

**EXHIBIT B to BOARD OF SUPERVISORS RESOLUTION
NO. 18-000410**

**Mitigation Monitoring and Reporting
Program for
Final Environmental Impact Report No. 621
West Alton Parcel Development Plan**

IP#16-376

SCH No. 2014121065

COUNTY OF ORANGE
OC Real Estate/Land Development Division
333 W. Santa Ana Blvd
Santa Ana, California 92701
Contact: Brian Bauer

May 2018

**Mitigation Monitoring and Reporting Program for
Final Environmental Impact Report No. 621
West Alton Parcel Development Plan**

**IP#16-376
SCH No. 2014121065**

May 2018

Prepared for:

**COUNTY OF ORANGE
OC Real Estate/Land Development Division
333 W. Santa Ana Blvd
Santa Ana, California 92701**

Contact: Brian Bauer

Prepared by:

**BonTerra Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, California 92707**

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Mitigation Monitoring and Reporting Program.....	1
1.1 Introduction.....	1
1.2 Mitigation Monitoring Procedures.....	1
1.3 Mitigation Monitoring and Reporting Plan.....	1

ACRONYM LIST

The following are acronyms used in the Mitigation Monitoring Matrix:

A

AB	Assembly Bill
ACM	asbestos-containing materials
AST	aboveground storage tank

B

BACT	Best Available Control Technology
BMP	Best Management Practice
Board	County of Orange Board of Supervisors

C

CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CC&Rs	Covenants, Conditions, and Restrictions
CCR	California Code of Regulations
CDFG	California Department of Fish and Game (now CDFW)
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
COC	chemical of potential concern
County	County of Orange
CRAM	California Rapid Assessment Method

D

DAMP	Drainage Area Management Plan
dBA	A-weighted decibels
DoN	Department of the Navy
DR	Development Requirement

E

EIR	Environmental Impact Report
Final Program EIR 620	<i>Final Program Environmental Impact Report No. 620, El Toro, 100-Acre Parcel Development Plan (2017)</i>
ESCP	Erosion and Sediment Control Plan

F

FTA	Federal Transit Administration
-----	--------------------------------

H

HMMP	Habitat Mitigation Monitoring Plan
hp	Horsepower
HVAC	heating, ventilation, and air conditioning

I

in/sec	inch per second
IRP	installation restoration programs

K

kWh	kilowatt hours
-----	----------------

L	
L _{eq}	interior average hourly noise level
LBP	lead-based paint
LED	light-emitting diode
LID	Low Impact Development
LIFOC	Lease in Furtherance of Conveyance
LOC	location of concern
M	
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MLD	Most Likely Descendent
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Plan
N	
NAHC	Native American Heritage Commission
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O	
O&M	Operation and Maintenance
OCFA	Orange County Fire Authority
OCFCD	Orange County Flood Control District
OCHCA	Orange County Health Care Agency
OCP	Orange County Projections
OSHA	Occupational Safety and Health Administration
P	
PAH	
PCB	polychlorinated biphenyl
PID	photoionization detector
Plan	Mitigation Monitoring and Reporting Plan
ppv	peak particle velocity
R	
RBC	risk-based concentration
RSL	Regional Screening Level
RWQCB	Regional Water Quality Control Board
S	
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SWPPP	Storm Water Pollution Prevention Plan
U	
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
V	
VdB	vibration decibel
VOC	Volatile organic compound
W	
WDID	Waste Discharge Identification
WQMP	Water Quality Management Plan

MITIGATION MONITORING AND REPORTING PROGRAM

1.1 INTRODUCTION

In accordance with the requirements of Section 21081.6 of the *California Public Resources Code*, and as part of its certification of the adequacy of Final Environmental Impact Report No. 621 (Final EIR 621) for the West Alton Parcel Development Plan, the Board of Supervisors (Board) of the County of Orange (County) adopts the following Mitigation Monitoring and Reporting Plan (MMRP or “Plan”). The Board adopts this MMRP in its capacity as the lead agency for Final EIR 621 in accordance with the provisions of the California Environmental Quality Act (CEQA) (*California Public Resources Code* §21000 et seq.) and the State CEQA Guidelines (*California Code of Regulations*, Title 14, Section 15000 et seq.).

The principal purpose of the MMRP is to ensure that the Board-approved mitigation measures and development requirements for the adopted Project are reported and monitored so as to ensure compliance with the measures’ requirements. In general, Orange County Executive Office/Real Estate is responsible for overseeing implementation and completion of the adopted measures. This includes the review of all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the attached MMRP Table. However, the Board retains overall responsibility for verifying implementation of all adopted mitigation measures.

1.2 MITIGATION MONITORING PROCEDURES

The County is the designated lead agency for the MMRP. OC Real Estate/Land Development Division is the department responsible for reviewing all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the MMRP Table.

1.3 MITIGATION MONITORING AND REPORTING PLAN

The MMRP is provided in tabular format to facilitate effective tracking and documentation of the status of mitigation measures. The attached MMRP Table provides the following monitoring information:

- **Development Requirements.** The text of all adopted Development Requirements for the Project from Final EIR 621.
- **Mitigation Measure.** The text of all adopted mitigation measures for the Project from Final EIR 621.
- **Approving or Verifying Authority.** The County Department(s) or other public agency(ies) responsible for overseeing the implementation and completion of each measure.
- **Date of Completion.** The date the measure is completed. (This column of the MMRP Table is to be filled in by the approving/verifying authority at a later date.)

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
AESTHETICS			
DR AES-1 Prior to issuance of any building permit, the County or its designee shall demonstrate that exterior lighting has been designed to be diffused, shielded, and low intensity and located so that direct rays are confined to the Project site in a manner meeting the approval of the Manager of Building & Safety or designee.	Prior to issuance of any building permit	Manager of Building & Safety or designee	
DR AES-2 Prior to the approval of final inspection, the County or its designee shall provide a letter from the electrical engineer, licensed landscape architect, or licensed professional designer that a field test has been performed after dark and the light rays are consistent with the Development Plan. Specifically, the County or its designee shall submit a photometric study that demonstrates that lighting levels, will not increase over 0.25 foot-candle over ambient conditions, when compared to without the Project, consistent with the protocol in Section 3.16, Lighting and Section 4.3.2.1, Filing Instructions of the Development Plan. The letter shall be submitted to the Manager of Inspection for review and approval. All lease agreements or other forms of conveyance of the Project site, between the County and a residential developer or the CC&Rs shall require replacement lighting to meet these standards. (Note: High voltage lighting requires a licensed electrical engineer stamp.	Prior to the approval of final inspection	Manager of Inspection	
AIR QUALITY			
DR AQ-1 During construction of the Project, the County or its designee shall comply with South Coast Air Quality Management District (SCAQMD) Rules 402 and 403, in order to minimize short-term emissions of dust and particulates. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off site. SCAQMD Rule 403 requires that fugitive dust be	Prior to the issuance of a grading permit, methods for compliance with SCAQMD Rules 402 and 403 shall be identified on the grading plan and included in construction specifications	Manager of Building & Safety, or designee	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. This requirement shall be included as notes on the contractor specifications. Table 1 of Rule 403 prescribes the best available control measures that are applicable to all construction projects and is included in Appendix C of the Environmental Impact Report (EIR) for this Project. The County or its designee shall provide the Manager of Building & Safety, or designee, with an SCAQMD-approved Dust Control Plan or other sufficient proof of compliance with Rule 403, prior to issuance of a grading permit.</p>			
<p>DR AQ-2 Architectural coatings shall be selected so that the volatile organic compound (VOC) content of the coatings is compliant with SCAQMD Rule 1113. This requirement shall be included as notes on the contractor specifications. The specifications for each project within the Development Plan area shall be reviewed by the Manager of Building & Safety, or designee, for compliance with this requirement prior to issuance of a building permit.</p>	<p>Prior to issuance of a building permit</p>	<p>Manager of Building & Safety, or designee</p>	
<p>DR AQ-3 Prior to issuance of each grading and building permit, the County or its designee shall provide plans and specifications demonstrating that construction documents require the construction contractors to implement the measure listed below. The contractor shall comply with the identified requirements, and verification that the contractor has complied shall be confirmed by the Manager of Building & Safety, or designee, during construction.</p>	<p>Prior to issuance of each grading and building permit</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB). Any emissions-control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</p>			
<p>DR AQ-4 Prior to issuance of each grading and building permit, the County or its designee shall provide plans and specifications demonstrating that construction documents require the construction contractors to implement the following measures or provide information and data that demonstrate that implementation would not be feasible or practicable:</p> <ul style="list-style-type: none"> a. Electricity shall come from power poles rather than diesel- or gasoline-fueled generators, compressors, or similar equipment; b. Construction parking shall be configured to minimize traffic interference; c. Construction trucks shall be routed away from congested streets and sensitive receptors; d. Construction activities that affect traffic flow on the arterial system shall be scheduled to off-peak hours to the extent practicable; 	<p>Prior to issuance of each grading and building permit</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<ul style="list-style-type: none"> e. Temporary traffic controls, such as a flag person(s), shall be provided where necessary to maintain smooth traffic flow, as necessary; f. Dedicated turn lanes for movement of construction equipment on and off site and signal synchronization shall be provided as necessary to maintain smooth traffic flow; g. All construction equipment shall be tuned and maintained in accordance with the manufacturer's specifications; h. Diesel truck idling time shall be five minutes or less, both on and off site; i. Work crews shall shut off diesel equipment when not in use; and j. Contractors and construction workers shall be encouraged to use ride-sharing and commute using Metrolink. <p>The contractor shall comply with the identified requirements, and verification that the contractor has complied shall be confirmed by the Manager of Building & Safety, or designee, during construction.</p>			

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>DR AQ-5 Fireplaces shall be limited to residential common areas, and none shall be provided in residential units. The specifications for each residential project within the Development Plan area shall be reviewed by the Manager of Building & Safety, or designee, for compliance with this requirement prior to issuance of a building permit.</p>	<p>Prior to issuance of a building permit</p>	<p>Manager of Building & Safety, or designee</p>	
<p><i>BIOLOGICAL RESOURCES</i></p>			
<p>DR BIO-1 Per the <i>Staff Report on Burrowing Owl Mitigation</i> (CDFG 2012), the County, or its designee, shall ensure that a pre-construction survey for the burrowing owl is conducted by a qualified Biologist no less than 14 days prior to any ground disturbance for development of the Project site. The pre-construction survey will include the Project site plus a 500-foot buffer (if access is available). If no active burrows are found, no further mitigation would be required.</p> <p>If an active burrow is observed outside the breeding season (September 1 to January 31) and it cannot be avoided, the burrowing owl shall be excluded from the burrow following methods described in CDFG 2012. One-way doors shall be used to exclude owls from the burrows. Once the burrow is unoccupied, as verified by site monitoring and scoping, the burrow shall be closed by a qualified Biologist who shall excavate the burrow by hand. If a burrow will be closed, the County or its designee shall contact CDFW to determine whether compensatory mitigation shall be required for the loss of the active burrow.</p> <p>If an active burrow is observed outside the breeding season (September 1 to January 31) and it can be avoided, a protective buffer shall be placed around the burrow per CDFG 2012 guidelines. The buffer shall</p>	<p>Prior to construction</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>range from 160 feet to 1,640 feet depending on the level of impact and the time of year. The County, or its designee, shall contact the CDFW to determine whether a reduced buffer can be accommodated without adversely impacting occupied burrows.</p> <p>If an active burrow is observed during the breeding season (February 1 to August 31), the active burrow shall be protected until nesting activity has ended. A protective buffer shall be placed around the active burrow per CDFG 2012 guidelines. The buffer shall range from 650 to 1,640 feet depending on the level of impact and the time of year. The County, or its designee, shall contact CDFW to determine whether a reduced buffer can be accommodated without adversely impacting occupied burrows. Construction shall be allowed to proceed when the qualified Biologist has determined that fledglings have left the nest. Additionally, the County, or its designee, shall contact CDFW to determine whether compensatory mitigation shall be required for the long-term loss of the nesting burrow due to construction of the Project.</p> <p>Upon completion of the pre-construction burrowing owl survey, a Letter Report shall be prepared and submitted to the Manager of Building and Safety, or designee, for review and approval prior to any ground disturbing activities. If an active burrow is observed, the Letter Report shall include a description of the protective buffer that has been designated and a summary of any correspondence with CDFW.</p>			
<p>DR BIO-2 Prior to issuance of any grading permits for activities within 500 feet of coastal sage scrub habitat, the Manager of Building and Safety, or designee shall verify the Project Applicant is following the</p>	<p>Prior to issuance of any grading permits for activities within 500 feet of coastal sage scrub habitat</p>	<p>Manager of Building and Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>Construction-related Minimization Measures that are required by the NCCP/HCP, as identified below.</p> <p>A. Prior to the commencement of clearing operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub, a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species will be clearly marked and identified on the construction plans.</p> <p>B. Following the completion of initial clearing activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel will be marked with temporary fencing or other appropriate markers that are clearly visible to construction personnel. No construction access, parking, or equipment storage shall be permitted within such marked areas.</p> <p>C. In areas bordering the NCCP Reserve System or Special Linkage/Special Management areas containing significant coastal sage scrub identified in the NCCP/HCP for protection, vehicle transportation routes shall be restricted to a minimum number during construction consistent with project construction requirements. Waste dirt or rubble shall not be</p>			

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>deposited on adjacent coastal sage scrub identified in the NCCP/HCP for protection. Pre-construction meetings involving the Monitoring Biologist, Construction Supervisors, and Equipment Operators shall be conducted and documented to ensure maximum practicable adherence to these measures.</p> <p>D. Coastal sage scrub identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction areas will be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring Biologist.</p>			
<p>DR BIO-3 In order to avoid impacts on nesting birds and raptors (common or special status), the County or its designee shall ensure that vegetation clearing shall be conducted during the non-breeding season (i.e., generally between September 16 and February 14 for migratory birds; July 1 and January 31 for nesting raptors) to the extent feasible. If Project timing requires that vegetation clearing occur between February 1 and September 15 (incorporating the typical breeding season for migratory birds and raptors), then a pre-construction nesting bird/raptor survey shall be conducted by a qualified Biologist within three days prior to vegetation clearing. If vegetation clearing would occur during the raptor nesting season, the survey shall also include areas within 500 feet of the Project impact area to determine the presence or absence of active raptor nests. If no active nests are found, no further mitigation would be required.</p> <p>If an active nest is located within or adjacent to the construction area and the Biologist determines that</p>	<p>Prior to construction</p>	<p>Manager of Building and Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>work activities may impact nesting, the Biologist shall determine an appropriate buffer to protect the nest. The size of the buffer shall be based on site features, the sensitivity of the species, and the type of construction activity in order to prevent disruption of nesting activity. No construction activities shall be allowed in the buffer zone until the Biologist determines that nesting activity has ended. Construction may proceed within the buffer once the Biologist determines that nesting activity has ceased and fledglings have left the nest.</p> <p>Upon completion of the pre-construction nesting bird survey, a Letter Report shall be prepared and submitted to the Manager of Building and Safety, or designee for review and approval prior to any ground disturbing activities. If an active nest is observed, the Letter Report shall include a description of the protective buffer that has been designated.</p>			
<p>DR BIO-4 In conjunction with Level I, II, or III reviews, landscape plans shall be reviewed by a qualified Biologist and approved by the Manager of Building and Safety, or designee to ensure that no plants identified on the California Invasive Plant Council’s (Cal-IPC’s) invasive plant inventory are included in the plant palette.</p>	<p>In conjunction with Level I, II, or III reviews</p>	<p>Manager of Building and Safety, or designee</p>	
<p>DR BIO-5 Prior to the issuance of occupancy permits for a building, the County or its designee shall incorporate a provision into the proposed lease agreement or Covenants, Codes, and Restrictions (CC&Rs) requiring domestic cats to be kept indoors in order to protect songbirds, including the coastal California gnatcatcher, least Bell’s vireo, and other special status bird species, from predation by domestic</p>	<p>Prior to the issuance of occupancy permits for a building</p>	<p>Manager of Building and Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>species. The proposed lease agreement or CC&Rs shall also require all dogs to be kept on a leash when outdoors.</p> <p>A brochure will be prepared by the County (or their designee) for distribution to all tenants describing the value of the Wildlife Movement Corridor and the plan to connect the Central and Coastal NCCP/HCP Habitat Reserves with construction of the Irvine Wildlife Corridor. The brochure will also educate residents about the prohibition of entering the Wildlife Movement Corridor or the Habitat Reserve areas. Additionally, it will describe the risk of wildlife predation by domestic pets and the risk of domestic pet predation by wildlife. It will also include information related to discouraging the habituation of coyotes by encouraging residents to not leave food outside for pets, keeping garbage contained, not intentionally feeding wildlife, and not leaving dogs outside unattended, or off leash. The brochure will also explain what to do if encountering a habituated coyote.</p>			
<p>MM BIO-1 Prior to the issuance of any grading permits for activities within 500 feet of riparian habitat, if grading and/or construction activities are scheduled to occur during the breeding season for the least Bell's vireo (March 15 to September 15), the Director of Community Development shall verify that the following requirements regarding least Bell's vireo are shown on the grading and/or building permit plans:</p> <p>A. No clearing, grubbing, grading, or other construction shall occur between March 15 and September 15, until the following requirements have been met to the satisfaction</p>	<p>Prior to the issuance of any grading permits for activities within 500 feet of riparian habitat</p>	<p>Director of Community Development</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>of the Manager of Building and Safety, or its designee:</p> <ul style="list-style-type: none"> i) The project certified-Biologist shall survey all riparian areas that would be subject to construction noise levels exceeding 60 A-weighted decibels (dBA) hourly average for least Bell's vireo. Pre-construction surveys shall be conducted by a qualified Biologist once per week within suitable habitat beginning four weeks prior to construction (or the week of March 15 if construction is in progress) and continuing through September 15 or until 10 consecutive visits have had negative survey results. Surveys shall be conducted between dawn and 11:00 AM during suitable weather conditions as outlined in the U.S. Fish and Wildlife Service (USFWS) survey protocol for the species. If a pre-construction focused survey is not conducted, all riparian habitat shall be considered occupied. ii. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average (or at the current existing noise level) at the edge of occupied least Bell's vireo habitat. An analysis showing that noise generated by construction activities shall not exceed 60 dB(A) (or current existing noise level) at the edge of riparian habitat shall be completed by an acoustician deemed qualified by the 			

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>Manager of Building and Safety, or its designee (e.g., possessing a noise engineer license with experience monitoring noise levels with listed animal species). OR</p> <p>iii. No less than two weeks prior to the commencement of construction activities (or by March 15 if construction is in progress), under the direction of a qualified Acoustician, noise attenuation measures shall be implemented to ensure noise levels from construction activities will not exceed 60 dB(A) (or at the current existing noise level) at the edge of habitat occupied or potentially occupied by the least Bell's vireo. Concurrent with construction and the noise attenuation measures, noise monitoring shall be conducted at the edge of riparian habitat to ensure that noise levels do not exceed 60 dB(A) hourly average (or current existing noise level). If noise attenuation measures implemented are determined to be inadequate by a qualified Acoustician or project Biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).</p> <p>B. If pre-construction surveys demonstrate that the least Bell's vireo is not present, the project Biologist shall submit a report with substantial evidence to the Manager of Building and Safety, or its designee that demonstrates noise attenuation measures are not necessary</p>			

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>between March 15 and September 15. The report shall describe the methodology and results of the 10 consecutive negative pre-construction survey visits. If evidence indicates the potential is high for least Bell's vireo to be present based on prior focused survey(s) or site conditions, the Manager of Building and Safety, or its designee shall require implementation of measures in item A above.</p>			
<p>MM BIO-2 In compliance with the <i>Fire Behavior Analysis Report and Fuel Modification Design Criteria</i>, the County or its designee shall install radiant heat walls adjacent to the NCCP/HCP Habitat Reserve and Wildlife Movement Corridor. Two design options are provided in the <i>Fire Behavior Analysis Report and Fuel Modification Design Criteria</i>. One option permits the wall design to include a four-foot tempered glass panel to be installed on the top of the wall. The other option, a solid block wall, will be used throughout the Project except for those locations adjacent to parks. In those limited locations (adjacent to Neighborhood Parks A, B, and C and the focal gardens), a portion of the wall may include tempered glass. For those locations where the tempered glass may be used, the entire glass surface shall be uniformly covered with the objects or patterns to minimize bird strikes against glass, the Manager of Building and Safety or its designee shall review the wall design as part of the Level I, II, or III Review, and/or ministerial permit process (e.g., grading permit), to ensure the approved design plans incorporate measures to minimize the risk of bird strikes, such as: (1) the use of opaque or uniformly textured/patterned/etched glass; (2) angling of glass downward so that the ground instead of the</p>	<p>In conjunction with Level I, II, or III reviews</p>	<p>Manager of Building and Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>surrounding habitat or sky is reflected; (3) installation of one-way film that results in opaque or translucent covering when viewed from either side of the glass; (4) installation of a uniformly dense dot pattern created as ceramic frit on both sides of the glass; and/or (5) installation of a striped or grid patterns of clear UV-reflecting and UV-absorbing film applied to both sides of the glass. <i>It should be noted that single decals (e.g., falcon silhouettes or large eye patterns) are ineffective and shall not be used unless the entire glass surface is uniformly covered with the objects or patterns (Klem 1990).</i></p>			
CULTURAL RESOURCES			
<p>MM CULT-1 Archaeological Observation and Salvage. Prior to the issuance of any grading permit in which native soil is disturbed, the County or its designee shall provide written evidence to the Manager of Building & Safety, or designee, that the County or its designee has retained a County-certified archaeologist to observe grading activities and to salvage and catalogue archaeological resources as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the County or its designee, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the County or its designee, for exploration and/or salvage.</p>	<p>Prior to the issuance of any grading permit in which native soil is disturbed</p> <p>Prior to the release of the grading bond</p>	<p>Manager of Building & Safety, or designee</p> <p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>Prior to the release of the grading bond, the County or its designee shall obtain approval of the archaeologist's follow-up report from the Manager of Building & Safety, or designee. The report shall include the period of inspection, an analysis of any artifacts found, and the present repository of the artifacts. The archaeologist shall prepare excavated material to the point of identification. The County or its designee shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Manager of Building & Safety, or designee. The County or its designee shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors and such fee program is in effect at the time of presentation of the materials to the County or its designee, all in a manner meeting the approval of the Manager of Building & Safety, or designee.</p>			
<p>MM CULT-2 Paleontological Observation and Salvage. Prior to the issuance of any grading permit in which native soil is disturbed, the County or its designee shall provide written evidence to the Manager of Building & Safety, or designee, that the County or its designee has retained a County-certified paleontologist to observe grading activities and to salvage and catalogue fossils as necessary. The paleontologist shall be present at the pre-grade conference; shall establish procedures for paleontological resource surveillance; and shall establish, in cooperation with the County or its designee, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of the fossils. If the paleontological</p>	<p>Prior to the issuance of any grading permit in which native soil is disturbed</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>resources are found to be significant, the paleontologist shall determine appropriate actions, in cooperation with the County or its designee, to ensure proper exploration and/or salvage.</p> <p>Prior to the release of the grading bond, the County or its designee shall submit the paleontologist's follow up report for approval by the Manager of Building & Safety, or designee. The report shall include the period of inspection, a catalogue and analysis of the fossils found, and the present repository of the fossils. The County or its designee shall prepare excavated material to the point of identification and shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to approval by Manager of Building & Safety, or designee. The County or its designee shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager of Building & Safety, or designee.</p>	<p>Prior to the release of the grading bond</p>	<p>Manager of Building & Safety, or designee</p>	
<p>MM CULT-3 Human Remains. If human remains are encountered during ground-disturbing activities, Section 7050.5 of the <i>California Health and Safety Code</i> states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition of the materials pursuant to Section 5097.98 of the <i>California Public Resources Code</i>. The provisions of Section 15064.5 of the California Environmental Quality Act Guidelines</p>	<p>Prior to issuance of grading permits</p>	<p>OC Development Services Department</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>shall also be followed. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner shall notify the Native American Heritage Commission (NAHC). The NAHC will determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The descendent must complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. These requirements shall be included as notes on the contractor specification and verified by the Development Services Department, prior to issuance of grading permits.</p>			
<i>GEOLOGY AND SOILS</i>			
<p>DR GEO-1 Prior to the issuance of a grading permit, the County, or its designee, shall submit a geotechnical report to the Manager of Building & Safety, or designee, for approval. The report shall include the information and be in the form as required by the County Grading Manual. All grading proposed on the Project site must be consistent with the OC Grading and Excavation Code.</p>	<p>Prior to the issuance of a grading permit</p>	<p>Manager of Building & Safety, or designee</p>	
<i>GREENHOUSE GAS EMISSIONS</i>			
<p>DR GHG-1 Projects shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (<i>California Code of Regulations</i> [CCR], Title 24, Part 6). These standards are updated, nominally every three years,</p>	<p>Prior to the issuance of each building permit</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
to incorporate improved energy efficiency technologies and methods.			
DR GHG-2 Projects shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR 11).	Prior to the issuance of each building permit	Manager of Building & Safety, or designee	
DR GHG-3 The Project shall incorporate renewable energy generation with a total generation equivalent to 1.25 kilowatts (kW) per dwelling unit.	Prior to the issuance of each building permit	Manager of Building & Safety, or designee	
DR GHG-4 Low-energy Energy Star®-compliant or equivalent residential appliances shall be exclusively offered by residential builders for each appliance that is rated by California Energy Star Program (e.g., refrigerator, clothes washer, dishwasher), or achieves an efficiency that is equivalent to the 2016 California Energy Star® compliance standard. All ground lease agreements between the County and a residential developer or the CC&Rs shall require replacement appliances to meet low-energy the California Energy Star®-compliant standards. The Manager of Building & Safety, or designee shall ensure compliance prior to the issuance of each building permit.	Prior to the issuance of each building permit and prior to the approval of ground lease agreements or CC&Rs, as applicable	Manager of Building & Safety, or designee Manager CEO/Real Estate/Land Development	
MM GHG-1 Prior to issuance of each building permit for parking structures and parking lots with 20 or more parking spaces devoted to common area parking (including common resident parking in a parking structure), the County or its designee shall provide plans and specifications demonstrating that the following features have been incorporated into the parking facility. Proof of compliance shall be provided prior to the issuance of occupancy permits.	Prior to issuance of each building permit for parking structures and parking lots with 20 or more parking spaces	Manager of Building & Safety, or designee	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<ul style="list-style-type: none"> The parking facility shall include a minimum of five percent preferentially located parking spaces for alternative-fueled (electric, natural gas, or similar low-emitting technology) vehicles. The parking facility shall include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations for up to three percent of the total parking spaces when a demand is demonstrated. The design and installation shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, of the CALGreen Code. Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code. 			
<p>MM GHG-2 The operator of each residential building shall provide a commuter information area or multiple areas within or near each building; the information area(s) shall be centrally located and accessible to all residents. The information shall include, but not be limited to, current maps, routes and schedules for bus, Metrolink, and Amtrak and a means for sharing information for ride-sharing. Proof of compliance shall be provided to the Manager, Chief Executive Officer (CEO) Real Estate/Land Development within one month following the issuance of each occupancy permit.</p>	<p>Within one month following the issuance of each occupancy permit</p>	<p>Manager CEO/ Real Estate/Land Development</p>	
<p>MM GHG-3 High efficiency lighting (light-emitting diode [LED]) shall be used for all residential, office, retail, and outdoor (streets, pathways, parks, and parking structures) lighting applications. All ground lease</p>	<p>Prior to the issuance of each building permit and prior to the approval of ground lease agreements or CC&Rs, as</p>	<p>Manager of Building & Safety, or designee Manager CEO/Real</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>agreements, between the County and developers, or the CC&Rs, shall require replacement lighting to use high efficiency bulbs. The Manager of Building & Safety, or designee shall ensure compliance prior to the issuance of each building permit.</p>	<p>applicable</p>	<p>Estate/Land Development</p>	
<p>MM GHG-4 The County or its designee shall provide plans and specifications demonstrating that the features listed below have been incorporated into all new buildings. Proof of compliance shall be provided to the Manager of Building & Safety, or his/her designee prior to the issuance of occupancy permits.</p> <ul style="list-style-type: none"> • Documentation that design and construction elements used would require buildings to be consistent with Leadership in Energy and Environmental Design (LEED) standards. • Installation of high albedo roof membranes. • Installation of formaldehyde free insulation in all buildings. • Use of locally sourced (i.e., Southern California) gypsum board. 	<p>Prior to the issuance of occupancy permits</p>	<p>Manager of Building & Safety, or designee</p>	
<p>MM GHG-5 The County’s master lease, any subsequent replacement leases, or any other form of disposition of the property shall require landscape maintenance personnel to use electric lawnmowers and leaf blowers for all routine landscape maintenance.</p>	<p>Prior to approval of any County master lease or any subsequent replacement leases</p>	<p>Manager CEO/Real Estate/Land Development</p>	
<p>MM GHG-6 In conjunction with Level I, II, and III reviews, each applicant shall demonstrate how the proposed development will (i) satisfy its proportional contribution toward the Project’s overall GHG emission reduction requirement as identified in DR</p>	<p>In conjunction with Level I, II, and III reviews and verified prior to the issuance of occupancy permits for each development application</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>GHG-3, MM GHG-1, and MM GHG-2 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR (or achieve equivalent reduction through other qualifying measures); and (ii) incorporate elements from the menu of options, provided below, sufficient to further reduce for a period of 30 years that application's incremental contribution to the Project's overall GHG emissions to a less than significant level, which is defined as a performance standard equal to 3.0 MTCO₂e/SP/year in 2030. For purposes of implementing this mitigation measure, each development project's incremental contribution to the overall generation of GHG shall be determined using the application's service population characteristics, which are defined as 1.99 persons per dwelling unit for residential development. For example, if an application proposes a total of 200 dwelling units, based on the application's service population of 398 (200 x 1.99), GHG emissions will be less than significant if the application's net GHG emissions with mitigation are less than 1,194 (398 x 3.0) MTCO₂e/year for year 2030.</p> <p>The GHG emissions calculation for 2030 shall be submitted using the most current version of CalEEMod or subsequent emissions calculator model accepted by SCAQMD. Mobile source emissions shall be calculated using the proposed project's average daily trips. Furthermore, each application shall mitigate the construction emissions associated with the project application.</p> <p>Applicants shall identify the GHG emission reduction measures proposed by the application (or previously approved excess reductions achieved by other applications within the Project) that will bring the application's GHG emissions below the SCAQMD-</p>			

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>recommended project level significance threshold of 3.0 MTCO_{2e}/SP/year for 2030. Applications shall be accompanied by a GHG study/plan prepared by a qualified consultant, to substantiate the relative emissions reduction associated with each proposed reduction measure identified in the application.</p> <p>In addition to the GHG emission reduction measures identified elsewhere in the Final EIR, the following presents a menu of GHG emissions reduction options that the applicant may pick from to achieve GHG emission reductions required to satisfy the performance standard specified in this mitigation measure. In conjunction with Level I, II, and III reviews, the County will review the applicant submitted GHG study/plan prepared by a qualified consultant to quantify the relative emissions reduction associated with each option selected for the application. The Level I, II and III approvals will identify the approved GHG reduction measures incorporated into the application in order to achieve the less than significant GHG emissions. The measures shall be incorporated by the County as conditions of approval that will be demonstrated as part of plan check and permitting processes. The County shall also verify implementation of the measures prior to the issuance of the use and occupancy permit for the application.</p> <ul style="list-style-type: none"> • Install solar water heating for swimming pools in private recreation centers in lieu of natural gas heating. The GHG emissions reduction is the difference between the total GHG emissions from the annual energy usage associated with electricity and natural gas and the energy usage with the installation of solar equipment. The electricity and natural gas 			

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>energy usage factors for swimming pools shall be based on the energy consumption identified in a published pools study, the Department of Energy estimates¹ or other reliable methodology. The analysis would be scaled to represent energy consumption per year per volume of the pool and the contractor specifications for the specific equipment used.</p> <ul style="list-style-type: none"> • Prepare a Transportation Demand Management Plan (TDM Plan) enhancing the use of alternative transportation modes through the provision of incentives, subsidies, bike-sharing and car-sharing programs, and other technology-based programs. Identify key implementation actions that would reduce vehicle miles traveled (VMT). • Install renewable energy power generation beyond the amount, if any, the application is getting credit for pursuant to MM GHG-1. The GHG emissions reduction would be calculated based on the amount of renewable energy provided. • Install electric vehicle charging stations capable of charging on- or off-site parking spaces that would achieve the same or better functionality as Level 2² charging stations. • Reduce GHG emissions by purchasing and retiring carbon credits that have been issued by a recognized and reputable accredited carbon registry. The credits purchased must be 			

¹ <https://energy.gov/energysaver/solar-swimming-pool-heaters>

² Level 2 charging refers to the voltage that the electric vehicle charger uses (240 volts). Level 2 chargers come in a variety of amperages ranging from 16 amps to 40 amps, the two most common are 16 and 30.

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>real, quantifiable, enforceable, validated, and for the period of time specified in the application's GHG emissions analysis.</p> <ul style="list-style-type: none"> Implement other quantifiable, GHG emission reduction measures identified and substantiated in the GHG study/plan submitted with each application. 			
HAZARDS AND HAZARDOUS MATERIALS			
<p>DR HAZ-1 Prior to initial grading, a site-specific Soils Management Plan will be developed to be implemented during grading and will include measures for monitoring soil conditions for evidence of impacts and contingency measures in the event that impacted soils (including, but not limited to, petroleum-hydrocarbons and other volatile organic compounds [VOCs]) are encountered during grading as evidenced by visual staining, olfactory perception, or field testing. The objective of the Soils Management Plan is to reduce exposures to impacted soils to less than significant levels, as defined by applicable law, for construction and utility workers during grading and construction phases of the Project and for future residents after construction is complete. The Soils Management Plan will include, at a minimum, identification of contaminants through use of field equipment (e.g., PID); sampling and laboratory analyses, if necessary; segregation; temporary stockpiling specifications; and treatment and/or disposal options in accordance with applicable law. This Soils Management Plan will be submitted to the Manager of Building & Safety for review and approval.</p>	<p>Prior to initial grading</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>DR HAZ-2 During site grading and construction activities, hazardous contaminated soils or other hazardous materials shall be managed in accordance with the requirements of Title 22, Division 4.5 of the <i>California Code of Regulations</i>; the U.S. Department of Transportation regulations in the <i>Code of Federal Regulations</i> (specifically, Title 49, Hazardous Materials Transportation Act and Title 40, Part 263, Subtitle C of Resource Conservation and Recovery Act); California Department of Transportation (Caltrans) standards; and Occupational Safety and Health Administration (OSHA) standards. Title 22 sets forth the requirements with which hazardous waste generators, transporters, and owners or operators of treatment, storage, or disposal facilities must comply. These regulations include the requirements for packaging, storing, labeling, reporting, and generally managing and disposing of hazardous waste, which shall be done in a manner meeting the satisfaction of the Manager, Orange County Health Care Agency (OCHCA)/Hazardous Materials Program prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste such as the requirements for transporting shipments of hazardous waste, manifesting, vehicle registration, and procedures to enact in the case of emergency accidental discharges during transportation. The County shall sign necessary hazardous and nonhazardous waste manifests as “Generator”.</p>	<p>During site grading and construction activities</p>	<p>Manager, Orange County Health Care Agency (OCHCA)/Hazardous Materials Program</p>	
<p>DR HAZ-3 If any underground storage tanks (USTs) are encountered during site grading or excavation activities, they shall be removed in accordance with the existing standards and regulations of, and oversight by, the Manager, OCHCA/Hazardous</p>	<p>During site grading or excavation activities, removal of on-site USTs or ASTs shall occur. Prior to issuance of a building permit for uses in locations where UST or</p>	<p>Manager, OCHCA/Hazardous Materials Program</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>Materials Program, based on compliance authority granted through the <i>California Code of Regulations</i> (specifically, Title 23, Division 3, Chapter 16, Underground Tank Regulations). The process for UST removal is detailed in the OCHCA's <i>Underground Storage Tanks: The Basics</i> manual. Soil samples from areas where storage tanks have been removed or where soil contamination is suspected shall be analyzed for hydrocarbons, including gasoline and diesel, in accordance with procedures set forth by the OCHCA. If hydrocarbons are identified in the soil, the appropriate response/remedial measures will be implemented as directed by OCHCA with support/review from the Regional Water Quality Control Board (RWQCB) until all specified requirements are satisfied and a Tank Closure Letter is issued. Any aboveground storage tank (AST) in existence at the commencement of site development shall be removed in accordance with all applicable regulations under the oversight of Orange County Fire Authority (OCFA). Compliance requirements relative to the removal/closure of storage tanks are set forth in Sections 25280 through 25299 of the <i>California Health and Safety Code</i>.</p>	<p>AST have been removed soil testing and proof of compliance with applicable OCHCA procedures shall be provided</p>		
<p>DR HAZ-4 Prior to issuance of building permits, the Project plans shall reflect a fire protection plan that would comply with or exceed the OCFA standards for Very High Fire Hazard Severity Zone (VHFHSZ)/Special Fire Protection Areas. Fire protection measures as part of the Project shall include, but not be limited to, fire-resistant structures adjoining natural open space areas and fuel modification/management to help suppress wildland fires. Unless an alternative approach is approved by OCFA, the fuel modification shall occur within two zones with requirements for</p>	<p>Prior to issuance of building permits</p>	<p>Orange County Fire Authority/ Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>minimum structure setbacks, permanent irrigation systems, fire-resistant plants from an approved plant list by the OCFA/County, and landscape and planting maintenance (i.e., thinning and removal of dead plants) as described below:</p> <ul style="list-style-type: none"> • Zone A shall consist of a 20-foot setback consisting of noncombustible construction only. • Zone B is the first 28 to 80 feet from Zone A. This zone will be cleared of all undesirable plant species, irrigated, and planted with plants as set forth in Appendix A of the Fire Behavior Report. <p>For those areas within the Project site not capable of providing a typical 170-foot fuel modification zone, an equal but alternative method of providing fire protection shall include increasing the irrigated zone(s) and providing a six-foot-high radiant heat wall at the edge of the fuel modification zone. The radiant heat wall shall be constructed at the edge of Zone B and between the structures and the native vegetation. The radiant heat walls are perpendicular to the wind but parallel with the slope and are extremely effective when used at the top of the slope in light to moderate fuels. (Note: DR BIO-4 pertains to the design of the radiant heat walls. Should the wall design be tempered glass over block wall, the tempered glass shall be textured to minimize the potential for bird strikes.)</p>			

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>MM HAZ-1 In the event that the Lease in Furtherance of Conveyance (LIFOC) area has not been transferred to the County by the time Project construction commences, the LIFOC area will be cordoned off and no grading or construction activities will be performed within the LIFOC area. Prior to initial grading, the County will secure from the Department of the Navy (DoN) an updated, complete listing; survey coordinates; and map showing locations of existing groundwater wells related to remedial activities within the LIFOC area. If a well or wells are part of active remediation monitoring at the time of transfer (i.e., they must be protected during grading and construction and access to them must be maintained) the final grading plan will be compared to the existing surface elevations at the location of each well and a Groundwater Well Management Plan will be prepared to ensure required access to and protection of the groundwater monitoring wells. That well plan shall, at a minimum, identify how the grade at each well location is proposed to change; identify how well heads will be protected during construction (e.g., placement of k-rails or other barriers); provide the methodology for extending or shortening well casings or replacing surface completions or wells, as needed; and specify a final survey of finished well locations and elevations. The well plan will be approved by the DoN and the Regional Water Quality Control Board (RWQCB).</p>	<p>Prior to initial grading</p>	<p>Department of the Navy/Regional Water Quality Control Board</p>	
<p>HYDROLOGY AND WATER QUALITY</p>			
<p>DR HWQ-1 Drainage Study. Prior to the issuance of any grading permits, the following drainage studies shall be</p>	<p>Prior to the issuance of any grading permits</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>submitted to and approved by the Manager of Building & Safety, or designee:</p> <ul style="list-style-type: none"> A. A drainage study of the Project including off-site areas that drain onto and/or through the Project, and justification of any proposed diversions; B. When applicable, a drainage study evidencing that proposed drainage patterns will not overload existing storm drains; and C. Detailed drainage studies indicating how the Project grading, in conjunction with the drainage conveyance systems (including applicable swales, channels, street flows, catch basins, storm drains, and flood water retarding) will allow building pads to be safe from inundation from rainfall runoff, which may be expected from all storms up to and including the theoretical 100-year flood. 			
<p>DR HWQ-2 Drainage Facilities. Prior to issuance of grading or building permits, drainage studies that demonstrate the following shall be submitted to and approved by Manager of Building & Safety, or designee:</p> <ul style="list-style-type: none"> 1. All surface runoff and subsurface drainage directed to the nearest acceptable drainage facility, as determined by the Manager of Building & Safety, or designee. 2. Drainage facilities discharging onto adjacent property shall be designed to imitate the manner in which runoff is currently produced from the site and in a manner meeting the satisfaction of the Manager of Building & Safety, or designee. Alternatively, 	<p>Prior to issuance of grading or building permits</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>Technical Guidance Manual for reference, and the County’s WQMP template for submittal. This WQMP shall include the following:</p> <ul style="list-style-type: none"> • Detailed site and project description. • Potential storm water pollutants. • Post-development drainage characteristics. • Low Impact Development (LID) BMP selection and analysis. • Structural and Non-Structural source-control BMPs. • Site design and drainage plan (BMP Exhibit). • GIS coordinates for all LID and Treatment Control BMPs. • Operation and Maintenance (O&M) Plan that (1) describes the long-term operation and maintenance requirements for BMPs identified in the BMP Exhibit; (2) identifies the entity that will be responsible for long-term operation and maintenance of the referenced BMPs; and (3) describes the mechanism for funding the long-term operation and maintenance of the referenced BMPs. 			
<p>DR HWQ-5 Compliance with the National Pollutant Discharge Elimination System (NPDES) Implementation Program. Prior to the issuance of a certificate of use and occupancy, the County or its designee shall demonstrate compliance with the County’s NPDES Implementation Program in a</p>	<p>Prior to the issuance of a certificate of use and occupancy</p>	<p>Manager, Inspection OC</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>manner meeting the satisfaction of the Manager, OC Inspection, including the following:</p> <ul style="list-style-type: none"> • Demonstrate that all structural BMPs described in the BMP Exhibit from the Project's approved WQMP have been implemented, constructed, and installed in conformance with approved plans and specifications; • Demonstrate that the County or its designee has complied with all non-structural BMPs described in the Project's WQMP; • Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs (the O&M Plan shall become an attachment to the WQMP); • Demonstrate that copies of the Project's approved WQMP (with attached O&M Plan) are available for each of the initial occupants; • Agree to pay for a Special Investigation from the County of Orange for a date 12 months after the issuance of a Certificate of Use and Occupancy for the Project to verify compliance with the approved WQMP and O&M Plan; and • Demonstrate that the County or its designee has recorded one of the following: <ol style="list-style-type: none"> 1. Covenants, Conditions, and Restrictions (CC&Rs), which includes the approved WQMP and O&M Plan; 			

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<ul style="list-style-type: none"> 2. A water quality implementation agreement that has the approved WQMP and O&M Plan attached; or 3. The final approved WQMP and O&M Plan. 			
<p>DR HWQ-6 Storm Water Pollution Prevention Plan. Prior to the issuance of any grading or building permits, the County or its designee shall demonstrate compliance with California’s General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Manager of Building & Safety, or designee. Projects subject to this requirement shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the Project site and be available for County review on request.</p>	<p>Prior to the issuance of any grading or building permits</p>	<p>Manager of Building & Safety, or designee</p>	
<p>DR HWQ-7 Erosion and Sediment Control Plan. Prior to the issuance of any grading or building permit, the County or its designee shall submit an Erosion and Sediment Control Plan (ESCP) in a manner meeting approval of the Manager of Building & Safety, or designee, to demonstrate compliance with the County’s NPDES Implementation Program and State water quality regulations for grading and construction activities. The ESCP shall identify how all construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, and other construction materials</p>	<p>Prior to the issuance of any grading or building permit</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion, or dispersion. The ESCP shall also describe how the County or its designee will ensure that all BMPs will be maintained during construction of any future public rights-of-way. The ESCP shall be updated as needed to address the changing circumstances of the Project site. A copy of the current ESCP shall be kept at the Project site and be available for County review on request.</p>			
<p>LAND USE AND PLANNING</p>			
<p>MM LU-1 The County shall provide the Project data to the Center for Demographic Research and request inclusion of the Project into the Orange County Projections (OCP) dataset, which will be used for the regional planning programs. This shall occur either through a mid-cycle update or in conjunction with the next scheduled update (anticipated in 2018).</p>	<p>Prior to issuance of any grading or building permit. In conjunction with the next scheduled update of the OCP dataset</p>	<p>Manager, CEO Real Estate/Land Development</p>	
<p>NOISE</p>			
<p>DR NOI-1 Construction activities shall be limited to the hours of 7:00 AM to 7:00 PM, Monday through Friday and 9:00 AM and 6:00 PM on Saturday and will not take place on Sundays or federal holidays.</p>	<p>During construction</p>	<p>Project Applicant</p>	
<p>DR NOI-2 Prior to the issuance of any grading permits, the County or designee shall produce evidence acceptable to the Manager of Building & Safety, or designee, that:</p> <ol style="list-style-type: none"> 1. All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of an occupied dwelling unit, the Habitat Reserve 	<p>Prior to the issuance of any grading permits</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>area, or the Wildlife Movement Corridor shall be equipped with properly operating and maintained mufflers.</p> <p>2. Stockpiling and/or vehicle staging areas shall be located as far as practicable from occupied dwellings, the Habitat Reserve area, or the Wildlife Movement Corridor.</p> <p>Notations in the above format, appropriately numbered and included with other notations on the front sheet of the Project's permitted grading plans, will be considered as adequate evidence of compliance with this condition.</p>			
<p>MM NOI-1 Prior to the issuance of each building permit, the County or designee shall obtain the approval of the Manager of Building & Safety, or designee, for an Acoustical Analysis Report and appropriate plans that demonstrate that the noise levels generated by heating, ventilation, and air conditioning (HVAC), and similar mechanical equipment that can operate continuously at nighttime, would not exceed the nighttime noise limit of 50 dBA for a time period of 30 minutes at the nearest existing or potential future residential receptor as specified in the City of Irvine Noise Ordinance. This same 50 dBA threshold shall apply to nighttime noise levels at the Wildlife Movement Corridor and the Habitat Reserve area.</p>	<p>Prior to the issuance of each building permit</p>	<p>Manager of Building & Safety, or designee</p>	
<p>MM NOI-2 Prior to the issuance of each building permit for a residential building, the County or designee shall obtain the approval of the Manager of Building & Safety, or designee, of an Acoustical Analysis Report and appropriate plans that demonstrate that the proposed site and architectural design features would provide an interior noise level of 45 A-weighted</p>	<p>Prior to the issuance of each building permit for a residential building</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>decibels (dBA) Community Noise Equivalent Level (CNEL) or less (based on buildout traffic conditions) in all habitable rooms of the proposed buildings facing Irvine Boulevard and Alton Parkway. The County or designee shall also submit building plans and specifications showing that the following occur:</p> <ul style="list-style-type: none"> • All residential units shall be provided with a means of mechanical ventilation, as required by the California Building Code, for occupancy with windows closed. • All exterior use areas shall be located behind the buildings, shielded by a sound wall or other barrier, or at an adequate distance from the noise source to provide exterior noise levels not exceeding 65 dBA CNEL. Exterior use areas are defined in footnote 2 to Table 4.11-4, Irvine Interior and Exterior Noise Standards. 			
<p>MM NOI-3 Prior to the issuance of each occupancy permit for a residential building with balconies with forecasted future noise levels exceeding 65 dBA CNEL, the County or designee shall obtain the approval of the Manager of Building & Safety, or designee, of the process that the Project Applicant will use to provide occupancy disclosure notices to all future tenants regarding potential noise impacts that future noise levels at the balconies may exceed 65 dBA CNEL.</p>	<p>Prior to the issuance of each occupancy permit for a residential building with balconies with forecasted future noise levels exceeding 65 dBA CNEL</p>	<p>Manager of Building & Safety, or designee</p>	
<p>MM NOI-4 Prior to the issuance of each building permit that would include pile driving, the County or designee shall obtain the approval of the Manager of Building & Safety, or designee of a vibration analysis demonstrating that the pile installation has been designed to limit vibrations to 0.24 peak particle</p>	<p>Prior to the issuance of each building permit that would include pile driving</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
velocity (ppv) inch per second (in/sec) or less at occupied buildings.			
<p>MM NOI-5 Prior to the issuance of a demolition permit if rock crushing is to occur on site, the Manager of Building & Safety, or designee shall verify that the Project plans demonstrate that the rock crusher would operate no closer than 2,350 feet from Portola High School classroom buildings or at a closer distance where it can be demonstrated that the maximum noise level with the rock crushing activities would not exceed 55 dBA L_{max} and the average noise level with the rock crushing activities at the classroom buildings would be 52 dBA L_{eq}. Additionally, the demolition permits shall include a requirement that any rock crushing activities on site occur during the non-breeding season (i.e., generally between September 16 and January 31).</p>	Prior to the issuance of a demolition permit if rock crushing is to occur on site	Manager of Building & Safety, or designee	
<p>MM NOI-6 Prior to the issuance of each building permit that would include pile driving, the County or designee shall obtain the approval of the Manager of Building & Safety, or designee of plans and specifications that stipulate that the Contractor shall:</p> <ul style="list-style-type: none"> a. Survey pile driving equipment appropriate for the Project, which is available in the region and commercially reasonable, and select the model with the lowest noise level. b. Use cushion blocks or noise curtains or both, to minimize the pile driving noise impact to the residences, the Portola High School, and occupied buildings adjacent to the site. c. Limit, by measures (a) and (b), the maximum pile driving impact noise to the 	Prior to the issuance of each building permit that would include pile driving	Manager of Building & Safety, or designee	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>residences, the Portola High School, and occupied buildings adjacent to the site to 75 dBA L_{max}.</p> <p>d. Submit a memorandum to the Manager of Building & Safety, or designee documenting the equipment survey and selection, pile driving noise reduction measures, and anticipated noise levels at nearby receptors. Additionally, pile driving shall only be allowed during the non-breeding season (i.e., generally between September 16 and January 31).</p>			
PUBLIC SERVICES			
<p>DR FIRE-1 Fire Alarm and Monitoring Systems. Prior to the issuance of a building permit which requires the installation of any fire alarm system, the County or its designee shall provide the Manager of Building & Safety, or designee, with a clearance from the Orange County Fire Authority (OCFA) indicating compliance with Guideline D-03 (New and Existing Fire Alarm & Signaling Systems). The fire alarm system shall be operational prior to the final inspection approval.</p>	<p>Prior to the issuance of a building permit which requires the installation of any fire alarm system</p>	<p>Manager of Building & Safety, or designee</p>	
<p>DR FIRE-2 A. Fire Master Plan. Prior to the issuance of a grading permit, the County or its designee must provide the Manager of Building & Safety, or designee, with proof from the OCFA indicating that a Fire Master Plan has been prepared that complies with Chapter 5 of the Fire Code and Guideline B-09 (Fire Master Plans for Commercial & Residential Development).</p> <p>B. Site Access. Prior to the issuance of any grading permit (with the exception of initial mass</p>	<p>Prior to the issuance of a grading permit</p> <p>Prior to the issuance of any grading permit</p>	<p>Manager of Building & Safety, or designee</p> <p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>grading of a large-scale project), the County or its designee shall provide the Manager of Building & Safety, or designee, with proof from the OCFA indicating that a Fire Master Plan has been prepared that complies with Guideline B-09 (Fire Master Plans for Commercial & Residential Development), including identification of access to and in the project area. *Note: refer to the OCFA website to obtain a copy of Guideline B-09 for information regarding the submittal requirements.</p> <p>C. Lumber Drop. Prior to the issuance of a building permit, the County or its designee must provide the Manager of Building & Safety, or designee, with proof from OCFA allowing the introduction of combustible materials into the project area.</p>	<p>Prior to the issuance of a building permit</p>	<p>Manager of Building & Safety, or designee</p>	
<p>DR FIRE-3 Automatic Fire Sprinkler Systems.</p> <p>A. Prior to the issuance of a building permit, the County or its designee shall provide the Manager of Building & Safety, or designee, with a copy of the OCFA-approved Fire Master Plan or site plan indicating that an approved automatic fire sprinkler system will be provided.</p> <p>B. Prior to the final inspection approval, the automatic fire sprinkler system shall be operational in a manner meeting the approval of the Fire Chief.</p>	<p>Prior to the issuance of a building permit, the County or its designee shall provide the Manager</p> <p>Prior to the final inspection approval</p>	<p>Manager of Building & Safety, or designee</p> <p>Fire Chief</p>	
<p>DR FIRE-4 Traffic Signal Preemption Devices. Prior to the acceptance of public street improvements requiring installation of a traffic signal, if determined necessary by the Fire Code Official, the County or its designee shall install traffic signal preemption equipment for</p>	<p>Prior to the acceptance of public street improvements requiring installation of a traffic signal</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>the surrounding signalized intersections. The clearance of this condition shall be by the Manager of Building & Safety, or designee, based on evidence that an agreement is in place or that the traffic signal preemption equipment has been installed.</p>			
<p>DR FIRE-5 Secured Fire Protection Agreement. Prior to approval of any building permits for the Project, the County or its designee shall enter into a Secured Fire Protection Agreement with the OCFA.</p>	<p>Prior to approval of any building permits</p>	<p>Orange County Fire Authority</p>	
<p>RECREATION</p>			
<p>DR REC-1 Prior to the issuance of a Certificate of Occupancy for any residential dwelling unit, the County or designee shall grade and improve common open space areas at a minimum ratio of 2.5 acres of parkland per 1,000 residents through provision of an open space system on site. The common open space areas that satisfy this requirement shall comply with Section 3.3.1, Common Open Space or Table 3.2, Development Standards of the Development Plan, as applicable.</p>	<p>Prior to the issuance of a Certificate of Occupancy for any residential dwelling unit</p>	<p>Manager of Building & Safety, or designee</p>	
<p>TRANSPORTATION/TRAFFIC</p>			
<p>DR TRAN-1 Prior to issuance of building permits, the County or its designee shall pay applicable fees for the Major Thoroughfare and Bridge Fee Program (i.e., Foothill/Eastern Transportation Corridor Zone A) in a manner meeting the approval of the Manager of Building & Safety, or designee.</p>	<p>Prior to issuance of building permits</p>	<p>Manager of Building & Safety, or designee</p>	
<p>DR TRAN-2 Prior to issuance of a grading permit, the County or its designee shall design and construct, or provide evidence of an acceptable form of financial security, that improvements internal to the Project (i.e.,</p>	<p>Prior to issuance of a grading permit</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>streets, bus stops, on-road bicycle trails, street names, signs, striping and stenciling) shall be done in accordance with plans and specifications meeting the approval of the Manager of Building & Safety, or designee. Further, all underground traffic signal conduits (e.g., signals, phones, power, loop detectors, etc.) and other appurtenances (e.g., pull boxes, etc.) needed for future traffic signal construction within the City of Irvine rights-of-way and for future interconnection with adjacent intersections within the City of Irvine rights-of-way and for future interconnection with adjacent intersections within the City of Irvine rights-of-way shall be constructed and in accordance with City of Irvine Engineering Standard, Plans, and Specifications and be approved by the City Engineer.</p>			
<p>DR TRAN-3 Prior to the issuance of any building permits, the County or its designee shall deliver an irrevocable offer to dedicate a traffic signal maintenance easement to the applicable jurisdiction at the applicable Project site access points along Irvine Boulevard in a manner meeting the approval of the Manager of Building & Safety, or designee.</p>	<p>Prior to the issuance of any building permits</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>DR TRAN-4 Prior to the issuance of any grading permits, the County or its designee shall provide adequate sight distance per Standard Plan 1117 at all street intersections which are internal to the Project, in a manner meeting the approval of the Manager of Building & Safety, or designee. The Project Applicant shall make all necessary revisions to the plan to meet the sight distance requirement such as removing slopes or other encroachments from the limited use area in a manner meeting the approval of the Manager of Building & Safety, or designee. In addition, sight distance for Project intersections and access points within the public right of way along Irvine Boulevard shall be based on City of Irvine Engineering Standard Plan 403 and City of Irvine Transportation Design Procedures.</p>	<p>Prior to the issuance of any grading permits</p>	<p>Manager of Building & Safety, or designee</p>	
<p>DR TRAN-5 In conjunction with Level I, II, or III reviews, when individual development projects under the Development Plan require an encroachment permit from the City of Irvine, that portion of the development that requires the encroachment permit shall be evaluated for consistency with applicable design requirements outlined in the City of Irvine Transportation Design Procedures or. Consistency with the City's design requirements shall be in a manner meeting the approval of the Manager of Building & Safety, or designee.</p>	<p>In conjunction with Level I, II, or III reviews</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>DR TRAN-6 The County should prepare a construction traffic management plan, in coordination with the adjacent cities, prior to commencement of construction. The plan should address routing, hours, provisions for over-sized equipment, and site access. The County or its designee shall submit the final plan to the City of Irvine and monitor implementation throughout the construction process.</p>	<p>Prior to commencement of construction</p>	<p>Manager, CEO Real Estate/Land Development</p>	
<p>MM TRAN-1 Intentionally omitted.</p>			
<p>MM TRAN-2 Intentionally omitted.</p>			
<p>MM TRAN-3 Prior to the issuance of any building permits, the County shall conduct a fee reallocation study to establish the Project's fair share traffic mitigation fees to be paid to the NITM Program, toward improvements identified in the List of NITM Improvements. County shall pay, or cause its designee to pay, its fair share traffic mitigation fees toward the improvements identified in the List of NITM Improvements, pursuant to this fee reallocation study. The fair share shall be calculated based on the final Project entitlements.</p> <p>The direct and cumulative impacts associated with the Project are identified in the updated Table 4.15-35. For locations where improvements other than those programmed by NITM are required, the County shall be responsible as follows:</p> <ul style="list-style-type: none"> • For those locations where improvements, are required due to direct Project impacts, the County shall negotiate a formal agreement with the City of Irvine, to pay to 	<p>Prior to the issuance of building permits</p>	<p>Manager, CEO Real Estate/Land Development</p>	

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>the City of Irvine the cost of those additional improvements.</p> <ul style="list-style-type: none"> For those locations where a cumulative impact has been identified, the County shall negotiate an agreement to pay a fair share of the costs to mitigate the cumulative impact, per typical City protocols for identifying the share. This bullet is intentionally omitted. 			
UTILITIES AND SERVICE SYSTEMS			
<p>DR UTIL-1 Prior to issuance of a grading permit, the County or its designee shall provide evidence acceptable to the Manager of Building & Safety, or designee that the South Coast Air Quality Management District (SCAQMD)-approved Dust Control Plan utilizes recycled water and not potable water for dust abatement.</p>	<p>Prior to issuance of a grading permit</p>	<p>Manager of Building & Safety, or designee</p>	
<p>DR UTIL-2 The County or its designee shall comply with the minimum solid waste diversion requirements of Assembly Bill (AB) 939, Senate Bill (SB) 1610, and SB 341 for solid waste generated during demolition, construction, and operation. A minimum of 75 percent of construction and demolition solid waste diversion compliance shall be done through the implementation of the OC Waste & Recycling's Construction & Demolition Program or comparable measures to the satisfaction of the Manager of Building & Safety, or designee. Pursuant to the Orange County Code of Ordinances, Title 4, Division 3, Article 2 (Solid Waste Management), Section 4-3-67 Franchise Required for Solid Waste Collection</p>	<p>During demolition, construction, and operation</p>	<p>Manager of Building & Safety, or designee</p>	

Mitigation Monitoring and Reporting Program

Mitigation Measures	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
Services, waste diversion and recycling would be the responsibility of the designated franchise waste hauler under contract to the County.			