

## 4.0 MITIGATION MONITORING AND REPORTING PROGRAM

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This Mitigation Monitoring and Reporting Program (MMRP), which is provided in **Table 4-1, *Mitigation Monitoring and Reporting***, has been prepared pursuant to Public Resources Code Section 21081.6, which requires adoption of a MMRP for projects in which the Lead Agency has required changes or adopted mitigation to avoid significant environmental effects. The County of Orange is the Lead Agency for the proposed Cielo Vista Project and therefore is responsible for administering and implementing the MMRP. The decision-makers must define specific reporting and/or monitoring requirements to be enforced during Project implementation prior to final approval of the Project. The primary purpose of the MMRP is to ensure that the mitigation measures identified in the Draft and Final EIR (designated by the respective environmental issue within Chapter 4.0 of the EIR) are implemented thereby minimizing identified environmental effects. The MMRP also includes the proposed Project Design Features (PDFs) listed in Chapter 2.0, *Project Description*, and throughout Chapter 4.0 the Draft EIR. The PDFs are specific design elements proposed by the Applicant that have been incorporated into the Project to prevent the occurrence of or to minimize the significance of potential environmental effects. Because PDFs have been incorporated into the Project, they do not constitute mitigation measures, as defined by Section 15126.4 of the State CEQA Guidelines (Title 14 of the California Code of Regulations). However, PDFs are included in this MMRP to ensure their implementation as a part of the Project. The Project would include PDFs related to: Aesthetics, Hazards and Hazardous Material, Hydrology and Water Quality, Traffic/Transportation, and Utilities and Service Systems.

The MMRP for the Project will be in place through all phases of the Project, including design (preconstruction), construction, and operation (both prior to and post-occupancy). The County of Orange (OC) Planning Department is responsible for administering the MMRP. OC Development Services will ensure that monitoring is documented through periodic reports and that deficiencies are promptly corrected. The designated environmental monitor will track and document compliance with mitigation measures, note any problems that may result, and take appropriate action to remedy problems.

Each mitigation measure and PDF is categorized by impact area, with an accompanying identification of:

- The monitoring and reporting phase during which the mitigation measure/PDF should be monitored;
- The timing to which the mitigation measure/PDF must comply with; and
- The responsible monitoring personnel/agency.

**Table 4-1**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b><i>Aesthetics</i></b>						
<p><b>Mitigation Measure 4.1-1</b> - Prior to issuance of any building permit, the Project Applicant/Developer shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the project site consistent with Sec. 7-9-55.8, Site Development Standards, of the Orange County Zoning Code; and to the approval of the Manager, Permit Services (County of Orange). Prior to the final inspection, the Project Applicant/Developer 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 that the light rays are confined to the premises. The letter shall be submitted to the Manager, OC Inspection for review and approval.</p>	<p>Design/Plan Check</p> <p>and</p> <p>Pre-Occupancy</p>	<p>Prior to issuance of building permit</p> <p>and</p> <p>Prior to final inspection</p>	<p>Manager, Permit Services (OC)</p> <p>and</p> <p>Manager, Inspection (OC)</p>			
<p><b>PDF 1-1</b> - The Project would provide up to 112 detached, single-family residences up to two-stories in height within two clustered planning areas (Planning Areas 1 and 2) to maximize</p>	<p>Design/Plan Check</p>	<p>Prior to issuance of building permit</p>	<p>Manager, OC Development Services</p>			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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the potential for open space and retain the primary east-west canyon within the central portion of the site.						
<b>PDF 1-2</b> - A primary community entry would be established at the intersection of "A" Street and Via del Agua (see Figure 2-12, Primary Entry at Via Del Agua, in Section 2.0, <i>Project Description</i> , of the Draft EIR). The entries to the project site would include a blend of hardscape and planting elements, in addition to low-level entry lighting. No entry gates would be installed.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 1-3</b> - Non-reflective and/or anti-glare building materials would be used. The selected color palette for each architectural style should share a "common sense" approach to the use of materials and colors indigenous to the region and compatibility with existing surrounding residential land use.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 1-4</b> - The Project would provide approximately 36 acres of undeveloped open space which can be offered for dedication to a public agency or an appropriate land conservation/trust organization. Or,	Design/Plan Check	Prior to recordation of a subdivision map	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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the open space would be owned and maintained by the Project HOA.						
<b>PDF 1-5</b> - As shown in the Conceptual Landscape Plan (Figure 2-11 and Table 2-2 of the Draft EIR), landscaped areas or natural open space areas would be located adjacent to existing residential development to serve as natural buffers between existing residential neighborhoods and proposed homes. The plant palette would include native and appropriate non-native drought tolerant trees, groundcovers and shrubs that would be compatible with the existing native plant communities found within the site. The landscape design would emphasize the planting of long-lived plant species that are native to the region or well adapted to the climatic and soil conditions of the area. In addition, any invasive non-native species that appears on the California Invasive Plant Council (Cal-IPC) list of invasive species would be excluded from the landscape plan plant palette.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 1-6</b> - As shown in the Streetscapes Plan (see Figure 2-13 of the Draft EIR), the planting plan for	Design/Plan Check	Prior to issuance of grading permit	Manager, OC Development Services			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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streets shall include shrubs, grasses, and stands of native and non-native trees. Uniformed spacing of trees shall be avoided.						
<b>PDF 1-7</b> - Landscape treatment of all areas shall emphasize the planting of shade trees along streets to contrast with open space. Street trees and trees planted near walkways or street curbs shall be selected and installed to prevent damage to sidewalks, curbs, gutters and other improvements.	Design/Landscape Plan Check	Prior to issuance of grading permit	Manager, OC Development Services			
<b>PDF 1-8</b> - Plantings would be installed around the 1.8-acre parcel located in Planning Area 1 that may be designated for continued oil operations to screen most, if not all, of the oil-related facilities within this area.	Design/ Plan Check	Prior to issuance of grading permit	Manager, OC Development Services			
<b>PDF 1-9</b> - All exterior lighting would be directed downward and “night sky friendly,” in compliance with the Codified Ordinances of the County of Orange Section 7-9-55.8 requirements for exterior lighting. All lights would be designed and located so that all direct light rays are confined to the property. No lighting would be cast	Design/Plan Check	Prior to issuance of building permit	Manager, Permit Services (OC)			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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directly outward into open space areas. Specimen trees may be up-lit into the canopy to avoid creating dark sides of the trees in instances where such lighting could be directed onto the tree canopy to avoid light spillage above and beyond the tree. (Mitigation Measure 4.1-1 would ensure compliance with the code requirements.)						
<p><b>PDF 1-10</b> - One or more HOAs may be established for the maintenance of private common area improvements within residential Planning Areas of the project site. Private improvements to be maintained by either the HOA or private property owners may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>▪ Parkway landscaping within the rights of ways of all local streets.</li> <li>▪ Slopes within the boundary of a Planning Area, fuel modification zones, detention and water quality treatment basins and facilities.</li> <li>▪ Community and neighborhood entries and signage, and</li> </ul>	Pre-Occupancy	Prior to issuance of certificates of use and occupancy	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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<p>common open space areas within residential Planning Areas.</p> <ul style="list-style-type: none"> <li>▪ Community perimeter walls and fencing.</li> <li>▪ Landscape areas of lots, common area wall surfaces, and slopes internal to the Project along residential local streets.</li> <li>▪ Common area landscaping and lighting.</li> </ul>						
<b>Air Quality</b>						
<p><b>Mitigation Measure 4.2-1</b> - Prior to the issuance of grading permits, the contractor shall provide evidence to the Manager, Permit Services that compliant with SCAQMD Rule 403 and during construction, that the following measures shall be implemented to reduce fugitive dust emissions:</p> <ul style="list-style-type: none"> <li>▪ Apply water and/or nontoxic chemical soil stabilizers according to manufacturer’s specification to all construction areas expected to be inactive for 10 or more days.</li> </ul>	<p>Pre-Construction</p> <p>and</p> <p>Construction (as necessary)</p>	<p>Prior to issuance of grading permit</p> <p>and</p> <p>Periodic site inspections (as necessary)</p>	<p>Manager, Permit Services (OC)</p>			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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<p>Reapply as needed to minimize visible dust.</p> <ul style="list-style-type: none"> <li>▪ Apply water three times daily or nontoxic chemical soil stabilizers according to manufacturer’s specifications to all unpaved parking or staging areas or unpaved road surfaces.</li> <li>▪ Enclose, cover, water three times daily, or apply approved chemical soil stabilizers to exposed piles of dirt, sand, soil, or other loose materials.</li> <li>▪ Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period.</li> </ul> <p>The determination of wind speed conditions in excess of 25 miles per hour shall be based on the following criteria:</p> <p>(A) For facilities with an on-site anemometer:</p> <p>(i) When the on-site anemometer registers at least two wind gusts in excess of 25 miles per hour within a</p>						

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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<p>consecutive 30-minute period. Wind speeds shall be deemed to be below 25 miles per hour if there is no recurring wind gust in excess of 25 miles per hour within a consecutive 30-minute period; or</p> <p>(B) For facilities without an on-site anemometer:</p> <p>(i) When wind speeds in excess of 25 miles per hour are forecast to occur in Yorba Linda for that day. This condition shall apply to the full calendar day for which the forecast is valid; or</p> <p>(ii) When wind speeds in excess of 25 miles per hour are not forecast to occur, and fugitive dust emissions are visible for a distance of at least 100 feet from the origin of such emissions, and there is visible evidence of wind driven fugitive dust.</p> <ul style="list-style-type: none"> <li>▪ All trucks hauling dirt, sand, soil, or other loose materials are to be</li> </ul>						

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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<p>covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.</p> <ul style="list-style-type: none"> <li>▪ Sweep streets at the end of the day, or more frequently as needed to control track out.</li> <li>▪ To prevent dirt and dust from unpaved construction roads from impacting the surrounding areas, install roadway dirt control measures at egress points from the Project Site (or areas of the Site actively grading). These may be wheel washers, rumble strips, manual sweeping, or other means effective at removing loose dirt from trucks and other equipment before leaving the site.</li> <li>▪ Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads.</li> <li>▪ Plant ground cover in planned areas as quickly as possible after</li> </ul>						

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
grading. <ul style="list-style-type: none"> <li>▪ All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.</li> </ul>						
<b>Mitigation Measure 4.2-2</b> - Prior to the issuance of grading permits, the contractor shall provide evidence to the Manager, Permit Services that compliant with SCAQMD Rule 403 traffic speeds on unpaved roads and project site areas shall be reduced to 15 miles per hour or less.	Pre-Construction  and Construction (as necessary)	Prior to issuance of grading permit  and Periodic site inspections (as necessary)	Manager, Permit Services (OC)			
<b>Biological Resources</b>						
<b>Mitigation Measure 4.3-1</b> - Prior to impacts in least Bell's vireo occupied habitat (i.e., southern willow scrub and mule fat scrub), the Project Applicant/developer shall obtain regulatory permits by way of an authorization pursuant to FESA and CESA. On- and/or off-site replacement and/or enhancement of least Bell's vireo habitat shall be provided by the Project Applicant at a ratio no less than 2:1, in coordination with the regulatory permitting	Pre-Construction	Prior to issuance of grading permit	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
processes of the USFWS and CDFW. Off-site replacement may include, but is not limited to, the purchase of mitigation credits in an agency-approved off-site mitigation bank supporting least Bell's vireo. A Mitigation Plan approved by the USFWS and/or CDFW, as appropriate, shall be provided to the Manager, OC Development Services prior to issuance of a grading permit.						
<p><b>Mitigation Measure 4.3-2</b> - Prior to the issuance of a grading permit, the Project Applicant shall be required to obtain regulatory permits by way of a CWA Section 404 permit, a CWA Section 401 Water Quality Certification, and/or a California Fish and Game Code Section 1602 Streambed Alteration Agreement for impacts to jurisdictional features regulated by the USACE, RWQCB, and/or CDFW and provide documentation of same to the OC Development Services Manager. The following measures may be required by the Agencies, unless required otherwise by the Agencies:</p> <p>1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters</p>	Pre-Construction	Prior to issuance of grading permit	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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<p>of the U.S.” /“waters of the State” at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., pre-project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.</p> <p>2. On- and/or off-site replacement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., pre-project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.</p>						
<p><b>Mitigation Measure 4.3-3</b> - Prior to issuance of a grading permit, the Project Applicant shall demonstrate to the satisfaction of the Manager, OC Development Services that the following requirements have been Included in the Project construction plan:</p> <p>1. Vegetation removal activities shall be scheduled outside the nesting</p>	<p>Pre-Construction</p> <p>and</p>	<p>Prior to issuance of grading permit</p> <p>and</p>	<p>Manager, OC Development Services</p>			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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<p>season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.</p> <p>2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) shall require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors), or as determined appropriate by the biological monitor, shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.</p> <p>3. A qualified biologist shall survey for active bird nests or mammal burrows in all Project site areas that could potentially be exposed to construction noise levels exceeding 60 dBA. Where active bird nests or mammal burrows are discovered, no construction activities shall occur that would result in noise levels exceeding</p>	<p>Construction (as necessary)</p>	<p>Periodic site inspections (as necessary)</p>				

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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60 dBA at the active nest or burrow location. Construction restriction areas shall be staked or fenced under the supervision of the qualified biologist prior to the commencement of construction activities during the breeding season dates listed above.						
<b>Cultural Resources</b>						
<b>Mitigation Measure 4.4-1</b> - Prior to the issuance of any grading permit, the Applicant shall provide written evidence to the Manager, OC Development Services, that the Applicant has retained a qualified archaeological monitor to conduct daily observations of construction excavations into younger Quaternary Alluvium during construction-related ground disturbing activities (i.e., grading and excavation) until the archaeological monitor determines further observations are not necessary based on soil conditions and presence/absence of archaeological resources. The observations shall target the flatter areas of the project site such as hilltops, ridge lines, and canyon bottoms, which are more conducive to retaining archaeological resources	Pre-Construction  and  Construction  (as necessary)	Prior to issuance of grading permit  and  Periodic site inspections  (as necessary)	Manager, OC Development Services			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
since such areas were prime locations for pre-historic occupation as compared to areas of steeper topography.						
<b>Mitigation Measure 4.4-2</b> - In the event that archaeological resources are unearthed during ground-disturbing activities, the archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the find so that the find can be evaluated. Work shall be allowed to continue outside of the vicinity of the find. All archaeological resources unearthed by Project construction activities shall be evaluated by the archaeologist. The Applicant shall coordinate with the archaeologist and the County to develop an appropriate treatment plan for the resources to reduce impacts to any significant resources to a less than significant level. Treatment measures to be considered first shall be avoidance or preservation in place. If preservation or avoidance of the resource is not appropriate, as determined by the archaeologist and the County, then	Construction (as necessary)	Upon discovery of potential archaeological resources  (as necessary)	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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the resource shall be removed from its location and appropriate data recovery conducted to adequately recover information from and about the archeological resource. All archaeological resources recovered shall be documented on California Department of Parks and Recreation Site Forms to be filed with the South Central Coastal Information Center. The landowner, in consultation with the archaeologist and the County shall designate repositories in the event that archaeological material is recovered.						
<b>Mitigation Measure 4.4-3</b> - The archaeological monitor shall prepare a final report at the conclusion of archaeological monitoring. The report shall be submitted by the Applicant to the County, the South Central Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures. The report shall include a description of resources unearthed, if any, treatment of the resources, and evaluation of the resources with	Construction (as necessary)	Upon discovery of potential archaeological resources (as necessary)	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
respect to the California Register of Historical Resources.						
<b>Mitigation Measure 4.4-4</b> - If archaeological resources are encountered during implementation of the Project when the archaeological monitor is not present, ground-disturbing activities shall temporarily be redirected from the vicinity of the find by the construction contractor. The Applicant shall immediately notify a qualified archaeologist of the find. The archaeologist shall coordinate with the Applicant as to the immediate treatment of the find until a proper site visit and evaluation is made by the archaeologist. The Applicant shall then follow the procedures outlined in Mitigation Measure 4.4-2. The archaeologist shall also determine the need for full-time archaeological monitoring for any ground-disturbing activities in the area of the find thereafter and training of construction workers, as appropriate.	Construction (as necessary)	Upon discovery of potential archaeological resources  (as necessary)	Manager, OC Development Services			
<b>Mitigation Measure 4.4-5</b> - Prior to issuance of any grading permit, the Applicant shall retain a qualified paleontologist certified by the County	Pre-Construction  and	Prior to issuance of grading permit  and	Manager, OC Development Services			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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<p>of Orange, Development Services Department (County Property Permits) who shall attend a pre-grading/excavation meeting and develop a paleontological monitoring program for excavations into sediments associated with the fossiliferous older Quaternary Alluvium, Yorba and Sycamore Canyon Members of the Puente Formation, and Quaternary landslides deposits. A qualified paleontologist is defined as a paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. The qualified paleontologist shall supervise a paleontological monitor who shall be present at such times as required by the paleontologist during construction excavations into the fossiliferous deposits mentioned above. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring shall be determined by the paleontologist and shall be based on the rate of excavation and grading</p>	<p>Construction (as necessary)</p>	<p>Periodic site inspections (as necessary)</p>				

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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activities, the materials being excavated, and the depth of excavation, and if found, the abundance and type of fossils encountered.						
<b>Mitigation Measure 4.4-6</b> - If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation and, if necessary, salvage. At the paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the John D. Cooper Archaeological and Paleontological Curation Center at the California State University, Fullerton. Accompanying notes, maps, and	Construction (as necessary)	Upon discovery of fossils (as necessary)	Manager, OC Development Services			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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photographs shall also be filed at the repository.						
<b>Mitigation Measure 4.4-7</b> - The Paleontologist and/or paleontological monitor shall conduct sampling and screening of the underlying sediments at the project site for the presence or absence of microfossils. The monitor shall collect various samples (consisting of approximately 200 pounds of sediment) from the spoils piles, sidewalls, or bottoms of an exposed excavation pit across the project site and use wet- or dry-screening techniques off-site for the recovery of microfossils. If the sample yields an appropriate concentration of microfossils, a bulk sediment sample may be warranted.	Construction	Periodic site inspections (as necessary)	Manager, OC Development Services			
<b>Mitigation Measure 4.4-8</b> - Prior to the release of the grading bond, the paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Applicant for approval by the	Pre-Construction	Prior to release of grading bond	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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Manager, OC Development Services. In addition, the report shall be submitted to the Natural History Museum of Los Angeles County, and other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.						
<b>Mitigation Measure 4.4-9</b> - If human remains are encountered unexpectedly during implementation of the Project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation	Construction (as necessary)	Upon discovery of human remains (as necessary)	Manager, OC Development Services			

**Table 4-1 (Continued)**

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<p>work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants'</p>						

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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<p>preferences for treatment.</p> <p>Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.</p>						
<b>Geology and Soils</b>						
<p><b>Mitigation Measure 4.5-1</b> - Prior to the issuance of precise grading permits unless noted as otherwise below or otherwise agreed to by County's engineering geologist, the Project Applicant/developer shall submit a final site specific, design-level geotechnical investigation prepared by a California-licensed professional engineering geologist to</p>	Design/Plan Check	Prior to issuance of precise grading permit	Manager, OC Public Works, Subdivision and Grading, or his/her designee; County's registered engineering geologist			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
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<p>the County of Orange Public Works Manager, Subdivision and Grading, or his/her designee and the County's engineering geologist for review, approval and implementation pursuant to the final site specific, design-level geotechnical investigation as outlined below. The investigation shall comply with all applicable State and local code requirements, including the current building code in effect at the time of precise grading permit issuance, and shall provide the following:</p> <p>a) As set forth in the letter from Tim Lawson, LGC Geotechnical, Inc. to Larry Netherton re Location of Whittier Fault, Cielo Vista, Tentative Tract Map No. 17341, County of Orange, California, dated July 31, 2014, the primary trace of the Whittier Fault is well-defined as a narrow fault zone less than approximately 15 feet-wide along the east-west drainage in the central portion of the Cielo Vista site. The geotechnical investigation required by this mitigation measure shall evaluate the potential for additional fault traces south of this zone and determine if any additional fault</p>						

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<p>traces are “active” (i.e., a fault that has ruptured the ground surface within the Holocene Age (approximately the last 11,000 years)) by subsurface investigations consisting of trenching activities. Based on the results of this geotechnical investigation, the Project’s proposed residences shall be set back from the fault trace in accordance with State setback requirements. The investigation shall comply with the Alquist-Priolo Earthquake Fault Zone Act.</p> <p>b) Conduct additional fault trenching as necessary and as recommended in the letter from Tim Lawson, LGC Geotechnical, Inc. to Larry Netherton re Discussion of Potential Implications of Subsurface Geological Features in the Southern Portion of Cielo Vista, Tentative Tract Map No. 17341, County of Orange, California, dated August 1, 2014, to confirm that the fault traces identified in the area of FT-1 and FT-4 are not active. Should this area not be determined to be active, a 75-foot setback zone would be recommended for those lots along the south side of the active Whittier Fault as delineated per subsection (a), above, and, on the</p>						

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<p>north side of the active Whittier Fault, a setback zone ranging from 50 feet on the west side of the site to approximately 120 feet on the east side of the site. In addition, a 10-foot overexcavation and recompaction below pad grade for the proposed structures in Lots 18 to 56 is recommended as well as post-tensioned foundations. If faults observed in FT-1 and FT-4 are determined to be active, precise grading permits for Lots 20-52, 66-70, 83-89, 96-98 and 109-112 shall not be issued unless additional studies are prepared and approved by the County's registered engineering geologist confirming that some or all of these lots are suitable for residential construction.</p> <p>c) Include a stability analysis consisting of down-hole logging of large-diameter borings in the areas of suspected landslides and other areas of potential slope stability issues to characterize the slopes and engineering analysis to determine what, if any, stabilization measures are necessary. For potential global and local slope failures, a factor of safety for slope stability of equal to or</p>						

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<p>greater than 1.5 and 1.1 for static and seismic loading conditions, respectively, is the generally accepted minimum for new residential construction. Where existing and/or proposed slopes are found to have a factor of safety lower than these minimum requirements, the development shall either need to be setback from, or mitigation methods implemented to improve the stability of, the slopes to these minimum levels. Slopes with less than the minimum factor of safety must be sufficiently setback so that at the location of the proposed residential structures, at least the minimum required factor of safety is achieved. Potential methods of mitigation against slope stability issues related to potentially unstable existing and proposed slopes, including existing landslides, typically include partial or complete landslide removal, excavation and construction of earthen buttresses, and/or shear keys. Landslide removal requirements, as well as the locations, depths, widths, and lengths of the buttresses/shear keys, shall be determined via geotechnical</p>						

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<p>investigation and analysis during the design phase of the Project and confirmed during site grading.</p> <p>d) Conduct representative sampling and laboratory testing of the onsite soils to identify the locations of on-site expansive or compressible soils. Where unsuitable soils are found, site-specific design criteria (i.e., foundation design parameters) and remedial grading techniques (i.e., primarily removal, moisture conditions and recompaction of unsuitable soils) shall be identified in the design-level geotechnical report to remove and/or mitigate unsuitable soils that could create geotechnical stability hazards to the Project.</p> <p>e) Determine structural design requirements as prescribed by the most current version of the California Building Code, including applicable County amendments, to ensure that structures and infrastructure can withstand ground accelerations expected from known active faults.</p> <p>Project plans for foundation design, earthwork, and site preparation shall incorporate all of the mitigations in the site-specific investigations. The</p>						

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
County's registered engineering geologist shall review the site-specific investigations, provide any additional necessary measures to meet Building Code requirements, and incorporate all applicable recommendations from the investigation in the design plans and shall ensure that all plans for the Project meet current Building Code requirements.						
<b>Hazards and Hazardous Materials</b>						
<b>Mitigation Measure 4.7-1</b> - Prior to the issuance of grading permits, the Project Applicant/developer shall submit the Soil Management Plan (SMP) prepared by a California-licensed professional geologist to the County of Orange Public Works Manager, Subdivision and Grading, or his/her designee for review, approval and implementation by the Project Proponent. The SMP shall include the protocol for the handling and/or disposal of impacted soils, as well as subsurface structures (i.e., underground storage tanks), that could potentially be encountered during construction activities. The SMP shall include protocols for: screening of soil exhibiting impacts,	Pre-Construction	Prior to issuance of grading permit	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
handling of volatile organic compounds (VOC) contaminated soils; stockpile management; vapor suppression and dust control, surface water protection, soil stockpile sampling; sampling frequency; and exporting of contaminated soils.						
<b>Mitigation Measure 4.7-2</b> - During ground disturbing construction activities, should VOC contaminated soils be encountered as a result of the screening methods prescribed by the Soils Management Plan (refer to Mitigation Measure 4.7-1), ground disturbing construction activities shall be immediately halted. Ground disturbing activities shall not resume until a VOC mitigation plan in accordance with South Coast SCAQMD Rule 1166 has been reviewed and approved by the SCAQMD Executive Officer. The VOC mitigation plan shall set forth requirements to control the emission of VOCs from excavating, grading, handling and treating VOC-contaminated soil consistent with SCAQMD Rule 1166.	Construction (as necessary)	Upon discovery of VOC contaminated soils (as necessary)	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<p><b>Mitigation Measure 4.7-3</b> - Prior to the issuance of grading permits, a qualified environmental consultant shall prepare and submit a site-specific health and safety plan (HASP) to the County of Orange Public Works Manager, Subdivision and Grading, or his/her designee for review and approval. The HASP shall be implemented in conjunction with the Soils Management Plan (refer to Mitigation Measure 4.7-1) when handling soil with suspected or confirmed chemical of concern (COC) impacts. At a minimum, the HASP shall identify the potential COCs and/or other hazards of concern and establish guidelines and/or procedures for controlling/minimizing exposures to potential COCs/hazards, including the appropriate level(s) of personal protective equipment (PPE). The general contractor shall be responsible for non-COC-related health and safety concerns associated with the excavation (e.g., excavation stability, stockpile placement, heavy equipment operation).</p>	Pre-Construction	Prior to issuance of grading permit	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<p><b>Mitigation Measure 4.7-4</b> - After decommissioning of the oil facilities on the project site, a qualified environmental consultant shall inspect the abandoned wells and perform a review of well decommission documentation. Also, DOGGR shall be contacted to perform a "Construction Site Review" of the abandoned wells on the subject site to determine whether the wells have been abandoned to current standards, as well as verify that adequate distances of wells to proposed structures is proposed. If these are not adequate, the siting of proposed structures and/or proper measures to well features shall be conducted to the satisfaction of DOGGR.</p>	Pre-Construction/ Construction	After decommissioning of the oil facilities on the project site	Manager, OC Public Works, Subdivision and Grading, or his/her designee			
<p><b>Mitigation Measure 4.7-5</b> - The Project Applicant shall retain a qualified environmental consultant to profile the unidentified substance in the unlabeled 55-gallon drum and facilitate its disposal in accordance with regulatory guidelines, including DOGGR, RWQCB, OCFA, OCHCA and/or any other agency with jurisdiction over such disposal measures. If soil staining occurs</p>	Pre-Construction	Prior to issuance of grading permit	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
around and/or beneath the container and the contents of the drum are determined to be hazardous, soil sampling shall be performed to determine if impacts to the near surface soils have occurred. If so, soil shall be removed in accordance with the measures included in the Project's SMP to be implemented pursuant to Mitigation Measure 4.7-1.						
<b>Mitigation Measure 4.7-6</b> - Prior to grading activities and concurrent with decommissioning of the on-site oil facilities, the Project Applicant shall retain a qualified environmental consultant/California registered engineer and/or geologist with demonstrated proficiency in the subject of soil gas investigation and mitigation to prepare a combustible gas/methane assessment study to the OCFA for review and approval, prior to grading activities. The study shall be prepared to meet the combustible soil gas hazard mitigation requirements set forth in OCFA's Combustible Soil Gas Hazard Mitigation Guideline C-03. Prior to conducting the gas/methane assessment study, the site drill locations shall be pre-approved by the	Pre-Construction	Prior to issuance of grading permit and concurrent with decommissioning of the on-site oil facilities	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
OCFA as to ensure approval of the report. Based on the results of the study, methane mitigation measures, which may include, but are not limited to, the use of vapor barriers and/or sealed utility conduits, and other mitigation measures shall be identified in a mitigation plan for implementation during construction and operation of the Project. The mitigation plan shall be subject to review and approval by the OCFA prior to grading activities.						
<b>Mitigation Measure 4.7-7</b> - Areas within Planning Area 1 (including, but not limited to areas located adjacent to lots 40, 41, 49, 50, 85, 86, and 87) not capable of providing a typical 170-foot fuel modification zone, shall increase the irrigated zone(s) to 100 feet and shall provide six-foot high block walls/radiant heat walls constructed of block/tempered glass over block at the bottom of the fuel modification zone. The block walls/radiant heat walls shall be placed where the fuels below the structure are not of continuous nature and not in alignment with the slope and Santa Ana winds and/or the	Design/Plan Check	Prior to issuance of building permit  and  Prior to issuance of certificates of use and occupancy	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
predominant winds. The block walls/radiant heat walls shall be perpendicular to the wind, but parallel with the slope. In most cases, the block walls/radiant heat walls shall be located at the property line/base of the irrigated zone and down slope from the native vegetation. Increased irrigated zones and block walls/radiant heat walls design and location shall be subject to the review and approval of the OCFA, prior to issuance of certificates of use and occupancy.						
<b>Mitigation Measure 4.7-8</b> - Structures with deficient fuel modification lots 39-42, 49-52, 69, 70, and 85-88 shall be protected with NFPA 13-D Automatic Fire Sprinklers including the attics and small spaces. Lots 96-112 shall be protected with NFPA 13-D Automatic Fire Sprinklers including attics and small spaces to mitigate for roadway access longer than 800-feet. Such features shall be indicated on construction drawings prior to issuance of a building permit.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<p><b>Mitigation Measure 4.7-9</b> - Fuel modification easements for maintaining the fuel modification areas must list the OCFA as an authorized user. These easements are recorded as part of the mapping process. Prior to recordation of the CC&amp;R's, OCFA must approve language allowing OCFA access to HOA owned property for the purpose of inspecting the fuel modification, plant palette, and added improvements to ensure maintenance of the fire safe zones. In addition, CC&amp;R's shall provide landscaping and maintenance guidelines to ensure that each residential lot is fire-safe and list allowable improvements such as patio structure, play equipment construction, and fencing materials. The CC&amp;R's shall be recorded prior to issuance of certificate of use and occupancy.</p>	Pre-Occupancy	Prior to issuance of certificates of use and occupancy	Manager, OC Development Services			
<p><b>Mitigation Measure 4.7-10</b> - For the safety of construction personnel, neighboring homes, and firefighting safety in the wildland areas, the Project Applicant, under the supervision of the Fire Chief, and prior to issuance of building permits</p>	Pre-Construction	Prior to issuance of building permit	Manager, OC Development Services			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
shall have completed the Project roadways in accordance with applicable OCFA and/or County design standards in the area prior to building permit issuance.						
<b>Mitigation Measure 4.7-11</b> - Prior to issuance of building permits, a service letter from the water agency serving the project area shall be submitted and approved by the OCFA water liaison describing the water supply system, pump system, and fire flow and lists the design features to ensure fire flow during a major wildfire incident.	Pre-Construction	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 7-1</b> - Prior to grading for development, existing on-site oil wells and facilities, and production facilities would be abandoned or re-abandoned, as necessary, in accordance with the standards of the State of California Division of Oil, Gas and Geothermal Resources (DOGGR). All other containers associated with oil production shall also be disposed in accordance with applicable regulatory requirements.	Pre-Construction	Prior to issuance of grading permit	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b>PDF 7-2</b> - No new residences (habitable structures) would be developed within 150 feet of any surface operational oil well; or within 50 feet of a subsurface pumping unit/well enclosed within a concrete vault, or as otherwise approved by the Director, OC Development Services. The buffer(s) would be clearly dimensioned on all applicable plans prior to issuance of building permits to the satisfaction of the Manager, OC Development Services.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 7-3</b> - No new residences (habitable structures) would be developed within ten feet of abandoned wells. The 10-foot buffer would be clearly dimensioned on all applicable plans prior to issuance of permits to the satisfaction of the Manager, OC Development Services.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 7-4</b> - All new wells drilled in the 1.8-acre "oil drilling pad" parcel located in Planning Area 1 for potential continued oil operations would be drilled per applicable DOGGR, OCFA and County of Orange requirements.	Post-Occupancy (as necessary)	Prior to operating permit for future oil-related facilities	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b>PDF 7-5</b> - The oil drilling pad would not be accessible to the public. Plantings, barriers, signage, and information would be provided where necessary to ensure public safety.	Post-Occupancy	Prior to operating permit for future oil-related facilities	Manager, OC Development Services			
<b>PDF 7-6</b> - Access to the oil drilling pad shall be provided within existing oil field service roads. No new roadways for servicing existing or proposed oil wells would be constructed through open space areas.	Post-Occupancy	Prior to operating permit for future oil-related facilities	Manager, OC Development Services			
<b>PDF 7-7</b> - The Applicant/developer would provide written notification to all future homeowners regarding the previous use of the site as an oilfield and the extent of continued oil production activities in the area.	Pre-Occupancy	Prior to issuance of certificates of use and occupancy	Manager, OC Development Services			
<b>PDF 7-8</b> - At the time oil operations on the 1.8-acre parcel cease, any wells would be abandoned and contaminated soils would be remediated pursuant to all applicable requirements, if necessary.	Post-Occupancy	Prior to termination of future oil-related facilities	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b>PDF 7-9</b> - Prior to issuance of a building permit, the Project would implement a fire protection plan that would comply with OCFA's standards for VHFHSZ/SFPA.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 7-10</b> - The Project would incorporate fire-resistant construction for all structures adjoining open space areas including the use of fire-resistant building materials. Such materials would be clearly shown on construction drawings and reviewed and approved by the Manager, OC Development Services prior to issuance of a building permit.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 7-11</b> - All structures would be protected with smoke detectors and National Fire Protection Association (NFPA) 13-D Automatic Fire Sprinklers. Such features would be clearly shown on construction drawings and reviewed and approved by the Manager, OC Development Services prior to issuance of a building permit.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b>PDF 7-12</b> - The project shall include fuel modification/management zones to help suppress wildland fires in accordance with OCFA guidelines.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 7-13</b> - The Project would incorporate a landscape plan that utilizes a plant palette consisting of fire resistant plants, native and appropriate non-native drought tolerant species in accordance with OCFA guidelines. In addition, long-term maintenance responsibilities would remove from all fuel modification zones any invasive non-native species that appear on the California Invasive Plant Council (Cal-IPC) list of invasive species to prevent these from becoming established.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 7-14</b> - Per OCFA requirements, fire hydrants would be spaced at 600 feet or less and minimum fire access requirements would be met or exceeded (28-foot minimum road width, 17-foot inside and 38-foot outside turning radius).	Design/Plan Check	Prior to recordation of subdivision map	Manager, OC Development Services			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b><i>Hydrology and Water Quality</i></b>						
<b>PDF 8-1</b> - The Project would implement a Water Quality Management Plan (WQMP) and a Storm Water Pollution Prevention Plan (SWPPP). The WQMP would include detailed sizing parameters for the basins and would provide guidelines for the proper maintenance of the water quality basins. The WQMP and SWPPP would identify the BMPs to be implemented by the Project that would reduce pollution levels in stormwater discharge in compliance with applicable water quality standards. These plans would be reviewed and approved by the Manager, OC Development Services prior to recordation of the subdivision map.	Design/Plan Check	Prior to recordation of subdivision map	Manager, OC Development Services			
<b>PDF 8-2 - Debris Basin</b> - The Project would include a debris basin at the most easterly cul-de-sac in Planning Area 1 for a drainage tributary (Creek A) of approximately 636 acres, which enters the project site at this location.	Design/Plan Check	Prior to issuance of grading or building permit	Manager, Permit Services (OC)			
<b>PDF 8-3</b> - All habitable building floor elevations would be constructed at a minimum of 1-foot (or greater) above	Design/Plan Check	Prior to issuance of grading or building permit	Manager, Permit Services (OC)			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
the anticipated peak 100-year flood water surface elevation to ensure that no residential structure would be flooded within the project site.						
<b>Noise</b>						
<b>Mitigation Measure 4.10-1</b> - During all project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site. All operations shall comply with the County of Orange Codified Ordinance Division 6 (Noise Control). The contractor shall produce evidence that the measures are in place prior to issuance of any grading permits and as approved by the County of Orange Manager, Planning Services.	Pre-Construction  and  Construction (as necessary)	Prior to issuance of grading permit  and  Periodic site inspections (as necessary)	Manager, OC Development Services			
<b>Mitigation Measure 4.10-2</b> - The construction contractor shall locate equipment staging in areas that would create the greatest distance	Pre-Construction  and	Prior to issuance of grading permit  and	Manager, OC Development Services			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction. All operations shall comply with the County of Orange Codified Ordinance Division 6 (Noise Control). Prior to issuance of any grading permits the County of Orange Manager, Planning Services shall approve the location of the staging area.	Construction (as necessary)	Periodic site inspections (as necessary)				
<b>Mitigation Measure 4.10-3</b> - The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. Haul routes shall be selected so that trips passing sensitive land uses or residential dwellings will be minimized. Further, haul routes shall be located to avoid concurrent use of haul routes from other related projects where sensitive receptors are located along such routes. Haul routes shall be approved by the Manager, OC Development Services prior to the issuance of any grading permits.	Pre-Construction and Construction (as necessary)	Prior to issuance of grading permit and Periodic site inspections (as necessary)	Manager, OC Development Services			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<p><b>Mitigation Measure 4.10-A (Supplemental Construction Noise Mitigation Measure)</b> Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible. Unattended construction vehicles shall not idle for more than 5 minutes when located within 500 feet from residential properties.</p>	<p>Construction (as necessary)</p>	<p>Periodic site inspections (as necessary)</p>	<p>Manager, OC Development Services</p>			
<p><b>Mitigation Measure 4.10-B (Supplemental Construction Noise Mitigation Measure)</b> Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners and residents to contact the job superintendent if necessary. In the event the County receives a complaint, appropriate corrective actions shall be implemented.</p>	<p>Construction (as necessary)</p>	<p>Periodic site inspections (as necessary)</p>	<p>Manager, OC Development Services</p>			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<p><b>Mitigation Measure 4.10-C (Supplemental Construction Noise Mitigation Measure)</b> Two weeks prior to the commencement of construction, notification must be provided to surrounding land uses within 500 feet of a project site disclosing the construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period. This notification shall give a contact phone number for any questions or complaints. All complaints shall be responded to in a method deemed satisfactory by the County of Orange.</p>	Pre-Construction	2 weeks prior to construction	Manager, OC Development Services			
<p><b>Mitigation Measure 4.10-4</b> - The Project Applicant shall retain the services of a qualified acoustical engineer with expertise in design of sound isolations to ensure that operation of the on-site oil well facilities are within County's exterior noise limits at the property line of the nearest proposed residential lot. Noise measures may include, but are not limited to, screening of oil facilities, motor dampening, and/or nighttime shutdown so as to meet the</p>	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
County's noise requirements. Screening, if necessary, could include landscaping and/or sound wall. The acoustics analysis of the oil well facilities shall be reviewed and approved by the Manager, OC Development Services, or his designee prior to issuance of building permits for the oil well facilities.						
<b>PDF 10-1</b> - Noise attenuation measures, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources, shall be implemented where feasible.	Pre-Construction  and  Construction (as necessary)	Prior to issuance of grading permit  and  Periodic site inspections (as necessary)	Manager, OC Development Services			
<b>Public Services</b>						
<b>Fire Protection Services</b> - Refer to Mitigation Measures 4.7-1 through 4.7-11; and Mitigation Measure 4.15-1. The following mitigation measures are also prescribed.						
<b>Mitigation Measure 4.12-1</b> - Prior to issuance of a grading permit, the Project Applicant shall enter into a Secured Fire Protection Agreement with the OCFA. This Agreement shall specify the developer's pro-rata fair share funding of capital improvements and equipment, which shall be limited to that required to	Design/Plan Check	Prior to issuance of grading permit	Manager, OC Development Services			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
serve the Project, to the satisfaction of OCFA.						
<b>Mitigation Measure 4.12-2</b> - All new traffic signals on public access ways shall include the installation of optical preemption devices to the satisfaction of the OCFA and the County of Orange Manager, Subdivision and Grading Services.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Public Works, Subdivision and Grading, or his/her designee			
<b>Police Protection Services</b>						
<b>Mitigation Measure 4.12-2B</b> Prior to issuance of a grading permit, the Project Applicant shall enter into a secured Law Enforcement Services Agreement with the Orange County Sheriff's Department. This Agreement shall specify the developer's pro-rata fair share funding of capital improvements and equipment, which shall be limited to serve the project site.	Design/Plan Check	Prior to issuance of grading permit	Manager, OC Development Services			
<b>School Facilities</b>						
<b>Mitigation Measure 4.12-3</b> - Prior to issuance of building permits and pursuant to Section 65995 of the CGC, the Project Applicant shall pay the required SB 50 (Section 65995 of the CGC) mitigation fees to the PYLUSD as	Pre-Construction	Prior to issuance of building permit	Manager, OC Development Services			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
full mitigation for potential Project impacts to schools.						
<b>School Safety - Short-Term Construction Impacts</b> - Refer to Mitigation Measure 4.14-1. The following mitigation measures are also prescribed.						
<b>Mitigation Measure 4.12-4</b> - During construction, the Project's Construction Staging and Traffic Management Plan (see Mitigation Measure 4.14-1) shall include a provision for on-going communication shall be maintained with school administration at the Travis Ranch School, Fairmont Elementary School and YLHS, providing sufficient notice to forewarn students and parents/guardians when existing pedestrian and vehicle routes to the school may be impacted in order to ensure school traffic and pedestrian safety.	Construction	Periodic commications with schools (as necessary)	Manager, OC Public Works, Subdivision and Grading, or his/her designee			
<b>Mitigation Measure 4.12-5</b> - In order to ensure school traffic and pedestrian safety, during construction, construction vehicles shall not haul past the Travis Ranch School, Fairmont Elementary School and YLHS, except when school is not in session. If that is infeasible, construction vehicles shall not haul during school arrival or dismissal times.	Construction	Periodic site inspections	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b>Mitigation Measure 4.12-6</b> - During construction, crossing guards shall be provided by the Project Applicant in consultation with the Travis Ranch School, Fairmont Elementary School and YLHS, as appropriate, when safety of students may be compromised by construction-related activities at impacted school crossings in order to ensure school pedestrian safety.	Construction	Periodic site inspections	Manager, OC Public Works, Subdivision and Grading, or his/her designee			
<b>Mitigation Measure 4.12-7</b> - During construction, temporary traffic control, signage, and/or flaggers shall be present on Via Del Agua and Aspen Way to direct vehicular traffic and pedestrians around the construction site in order to ensure school traffic and pedestrian safety.	Construction	Periodic site inspections	Manager, OC Public Works, Subdivision and Grading, or his/her designee			
<b>Libraries</b>						
<b>Mitigation Measure 4.12-8</b> - Prior to the issuance of building permits, the Project Applicant/developer shall comply with the development fee program for OCPL as provided in Sections 7-9-700 through 7-9-713 of the Codified Ordinances of the County of Orange and/or the development fee program for the City of Yorba Library	Pre-Construction	Prior to issuance of building permit	Manager, OC Development Services			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
system, to be determined in consultation with City of Yorba Linda and County of Orange Planning Staff.						
<b>Mitigation Measure 4.12-8(b)</b> - Prior to issuance of a building permit, the Project Applicant shall enter into a capital facilities and equipment agreement with the Orange County Public Library and/or the Yorba Linda Public Library. This Agreement shall specify the developer’s pro-rata fair share funding of capital improvements and equipment, which shall be limited to serve the project site.	Pre-Construction	Prior to issuance of building permit	Manager, OC Development Services			
<b>Recreation</b>						
<b>Mitigation Measure 4.13-1</b> - Prior to issuance of certificates of occupancy, the Project Applicant shall pay local park fees pursuant to the determining formula contained in the County Local Park Code, and meeting the City standards for the provision of local parks. The fees shall be paid to the OC Parks. Such fees shall be utilized for improvements to an existing park or acquisition of land for a new park, or a combination of both to the benefit of the northeastern Yorba Linda community near the project site.	Pre-Construction	Prior to issuance of certificates of use and occupancy	Manager, OC Development Services			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b>Mitigation Measure 4.13-2</b> - Prior to issuance of grading permits, the Project Applicant shall coordinate with the City of Yorba Linda Parks and Recreation Department and OC Parks in order to identify potential planned trail alignments through the project site, as identified in the City of Yorba Linda's Riding, Hiking and Bikeway Trail Component Map. Once the trail alignments are defined by the City and/or County, the alignments shall be dedicated by the Project Applicant, to the City or the County either in fee or by an access and maintenance easement.	Design/Plan Check	Prior to issuance of grading permit	Manager, OC Development Services			
<b>Transportation/Traffic</b>						
<b>Construction Impacts</b> - Refer to Mitigation Measures 4.12-4 to 4.12-7. The following mitigation measure is also prescribed.						
<b>Mitigation Measures 4.14-1</b> - Prior to the start of construction, the Project Applicant, in coordination with the County of Orange, shall devise a Construction Staging and Traffic Management Plan to be implemented during construction of the Project. The Construction Staging and Traffic Management Plan shall identify all traffic control measures, signs, and delineators to be	Design/Plan Check	Prior to issuance of grading permit	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

Table 4-1 (Continued)

Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
implemented by the construction contractor through the duration of construction activities associated with the Project. The Plan shall also consider construction traffic and associated construction traffic noise from nearby simultaneous construction activities and pedestrian safety related to school routes. The Construction Staging and Traffic Management Plan shall be subject to final approval by the County of Orange Public Works Department.						
<b>Operation Impacts</b>						
<b>Mitigation Measure 4.14-2</b> A traffic signal shall be installed prior to issuance of the first occupancy permits, or as otherwise determined appropriate through consultation with the City of Yorba Linda, for the Project at the intersection of Via del Agua and Yorba Linda Boulevard. The Project Applicant shall pay the City of Yorba Linda its fair share cost toward installation of a traffic signal, install the traffic signal, or pay the full cost of the signal installation, with the latter two alternatives subject to reimbursement, as agreed to by the Project Applicant and the City of Yorba Linda.	Pre-Occupancy	Prior to issuance of certificates of use and occupancy	Manager, OC Public Works, Subdivision and Grading, or his/her designee			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b>PDF 14-1</b> - All local streets proposed by the Project would meet the minimum street design and size standards of the City of Yorba Linda and the County of Orange.	Design/Plan Check	Prior to recordation of a subdivision map	Manager, OC Development Services			
<b>PDF 14-2</b> - Landscape plans would take into consideration service lines, traffic safety sight line requirements, and structures on adjacent properties to avoid conflicts as trees and shrubs mature.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 14-3</b> - The stopping sight distance at Via del Aqua and the proposed Street A would meet or exceed the County's Standard Plan No. 1117 requirements for stopping sight distance.	Design/Plan Check	Prior to recordation of a subdivision map	Manager, OC Development Services			
<b>Utilities and Service Systems</b>						
<b>Water Supply and Infrastructure</b> - Refer to Mitigation Measure 4.7-11. The following mitigation measure is also prescribed.						
<b>Mitigation Measure 4.15-1</b> - To address the Project's need for water storage, the Project Applicant shall pay a fair-share cost to the YLWD for infrastructure improvements identified in the Northeast Area Planning Study that are required to support the Cielo Vista Project. The	Pre-Construction	Prior to issuance of grading permit	Manager, OC Development Services			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
payment shall reflect a proportional fair-share of the costs attributable to the Cielo Vista Project toward improvements YLWD has proposed that include construction of facilities which directly benefit and are needed for capacity and conveyance at the project site as determined by District Staff. No grading permits shall be issued for the Project until these improvements are implemented by YLWD and are operational to the satisfaction of the OCFA, unless otherwise determined acceptable by the YLWD and OCFA.						
<b>PDF 15-1</b> - Builder-installed indoor appliances, including dishwashers, showers and toilets, would be low-water use.	Pre-Occupancy	Prior to issuance of certificates of use and occupancy	Manager, OC Development Services			
<b>PDF 15-2</b> - Drought-tolerant, native landscaping would be used in public common areas to reduce water consumption. The plant palette for the Project would ultimately be determined based on OCFA requirements for use of fire-resistant plants in high fire-prone areas, but in consideration of applicable City of Yorba Linda and County of Orange landscaping requirements.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			

Table 4-1 (Continued)

## Mitigation Monitoring and Reporting Program

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
<b>PDF 15-3</b> - Community landscape areas would be designed on a "hydrozone" basis to group plants according to their water and sun requirements. The plant palette for the Project would ultimately be determined based on OCFA requirements for use of fire-resistant plants in high fire-prone areas, but in consideration of applicable City of Yorba Linda and County of Orange landscaping requirements.	Design/Plan Check	Prior to issuance of building permit	Manager, OC Development Services			
<b>PDF 15-4</b> - Irrigation for both public and private landscape areas would be designed to be water-efficient and comply with Section 7-9-133.5, Landscape Water Use Standards, of the Orange County Code of Ordinances. All irrigation systems would have automatic controllers designed to properly water plant materials given the site's soil conditions, and irrigation systems for all public landscapes would have automatic rain shut-off devices. Drip irrigation would be encouraged. Spray systems would have low volume, measured as gallons per minute (GPM), matched-precipitation heads. Prior to approval of the	Design/Plan Check	Prior to approval of the tentative map	Manager, Permit Services (OC)			

**Table 4-1 (Continued)**

**Mitigation Monitoring and Reporting Program**

Mitigation Measure or Project Design Feature (PDF)	Monitoring and Reporting Phase	Timing	Responsible for Monitoring	Compliance Verifications		
				Initial	Date	Comments
tentative map, the Project Applicant would obtain approval from the Manager, Permit Services of a preliminary landscape plan including the above listed conservation features and compliance with the County's County of Orange Landscape Code (Ord. No. 09-010).						