

## 4.0 – Mitigation Monitoring and Reporting Program

The purpose of the program is to ensure that the mitigation measures required by the Environmental Impact Report (EIR) for the City's requested actions are properly implemented. The City will monitor the mitigation measures for implementation of the project. The Mitigation Monitoring Checklist provides a mechanism for monitoring the mitigation measures in compliance with the EIR. General guidelines for the use and implementation of the monitoring program are described below.

### MITIGATION MONITORING CHECKLIST

The Mitigation Monitoring Checklist is organized by categories of environmental impacts, (e.g., Air Quality, Biological Resources, Cultural Resources, etc.). The checklist identifies the implementation schedule and the responsible party for implementing the measure. A description of these items is provided below.

**Schedule for Implementation.** The mitigation measures required for the project will be implemented at various times as construction proceeds and during operation. Some measures must be implemented before or during construction activities, while others must be implemented on completion. For each mitigation measure, the implementation schedule is identified.

**Monitoring Responsibility.** The Monitoring Responsibility explains who will ensure that the mitigation measures are properly implemented is identified for each mitigation measure. The City of Murrieta shall be responsible for either monitoring each measure, or delegating to an agency or party at their discretion.

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Mitigation Measure	Schedule for Implementation	Monitoring Responsibility
<b>Air Quality</b>		
<p><b>AQ - 1</b> Require the use of Tier 4 emissions standards or better for off-road diesel-powered construction equipment of 50 horsepower or greater. To ensure that Tier 4 construction equipment or better will be used during the proposed Project's construction, South Coast Air Quality Management District (SCAQMD) staff recommends that the Lead Agency include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractor(s) must demonstrate the ability to supply the compliant construction equipment for use prior to any ground disturbing and construction activities. A copy of each unit's certified tier specification or model year specification and California Air Resources Board (CARB) or SCAQMD operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment. Additionally, the Lead Agency should require periodic reporting and provision of written construction documents by construction contractor(s) to ensure compliance and conduct regular inspections to the maximum extent feasible to ensure compliance.</p>	Prior to Construction	City of Murrieta and SCAQMD
<p><b>AQ-2</b> Require zero-emissions or near-zero emission on-road haul trucks such as heavy-duty trucks with natural gas engines that meet the CARB's adopted optional NOx emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible. At a minimum, require that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year trucks (e.g., material delivery trucks and soil import/export) that meet CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. The Lead Agency should include this requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards, and make the records available for inspection. The Lead Agency should conduct regular inspections to the maximum extent feasible to ensure compliance.</p>	Prior to Construction	City of Murrieta
<p><b>AQ-3</b> Suspend all on-site construction activities when wind speeds (as instantaneous gusts) exceed 25 miles per hour.</p>	Prior to and during construction	City of Murrieta

<p><b>AQ-4</b> All trucks hauling dirt, sand, soil or other loose materials are to be covered, or should maintain at least two feet of freeboard in accordance with California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).</p>	<p>During Construction</p>	<p>City of Murrieta</p>
<p><b>AQ-5</b> Enter into applicable bid documents, purchase orders, and contracts to notify all construction vendors, contractors, and/or haul truck operators that vehicle and construction equipment idling time will be limited to no longer than five minutes, consistent with the CARB’s policy. For any idling that is expected to take longer than five minutes, the engine should be shut off. Notify construction vendors, contractors, and/or haul truck operators of these idling requirements at the time that the purchase order is issued and again when vehicles enter the proposed Project site. To further ensure that drivers understand the vehicle idling requirement, post signs at the proposed Project site, where appropriate, stating that idling longer than five minutes is not permitted.</p>	<p>Prior to Construction</p>	<p>City of Murrieta and SCAQMD</p>
<p><b>AQ-6</b> Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas.</p>	<p>Prior to Construction</p>	<p>City of Murrieta</p>
<p><b>AQ-7</b> Limit the daily number of trucks allowed at the proposed Project to levels analyzed in the CEQA document. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the proposed Project through the CEQA process prior to allowing this land use or higher activity level.</p>	<p>Prior to Construction</p>	<p>City of Murrieta</p>
<p><b>AQ-8</b> Provide electric vehicle (EV) Charging Stations.</p>	<p>After Construction</p>	<p>City of Murrieta and SCAQMD</p>
<p><b>AQ-9</b> Should the proposed Project generate significant regional emissions; the Lead Agency should require mitigation that requires accelerated phase-in for non-diesel-powered trucks. For example, natural gas trucks, including Class 8 HHD trucks, are commercially available today. Natural gas trucks can provide a substantial reduction in health risks, and may be more financially feasible today due to reduced fuel costs compared to diesel. In the Draft SEIR, the Lead Agency should require a phase-in schedule for these cleaner operating trucks to reduce any significant adverse air quality impacts. SCAQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive programs with the Lead Agency.</p>	<p>Prior to and during construction</p>	<p>City of Murrieta and SCAQMD</p>

<p><b>AQ-10</b> Trucks that can operate at least partially on electricity have the ability to substantially reduce the significant NOx impacts from this project. Further, trucks that run at least partially on electricity are projected to become available during the life of the project as discussed in the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS). It is important to make this electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Therefore, SCAQMD staff recommends the Lead Agency Require the proposed Project and other plan areas that allow truck parking to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for trucks to plug-in. Similar to the City of Los Angeles requirements for all new projects, SCAQMD staff recommends that the Lead Agency require at least 5% of all vehicle parking spaces (including for trucks) include EV charging stations. Further, electrical hookups should be provided at the onsite truck stop for truckers to plug in any onboard auxiliary equipment. At a minimum, electrical panels should be appropriately sized to allow for future expanded use.</p>	<p>Prior to Construction</p>	<p>City of Murrieta and SCAQMD</p>
<p><b>AQ-11</b> Design warehouses or distribution centers such that entrances and exits are such that trucks are not traversing past neighbors or other sensitive receptors.</p>	<p>Prior to Construction</p>	<p>City of Murrieta</p>
<p><b>AQ-12</b> Design warehouses or distribution centers such that any check-in point for trucks is well inside the site to ensure that there are no trucks queuing outside of the facility.</p>	<p>Prior to, during, and after construction</p>	<p>City of Murrieta</p>
<p><b>AQ-13</b> Design warehouses or distribution centers to ensure that truck traffic within the site is located away from the property line(s) closest to its residential or sensitive receptor neighbors.</p>	<p>Prior to Construction</p>	<p>City of Murrieta</p>
<p><b>AQ-14</b> Restrict overnight parking in residential areas.</p>	<p>Prior to, during, and after construction</p>	<p>City of Murrieta</p>
<p><b>AQ-15</b> Establish overnight parking within warehouses or distribution centers where trucks can rest overnight.</p>	<p>Prior to, during, and after construction</p>	<p>City of Murrieta</p>
<p><b>AQ-16</b> Establish area(s) within warehouses or distribution centers for repair needs.</p>	<p>Prior to, during, and after construction</p>	<p>City of Murrieta</p>
<p><b>AQ-17</b> Develop, adopt and enforce truck routes to and from warehouses or distribution centers that avoid sensitive receptors, where feasible.</p>	<p>Prior to, during, and after construction</p>	<p>City of Murrieta</p>

<p><b>AQ-18</b> Create a buffer zone of at least 300 meters (roughly 1,000 feet), which can be office space, employee parking, greenbelt, etc. between warehouses or distribution centers and sensitive receptors.</p> <p><b>AQ-19</b> Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or on the proposed Project site to generate solar energy for the facility.</p> <p><b>AQ-20</b> Maximize the planting of trees in landscaping and parking lots.</p> <p><b>AQ-21</b> Use light colored paving and roofing materials (e.g., “cool” roofs and “cool” pavements).</p> <p><b>AQ-22</b> Utilize only Energy Star heating, cooling, and lighting devices, and appliances.</p> <p><b>AQ-23</b> Require use of electric or alternatively fueled sweepers with HEPA filters.</p> <p><b>AQ-24</b> Use of water-based or low VOC cleaning products.</p>	<p>Prior to, during, and after construction</p> <p>Prior to Construction</p> <p>Prior to Construction</p> <p>Prior to Construction</p> <p>Prior to Construction</p> <p>Prior to, during, and after Construction</p> <p>Prior to, during, and after Construction</p> <p>Prior to, during, and after Construction</p>	<p>City of Murrieta</p> <p>City of Murrieta</p> <p>City of Murrieta</p> <p>City of Murrieta</p> <p>City of Murrieta</p> <p>City of Murrieta</p> <p>City of Murrieta</p>
<p><b>Aesthetics</b></p>		
<p><b>AES-1</b> For future development located in or immediately adjacent to residentially zoned properties, construction documents shall include language that requires all construction contractors to strictly control the staging of construction equipment and the cleanliness of construction equipment stored or driven beyond the limits of the construction work area. Construction equipment shall be parked and staged within the project site, as distant from the residential use, as reasonably possible. Staging areas shall be screened from view from residential properties.</p>	<p>Prior to and during construction</p>	<p>City of Murrieta</p>

<p><b>AES-2</b> Construction documents shall include language requiring that construction vehicles be kept clean and free of mud and dust prior to leaving the development site. Streets surrounding the development site shall be swept daily and maintained free of dirt and debris.</p>	<p>Prior to and during construction</p>	<p>City of Murrieta</p>
<p><b>AES-3</b> Construction worker parking may be located off-site with prior approval by the City. On-street parking of construction worker vehicles on residential streets shall be prohibited.</p>	<p>Prior to and during construction</p>	<p>City of Murrieta</p>
<p><b>Cultural Resources</b></p>		
<p><b>CR-1</b> Future development projects shall continue to be evaluated for cultural resources by the City of Murrieta through review by the Eastern Information Center (EIC) and notification of and consultation with the local tribes for new entitlement projects. The projects shall be evaluated for compliance with the California Environmental Quality Act (CEQA) and where feasible, avoidance of cultural resources. If, following review by the EIC and/or tribal consultation, it is determined that there is a potential for impacts to cultural resources, further cultural resources analysis by a qualified professional(s), as defined in Mitigation Measure CR-2, may be required by the City.</p>	<p>Prior to issuance of permit</p>	<p>City of Murrieta and EIC</p>
<p><b>CR-2</b> In the event that cultural resources (archaeological, historical, paleontological) resources are inadvertently unearthed during excavation and grading activities of any future development project, the contractor shall cease all earth-disturbing activities within a 100-foot radius of the area of discovery. If not already retained due to conditions present pursuant to Mitigation Measure CR-1, the project proponent shall retain a qualified professional (i.e., archaeologist, historian, architect, paleontologist, Native American Tribal monitor), subject to approval by the City of Murrieta to evaluate the significance of the find and appropriate course of action (refer to Mitigation Measures CR-1 and CR-3). If avoidance of the resources is not feasible, salvage operation requirements pursuant to Section 15064.5 of the CEQA Guidelines shall be followed. After the find has been appropriately avoided or mitigated, work in the area may resume.</p>	<p>During Construction</p>	<p>City of Murrieta Eastern Information Center (EIC) and local tribes</p>
<p><b>CR-3</b> In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to State Health and Safety Code Section 7050.5, no further disturbance shall occur until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage</p>	<p>During Construction</p>	<p>City of Murrieta, County of Riverside, and NAHC</p>





<p>community GHG emissions to comply with the established community GHG reduction targets;</p> <ul style="list-style-type: none"> <li>• <b><u>GHG-1.4</u></b> Establish a comprehensive approach to reduce community GHG emissions by incorporating technologically feasible GHG emission reduction measures;</li> <li>• <b><u>GHG-1.5</u></b> Establish a mechanism to monitor the plan’s progress toward achieving the level and to require amendment if the plan is not achieving specified levels;</li> <li>• <b><u>GHG-1.6</u></b> Provide a mechanism through which future projects may tier and streamline their analysis of GHG emissions pursuant to CEQA Guidelines Section 15183.5(b)(2); and</li> <li>• <b><u>GHG-1.7</u></b> Be adopted in a public process following environmental review.</li> <li>• <b><u>GHG-1.8</u></b> Upon adoption, the CAP will be monitored and progress for achieving targets will be reported on a regular basis as follows: <ul style="list-style-type: none"> <li>- Implementation Monitoring Report – prepared annually;</li> <li>- Greenhouse Gas Emissions Inventory – updated every two years; and</li> <li>- Climate Action Plan – updated every five years.</li> </ul> </li> </ul>		
<b>Hazardous Materials</b>		

<p><b>HHM-1</b> The Community Development Department, in cooperation with the Murrieta Fire &amp; Rescue and the Riverside County Community Health Agency, Materials Management Division, shall provide information to businesses on viable alternatives to hazardous materials. Create an informational pamphlet with existing hazardous material substitutions and retailers that sell the materials. Offer the information to applicable business owners who are required to file as a hazardous waste handler in the City.</p>	<p>Prior to, during and after construction</p>	<p>City of Murrieta</p>
<p><b>HHM-2</b> The Community Development Department, in cooperation with the Murrieta Fire &amp; Rescue and the Riverside County Community Health Agency, Materials Management Division, provide information on viable alternatives to household hazardous materials on the City's website so households may use alternatives. Information will also educate the public to the health, safety, and environmental benefits of using non-hazardous substitutions.</p>	<p>Prior to and during construction</p>	<p>City of Murrieta</p>
<p><b>HHM-3</b> Prior to development approval on a project-by-project basis, the project applicant shall confirm the presence or absence of hazardous materials pertaining to the release of hazardous materials into the soil, surface water, and/or groundwater. If necessary, development shall undergo site characterization and remediation on a project-by-project basis, per applicable Federal, State, and/or local standards and guidelines set by the applicable regulatory agency.</p>	<p>Prior to issuance of building permit</p>	<p>City of Murrieta</p>
<p><b>HHM-4</b> The project applicant shall comply with the requirements of the Federal Aviation Administration (FAA) should any portions of the development be within a height overlay review zone or encroach within an imaginary surface surrounding the French Valley Airport. A Notice of Proposed Construction or Alteration (Form 7460-1) may be required by the FAA in accordance with Federal Aviation Regulations Part 77.</p>	<p>Prior to issuance of building permit</p>	<p>City of Murrieta and the FAA</p>
<p><b>Hydrology and Water Quality</b></p>		
<p><b>HYD-1</b> Prior to issuance of any Grading or Building Permit, and as part of the future development's compliance with the NPDES requirements, a Notice of Intent shall be prepared and submitted to the San Diego RWQCB providing notification and intent to comply with the State of California General Construction Permit. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the Director of Public Works and the City Engineer for water quality construction activities on-site. A copy of the SWPPP</p>	<p>Prior to building permit issuance</p>	<p>City of Murrieta and San Diego RWQCB</p>

<p>shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the “maximum extent practicable.” All recommendations in the Plan shall be implemented during area preparation, grading, and construction. The project applicant shall comply with each of the recommendations detailed in the Study, and other such measure(s) as the City deems necessary to mitigate potential stormwater runoff impacts.</p> <p><b>HYD-2</b> Prior to issuance of any Grading Permit, future development projects shall prepare, to the satisfaction of the Director of Public Works and the City Engineer, a Water Quality Management Plan or Stormwater Mitigation Plan, which includes Best Management Practices (BMPs), in accordance with the Riverside County DAMP and the Murrieta WQMP. All recommendations in the Plan shall be implemented during post construction/operation phase. The project applicant shall comply with each of the recommendations detailed in the Study, and other such measure(s) as the City deems necessary to mitigate potential water quality impacts.</p>	<p>Prior to building permit issuance</p>	<p>City of Murrieta</p>
<p><b>Noise</b></p>		
<p><b>NOI-1</b> The City shall require future developments to implement the following measures to reduce the potential for human annoyance and architectural/structural damage resulting from elevated groundborne noise and vibration levels:</p> <ul style="list-style-type: none"> <li>- Pile driving within a 50-foot radius of historic structures shall utilize alternative installation methods where possible (e.g., pile cushioning, jetting, predrilling, cast-in-place systems, resonance-free vibratory pile drivers).</li> <li>- The preexisting condition of all designated historic buildings within a 50-foot radius of proposed construction activities shall be evaluated during a preconstruction survey. The preconstruction survey shall determine conditions that exist before construction begins for use in evaluating damage caused by construction activities. Fixtures and finishes within a 50-foot radius of construction activities susceptible to damage shall be documented (photographically and in writing) prior to construction. All damage shall be repaired back to its preexisting condition.</li> </ul>	<p>Prior to issuance of a building permit and prior to and during construction</p>	<p>City of Murrieta</p>

<p>- Vibration monitoring shall be conducted prior to and during pile driving operations occurring within 100 feet of the historic structures. Every attempt shall be made to limit construction-generated vibration levels in accordance with Caltrans recommendations during pile driving and impact activities in the vicinity of the historic structures.</p> <p><b>NOI-2</b> Residential projects located within the 55 CNEL noise contour for the French Valley Airport shall be subject to review by the Riverside County Airport Land Use Commission and shall be required to ensure interior noise levels from aircraft operations are at or below 45 dB CNEL.</p>	<p>Prior to issuance of building permit</p>	<p>City of Murrieta and the Riverside ALUC</p>
<p><b>Public Resources</b></p>		
<p><b>SCH-1</b> Prior to the issuance of certificate of occupancy, individual project applicants shall submit evidence to the City of Murrieta that legally required school impact mitigation fees have been paid per the mitigation established by the applicable school district.</p>	<p>Prior to the issuance of a certificate of occupancy</p>	<p>City of Murrieta</p>
<p><b>Wastewater</b></p>		
<p><b>WW-1</b> Prior to issuance of a wastewater permit for any future development project, the Project Applicant shall pay applicable connection and/or user fees to RCWD, EVMWD, WMWD, or EMWD.</p> <p><b>WW-2</b> Prior to issuance of a building permit for any future development project, the Project Applicant shall prepare an engineering study to support the adequacy of the sewer systems and submit the engineering study to the City for review and approval. Any improvements recommended in the engineering study shall be installed prior to the certificate of occupancy for the development project.</p> <p><b>WW-3</b> Prior to issuance of a building permit for any future development project, the Project Applicant shall provide evidence that the RCWD, EVMWD, WMWD, or EMWD has sufficient wastewater transmission and treatment plant capacity to accept sewage flows from buildings for which building permits are being requested.</p>	<p>Prior to building permit approval</p> <p>Prior to issuance of a building permit</p> <p>Prior to issuance of a building permit</p>	<p>City of Murrieta and RCWD, EVMWD, WMWD, or EMWD</p> <p>City of Murrieta</p> <p>City of Murrieta and RCWD, EVMWD, WMWD, or EMWD</p>

<b>Wildfire/ Fire Protection</b>		
<b>FP-1</b> The Murrieta Fire & Rescue (MFR) shall review future development projects to determine if a Fuel Modification Plan is required. If required, project applicants shall prepare the Fuel Modification Plan in accordance with Fire Department requirements prior to the issuance of a grading or building permit.	Prior to Construction	City of Murrieta and MFR
<b>FP-2</b> Brush clearance shall be conducted prior to initiation of construction activities in accordance with MFR requirements.	Prior to Construction	City of Murrieta and MFR
<b>FP-3</b> Adequate access to all buildings on the project site shall be provided for emergency vehicles during the building construction process.	Prior to Construction	City of Murrieta and MFR
<b>FP-4</b> Adequate water availability shall be provided to service construction activities.	Prior to Construction	City of Murrieta

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