

MITIGATION MONITORING AND REPORTING PROGRAM 490 PACIFIC COAST HIGHWAY PROJECT

Purpose of Mitigation Monitoring and Reporting Program: The California Environmental Quality Act (CEQA), Public Resources Code Section 21081.6, requires that a Mitigation Monitoring and Reporting Program (MMRP) be established upon completing findings. CEQA stipulates that “the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.”

This MMRP has been prepared in compliance with Section 21081.6 of CEQA to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during the construction of the project, as required. Table 1 has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation measures, monitoring/mitigation timing, the responsible agency for implementing the measure, and space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the Initial Study/Mitigated Negative Declaration (IS/MND).

The City of Seal Beach (City) is the lead agency for the project under CEQA and shall administer and implement the MMRP. The City is responsible for review of all monitoring reports, enforcement actions, and document disposition. The City shall rely on information provided by the project site observers/monitors (e.g., construction manager, project manager, archaeologist, etc.) as accurate and up-to-date and shall provide personnel to field check mitigation measure status, as required.

Project Description: The project proposes to develop a vacant lot with a 16-pump gas station with a 2,400 square-foot convenience store (see Figure 3, Site Plan). The gas station would be in operation 24 hours a day. The site was previously a gas station that was demolished in 2011, and gravel was placed over the vacant lot. The site has been an active environmental remediation area (with operating groundwater and soil vapor recovery systems) since 1986 to remove leaked gasoline (hydrocarbons) from the previous gas station. The environmental remediation area would remain on site with one monitoring well relocated. A 4,052-square foot steel canopy would be installed above the gas pumps. The project would have 19,797 square feet of paved areas with 13 parking spaces. Ingress and egress to the site would be provided via four unsignalized driveways: two driveways along Pacific Coast Highway and two driveways along 5th Street. In addition, underground storage fuel tanks would be installed in the southern portion of the project site. Additional improvements would include a monument sign; trash enclosure; and air and water units for vehicles.

The project site is in a General Commercial Zone (CG) per the City of Seal Beach (City) Zoning Maps (City 2010). Per Section 11.2.10.010 of the Municipal Code, automobile service stations are allowed in CG zones subject to the approval of a conditional use permit (City 2018a). The project would also require approval of a variance as the project site does not meet minimum street frontage requirements per the City’s Municipal Code. The variance would also allow the proposed improvements to be efficiently configured on the project site.

The site would contain two bioretention basins, with one at the western edge of the project site, behind the convenience store, and one at the eastern edge of the site, adjacent to the sidewalk along Pacific Coast Highway. Perforated storm drain pipes would lead to the basins, and from the basins through a

biofiltration unit to a catch basin in the southwestern corner of the project site. The catch basin would lead into a culvert that would connect with the existing storm drain system on 5th Street.

Landscaping would include various plants and shrubs, with low precipitation drip irrigation (see Figure 6, Landscape Plan). Trees would be placed to provide shielding between the convenience store and the adjacent residences to the west.

Construction is anticipated to begin in June 2020 and last approximately six months. Site preparation activities would begin in June to be followed by grading in July. Cut and fill materials would be balanced on site. Building construction would begin in August 2020.

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			Initials	Date
AIR QUALITY				
AQ-1 During site preparation and grading construction phases, all haul trucks transporting soil to or from the project site shall be covered to prevent fugitive dust emissions.	Throughout construction activities	City/ Construction contractor		
<p>AQ-2 During project construction, the following measures shall be implemented to the satisfaction of the City of Seal Beach. Construction equipment maintenance records and data sheets of equipment design specifications (including the emission control tier of the equipment) shall be kept on-site during construction and subject to inspection by the City.</p> <p>a) Construction equipment shall be properly maintained according to manufacturer specifications.</p> <p>b) All contractors shall turn off all construction equipment and delivery vehicles when not in use, or limit on-site idling for no more than 5 minutes in any one hour.</p> <p>c) On-site electrical hook ups to a power grid shall be provided for electric construction tools, including saws, drills, and compressors, where feasible, to reduce the need for diesel-powered electric generators.</p> <p>d) The project shall demonstrate compliance with South Coast Air Quality Management District (SCAQMD) Rule 403 concerning fugitive dust and provide appropriate documentation to the City.</p> <p>e) Traffic speeds on all unpaved portions of the project site shall be reduced to 15 miles per hour or less.</p> <p>f) Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).</p> <p>g) Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1.</p>	Throughout construction activities	City/ Construction contractor		

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CULTURAL RESOURCES				
CUL-1 Pre-Construction Worker Environmental Awareness Program. Prior to the commencement of any ground-disturbing activities for the project, a qualified archaeologist and Native American monitors from both Gabrielino (Gabrieleno) and Juaneño tribes shall conduct a Worker Environmental Awareness Program (WEAP) to present to City staff, the grading contractor, and any relevant subcontractors information regarding the cultural and archaeological sensitivity of the project area, as well as the requirements of the monitoring program. The WEAP can be presented at a pre-grading meeting or separately. If the WEAP is held separately, the qualified archaeologist and Native American monitors shall be present for a pre-grading meeting with the grading contractor to discuss project schedule, safety requirements, and monitoring protocols.	Prior to commencement of ground disturbing activities This mitigation measure shall be included in construction documents for implementation during construction	City/ Construction contractor		
CUL-2 Construction Monitoring for Cultural Resources. Ground-disturbing activities during construction shall be monitored by a qualified archaeologist and Native American monitors from both Gabrielino (Gabrieleno) and Juaneño tribes. These activities include removal of existing gravel and other surface materials, grading, trenching, excavation, etc. If cultural material is encountered during monitoring, both the archaeologist and the Native American monitors would have the authority to temporarily halt or redirect activity in the area of the find while the cultural material is documented and a decision is made regarding the significance/eligibility of the find and whether additional excavation, analysis, or other mitigation measures are required. Determinations of significance will be made in consultation among the archaeological Principal Investigator, the Monitor Tribes, and City staff. If it is determined that the potential for subsurface cultural material is too low to warrant fulltime monitoring, monitoring can be reduced to part-time or spot-checking, or can be discontinued. Such a decision would be made in consultation among the Native American monitors/Monitoring Tribes, the Principal Investigator, and City staff.	Ongoing during construction This mitigation measure shall be included in construction documents for implementation during construction	City/ Construction contractor		
CUL-3 Monitoring Program Report. Following the conclusion of monitoring, a report shall be prepared documenting the methods and results of the monitoring program and	Report shall be prepared after conclusion of monitoring	City/ Applicant		

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submitted to the City and the SCCIC.	This mitigation measure shall be included in construction documents for implementation during construction			
CUL-4 Procedure for Encountering Human Remains. In the event that human remains are discovered, the County Coroner shall be contacted. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code Section 7050.5 and Public Resources Code Section 5097.98 shall be followed.	Ongoing during construction This mitigation measure shall be included in construction documents for implementation during construction	Construction Contractor		
GEOLOGY AND SOILS				
GEO-1 Site-specific Geotechnical Investigation. A site-specific geotechnical investigation shall be completed prior to final site design approval by the City to identify site-specific criteria related to considerations such as grading, excavation, fill, and structure/facility design. All applicable results and recommendations from the geotechnical investigation will be incorporated into the project design and construction documents to address identified potential geologic and soil hazards, including but not necessarily limited to: (1) seismic hazards including ground rupture, ground acceleration (ground shaking), soil liquefaction (and related issues such as dynamic settlement and lateral spreading), landslides/slope instability, and seiche effects; and (2) non-seismic hazards including manufactured slope instability, subsidence/compressible soils, expansive or corrosive soils, and trench/excavation instability. The final project design and construction documents will also encompass applicable standard design and construction practices from established regulatory/industry sources including the California Building Code (CBC), International Building Code (IBC), California Geological Survey (CGS), Greenbook standards, as well as the results/recommendations of geotechnical review and field observations/testing to be conducted during project excavation, grading and construction activities (with all related requirements to be included in applicable engineering/design drawings and construction contract specifications). A summary	The plan shall be prepared prior to final site design All report recommendations shall be included in project design and construction documents for implementation during construction	City/ Applicant		

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<p>of the types of remedial measures typically associated with identified potential seismic hazards, pursuant to applicable regulatory and industry standards, is provided below. The remedial measures identified/recommended as part of the described site-specific geotechnical investigation will take priority over the more general types of standard regulatory/industry measures provided herein.</p> <ul style="list-style-type: none"> • <u>Ground Rupture</u>: (1) Locate (or relocate) structures away from known active (or potentially active) faults and outside of associated CGS Earthquake Fault Zones; and (2) require appropriate (typically 50-foot) building exclusion buffers (setbacks) on either side of applicable fault traces. • <u>Ground Acceleration (Ground Shaking)</u>: (1) Incorporate applicable seismic loading factors (e.g., IBC/CBC/CGS criteria) into project structure design; (2) use remedial grading techniques where appropriate (e.g., removing/replacing and/or reconditioning unsuitable soils); and (3) use properly engineered fill per applicable industry/regulatory standards (e.g., IBC/CBC/CGS), including criteria such as appropriate fill composition, placement methodology, compaction levels, and moisture content. • <u>Liquefaction and Related Effects</u>: (1) Remove unsuitable soils and replace with engineered fill (as previously described), per applicable regulatory/industry standards (e.g., IBC/CBC/CGS); (2) employ measures such as deep soil mixing (i.e., introducing cement to consolidate loose soils) or use of subsurface structures (e.g., stone columns or piles) to provide support (i.e., by extending structures into competent underlying units); (3) use appropriate surface drainage and/or subdrains in applicable areas to avoid or reduce near-surface saturation; and (4) design for potential settlement of liquefiable materials through means such as use of post-tensioned foundations and/or flexible couplings for utility connections. • <u>Landslides/Slope Instability</u>: (1) Construct properly drained shear keys and/or replace susceptible deposits with manufactured buttress fills where appropriate; (2) employ applicable slope laybacks (i.e., shallower slopes) and/or structural setbacks; (3) incorporate structures such as retaining walls and stability fills where appropriate to provide support; (4) provide protective walls or other barriers in areas susceptible to landslides; and (5) implement proper 				

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<p>slope drainage and landscaping where applicable per established regulatory/industry standards (e.g., IBC/CBC/CGS).</p> <ul style="list-style-type: none"> • <u>Manufactured Slope Instability</u>: (1) Limit slope grades to 2:1 (horizontal to vertical) or other applicable ratios based on site-specific conditions and the results of slope stability analyses (if recommended as part of the geotechnical analyses); (2) employ similar strategies regarding slope laybacks, structure setbacks and support/ protective structures as outlined above under the discussion of Landslides/Slope Instability; (3) provide appropriate short- and long-term drainage control, such as slope drains and/or brow ditches to avoid/minimize runoff on slopes; and (4) utilize native and/or drought-tolerant landscaping varieties, as well as "smart" irrigation systems (e.g., appropriate water schedules and rain/pressure-sensitive sensors/ shutoff devices) to minimize irrigation and associated runoff. • <u>Subsidence/Compression</u>: (1) Use standard efforts such as over-excavation and recompaction or replacement of unsuitable materials with engineered fill, and enhanced foundation design in applicable areas (e.g., post-tensioned or mat slab foundations); (2) use engineered fill, subdrains, surcharging (i.e., loading prior to construction to induce settlement) and/or settlement monitoring (e.g., through the use of settlement monuments) in appropriate areas; (3) implement groundwater withdrawal monitoring/restrictions per established legal/regulatory/industry standards (if applicable). • <u>Collapsible Soils</u>: (1) Over-excavation and recompaction or replacement of unsuitable materials with engineered fill; (2) deep soil mixing, use of subsurface structures to provide support, and proper surface drainage/subdrains (as described above under Liquefaction); and (3) surcharging (as described above under Subsidence/Compression). • <u>Expansive Soils</u>: (1) Replace and/or mix expansive materials with non-expansive fill; and (2) cap expansive soils in place with an appropriate thickness of non-expansive fill per established regulatory/industry standards (e.g., IBC/CBC). • <u>Corrosive Soils</u>: (1) Remove unsuitable deposits and replace with non-corrosive fill; (2) use corrosion-resistant construction materials (e.g., corrosion-resistant 				

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<p>concrete and coated or non-metallic facilities); or (3) install cathodic protection devices (e.g., use of a more easily corroded "sacrificial metal" to serve as an anode and draw current away from the structure to be protected) per established regulatory/industry standards (e.g., IBC/CBC).</p> <ul style="list-style-type: none"> • Trench/Excavation Instability: (1) Limit trench and other excavation depths and side slope grades to the minimum feasible levels; (2) provide shoring and/or other protective systems (e.g., benching and shielding) for applicable trenches/ excavations, pursuant to associated regulatory standards (e.g., Occupational Safety and Health Administration [OSHA] and Cal-OSHA); (3) restrict heavy equipment/vehicle access and material/soil stockpiles near trenches/excavations; and (4) inspect trenches/excavations and related conditions/facilities at the start of each shift and after precipitation (or other water intrusion) events. 				
HAZARDS AND HAZARDOUS MATERIALS				
<p>HAZ-1 Construction Worker Health and Safety Work Plan. Prior to construction, the project applicant shall have a project-specific health and safety work plan prepared and distributed to the construction workers to address the potential exposure to hazardous materials associated with working with or near hydrocarbon contamination in soil and groundwater. This work plan shall comply with all OCHCA Environmental Health Division work plan requirements to address physical hazards, site security, management of soil and water, and monitoring equipment. A description of engineering controls and measures that would be put in place to prevent and/or reduce the risks posed to site workers, public and the environment in the unlikely event of excavating contaminated soil from the project construction area shall be provided in the work plan and submitted to the OCHCA Environmental Health Division for approval. These engineering controls and measures shall include, but not be limited to the following:</p> <ul style="list-style-type: none"> • Written notifications shall be posted on the perimeter fencing in advance of start of excavation to notify the general public of the nature and duration of work activities. The postings shall also include emergency contact names and telephone numbers. • Site workers shall be required to wear personal protective equipment (PPE) 	<p>Prior to start of construction activities</p>	<p>City/ Construction contractor</p>		

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<p>including gloves, dust masks or respirators, hard hats, steel toed boots, protective clothing, eye shield and ear plugs or earmuffs.</p> <ul style="list-style-type: none"> All excavated soil shall be underlain and covered by plastic or Visqueen, if stored on site, to prevent or reduce off-gassing into the atmosphere and to protect the stockpile from erosion due to storm runoff. If on-site temporary storage becomes necessary, the stockpiles shall be placed downwind of any sensitive receptors in the area. All work shall stop if ambient air concentrations exceed acceptable thresholds as approved by the OCHCA Environmental Health Division, and excavation shall be backfilled with inert soil or other material until concentration drop back to normal. Exposure to dust and potential inhalation hazards shall be controlled by lightly spraying the excavated materials with clean water as they are stockpiled on site or as they are transferred to trucks for shipment offsite. A dust monitor shall be used on site to measure airborne dust during activities that are expected to generate dust. If dust levels exceed permissible exposure levels as set by OSHA standards, additional measures for dust control such as the use of industrial non-toxic dust suppressants shall be implemented. Runoff around the excavation site shall be controlled by placing fiber rolls or other similar types of erosion and runoff control means to direct surface runoff and to protect the nearby downstream storm drains. Vehicular and pedestrian traffic shall be directed away from the construction zone prior to and during excavation and follow-on activities in accordance with a traffic plan approved by the City of Seal Beach and in coordination with the project applicant. 				
<p>HAZ-2 Excavation Monitoring. All excavation activities shall be actively monitored by a Registered Environmental Assessor for the potential presence of hydrocarbon contaminated soils. In the event of encountering hydrocarbon contaminated soils, these soils shall be properly tested, managed, and disposed of at a licensed facility in accordance with OCHCA requirements.</p>	<p>During all site excavation activities.</p> <p>This mitigation measure shall be included in construction documents for</p>			

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	implementation during construction			
<p>HAZ-3 Hazardous Materials Business Emergency Plan. The project applicant shall complete a HMBEP. The HMBEP shall contain the following:</p> <ul style="list-style-type: none"> • Basic information on the location, type, quantity and health risks of hazardous materials stored, used, or disposed of onsite. • An emergency response plan that describes the procedures for mitigating a hazardous release, procedures, and equipment for minimizing the potential damage of a hazardous materials release, and provisions for immediate notification of the OCHCA Environmental Health Division and other emergency response personnel such as the OCFA. • The HMBEP shall be submitted to the OCHCA Environmental Health Division, who would review the plan; monitor for compliance with existing laws and regulations; identify safety hazards that could cause or contribute to an accidental spill or release; and suggest preventative measures to minimize the risk of a spill or release of hazardous substances. 	Post-construction/prior to operation	City/ Applicant		
NOISE				
<p>NOISE-1 During construction activities a 10-foot-tall temporary noise control barrier shall be provided within 100-feet of tank excavation activities to shield nearby residential properties from a line of site view, which would reduce noise levels to less than 75 dBA LEQ. The noise control barrier shall be solid with no cracks or gaps and be constructed with either ½-inch thick (or thicker) plywood, noise control blankets, or other purpose-designed acoustic barrier materials. In addition, all equipment shall have sound-control devices that are no less effective than those provided on the original equipment, stationary construction equipment shall be positioned as far as feasible from the residential property line, and no equipment shall be left idling on the site.</p>	Throughout construction activities.	City/ Construction contractor		
TRANSPORTATION				
<p>TRA-1 Marvista Drive/5th Street Intersection Restriping. Prior to opening day of the proposed project, to increase the left-turn capacity of the intersection, the</p>	Prior to operation	City/ Applicant		

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eastbound approach at the Pacific Coast Highway at Marvista Drive/5th Street intersection shall be restriped by the City to provide a left-turn lane, a shared left-through lane, and a right-turn lane. The applicant shall pay a fee to the City to perform the work. If determined necessary through City of Seal Beach coordination with Caltrans, the traffic signal shall be adjusted to provide split phasing in the east-west direction.				