



**Mitigation Monitoring and Reporting Program  
for the  
FINAL Environmental Impact Report  
Bottoms Property Residential Project  
City of Richmond, Contra Costa County, California**

**State Clearinghouse No. 2013102024**

Prepared for:

**City of Richmond**

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**Table 1: Bottoms Property Residential Project Mitigation Monitoring and Reporting Program**

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
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<b>2. Air Quality</b>					
<p><b>MM AIR-2.</b> During construction activities, the following air pollution control measures shall be implemented:</p> <ul style="list-style-type: none"> <li>Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>All haul trucks transporting soil, sand, or other loose material offsite shall be covered.</li> <li>All haul trucks transporting soil, sand, or other loose material offsite shall be covered. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>All roadways, driveways, and sidewalks shall be paved as soon as possible.</li> <li>Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points.</li> <li>All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified visible emissions evaluator.</li> <li>A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours of a complaint or issue notification. The Bay Area Air Quality Management District’s phone number shall also be visible to ensure compliance with applicable regulations.</li> </ul>	Verify inclusion in project specifications; site inspections	During construction activities	City of Richmond Planning and Building Division		

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<b>MM AIR-4a.</b> Use Tier 4 construction equipment with level 3 diesel particulate filter (DPF) for equipment greater than 50 horsepower.	Verify inclusion in project specifications; site inspections	During construction activities	City of Richmond Planning and Building Division		
<b>MM AIR-4b.</b> All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.	Verify inclusion in project specifications; site inspections	During construction activities	City of Richmond Planning and Building Division		
<b>MM AIR-4c.</b> All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 miles per hour.	Verify inclusion in project specifications; site inspections	During construction activities	City of Richmond Planning and Building Division		
<b>MM AIR-4d.</b> The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area of the site shall be limited to a single activity at any one time. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.	Verify inclusion in project specifications; site inspections	During construction activities	City of Richmond Planning and Building Division		
<b>MM AIR-4e.</b> All trucks and equipment, including their tires, shall be washed off prior to leaving the site.	Verify inclusion in project specifications; site inspections	During construction activities	City of Richmond Planning and Building Division		
<b>MM AIR-4f.</b> The idling time of diesel-powered construction equipment shall be limited to five minutes.	Verify inclusion in project specifications; site inspections	During construction activities	City of Richmond Planning and Building Division		
<b>3. Biological Resources</b>					
<b>MM BIO-1a.</b> If clearing and construction activities will occur during the nesting period for burrowing owls (February 1– August 31), then a qualified biologist shall conduct take	Verify inclusion in project specifications, site inspection prior to	During the nesting bird season (February 1 through	City of Richmond Planning		

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avoidance surveys for burrowing owls on and within 500 feet of the project site. Surveys shall be conducted no more than 14 days prior to the start of construction activities, and in accordance with Appendix D of CDFW’s Staff Report on Burrowing Owl Mitigation (Staff Report), published March 7, 2012. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If no burrowing owls are detected, then no further mitigation is required. If active burrowing owls are detected, the project proponent shall follow the protocol outlined in MM BIO-1b, below.	commencement of vegetation removal/ground disturbance	August 31)	and Building Division		
<b>MM BIO-1b.</b> If burrowing owls are detected onsite during pre-construction surveys, mitigation shall be required in accordance with CDFW’s Staff Report. If the surveys identify breeding or wintering burrowing owls on or adjacent to the property, occupied burrows shall not be disturbed and shall be provided with protective buffers which will be determine through coordination with CDFW but are typically no less than 300 feet from occupied burrows. Where avoidance is not feasible, an exclusion plan shall be implemented to encourage owls to move away from the work area prior to construction. The exclusion plan shall be subject to CDFW approval and monitoring requirements and approved by the City prior to issuance of a permit for ground-disturbing activities.	Verify inclusion in project specifications, site inspection	During pre-construction surveys	City of City of Richmond Planning and Building Division		
<b>MM BIO-1c.</b> Pre-construction surveys for nesting birds shall occur prior to the following: Any Project action, including ground-disturbing activities scheduled to occur between February 1 and September 1. The pre-construction survey shall be conducted by a qualified biologist no more than 14 days prior to the initiation of construction. If a lapse in	Verify inclusion in project specifications, site inspection prior to commencement of vegetation removal/ground	Prior to the following: Any Project action, including ground-disturbing activities scheduled to occur	City of City of Richmond Planning and Building Division		

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Project activity of one week or more occurs, the surveys shall be repeated. If nesting birds are found, species specific buffers shall be implemented in consultation with CDFW. The buffer area shall be fenced off from work activities and no work shall occur in that area until the young have fledged, as determined by a qualified biologist. Active nests found within the vicinity of the Project area, outside the species specific buffer shall be monitored by the Project biologist during all work activities for changes in bird behavior, the qualified biologist shall perform at least two-hours of pre-construction monitoring to characterize normal bird behavior. At the first indication of nest abandonment all work shall halt and the biologist shall contact CDFW on how to proceed.	disturbance	between February 1 and September 1			
<b>4. Cultural Resources</b>					
<b>MM CR-1.</b> If areas of prehistoric resources are encountered during subsurface excavation, all work within 50 feet of the discovery shall cease until a qualified archaeologist can determine the significance of the find. The project applicant shall require a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Upon completion of the archaeologist’s evaluation, a report shall be prepared documenting the methods and results. The archaeologist shall recommend to the City potentially feasible mitigation measures that would preserve the integrity of the site or minimize impacts on it, including any or a combination of the following: 1. Avoidance, preservation, and/or enhancement of all or a portion of the cultural resource as open space or habitat, and, if the resources is specifically a prehistoric archaeological resource, with a conservation easement dedicated to the most interested and appropriate NAHC-designated tribal representative(s), if a tribe is willing to	Verify inclusion in grading plan notes, site inspection	During site grading	City of City of Richmond Planning and Building Division		

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<p>accept and maintain such an easement, or alternatively, a cultural resource organization that holds conservation easements;</p> <p>2. An agreement with any such tribal or cultural resource organization to maintain the confidentiality of the location of the site so as to minimize the danger of vandalism to the site or other damage to its integrity; or</p> <p>3. Other measures, short of full or partial avoidance or preservation, intended to minimize impacts on the archaeological resources consistent with land use assumptions and the proposed design and footprint of the development.</p> <p>After receiving such recommendations, the City shall assess the feasibility of the recommendations and impose the most protective mitigation feasible in light of land use assumptions and the proposed design and footprint of the project. The City shall, in reaching conclusions with respect to these recommendations, consult with both the project applicant and the interested NAHC-designated tribal representative(s).</p>					
<p><b>MM CR-2.</b> If areas of prehistoric resources are encountered during subsurface excavation, all work within 50 feet of the discovery shall cease until a qualified archaeologist can determine the significance of the find. The project applicant shall require a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Upon completion of the archaeologist’s evaluation, a report shall be prepared documenting the methods and results, and offering recommendations.</p>	<p>Verify inclusion in grading plan notes, site inspection</p>	<p>During site grading</p>	<p>City of City of Richmond Planning and Building Division</p>		

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<p><b>MM CR-3.</b> In the event a fossil is discovered during construction for the proposed project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology Standards.</p>	<p>Verify inclusion in grading plan notes, site inspection</p>	<p>During site grading</p>	<p>City of City of Richmond Planning and Building Division</p>		
<p><b>MM CR-4.</b> In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines § 15064.5; Health and Safety Code § 7050.5; Public Resources Code § 5097.94 and § 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:</p> <p>1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the “most likely descendant” (MLD) of the deceased Native American. The MLD shall make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of,</p>	<p>Verify inclusion in grading plan notes, site inspection</p>	<p>During site grading</p>	<p>City of City of Richmond Planning and Building Division</p>		



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<p>with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.</p> <p>2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:</p> <ul style="list-style-type: none"> <li>• The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.</li> <li>• The descendant identified fails to make a recommendation.</li> <li>• The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.</li> </ul>					
<p><b>5. Geology, Soils, and Seismicity</b></p>					
<p><b>MM GEO-1.</b> Prior to issuance of a grading permit, a qualified geotechnical engineer or engineering geologist shall prepare a design-level geotechnical investigation to provide site preparation and design recommendations related to site-specific geologic conditions, including seismic-related ground failure, shaking, and liquefaction. The recommendations of the design-level geotechnical investigation will build upon the</p>	<p>Direct observation of verification</p>	<p>Prior to issuance of a grading permit</p>	<p>City of City of Richmond Planning and Building Division</p>		

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recommendations contained in the Miller Pacific Supplemental Geotechnical Investigations to ensure compliance with Uniform Building Code Requirements, which shall be incorporated into the project plans and provided to the City of Richmond for review and approval.					
<b>MM GEO-3a.</b> As presented in the reports by Miller Pacific Engineering in 2012 and 2013, the site shall be prepared using a combination of excavation of fill above bay mud under Buildings 1–5 where appropriate, surcharging areas where the depth of mud is between 5 and 10 feet, or can be reduced to 5 to 10 feet, given site constraints, and avoidance of areas where the depth of mud is greater than 10 feet. Design-level investigation, including additional subsurface exploration, laboratory testing, and engineering analysis where necessary, shall be performed to quantify the amount and rate of expected future settlements based on the proposed site grading and expected building loads and thus ensure compliance with the 2013 California Uniform Building Code.	Direct observation of verification	Prior to issuance of a grading permit	City of City of Richmond Planning and Building Division		
<b>MM GEO-3b.</b> New improvements shall be set back a minimum of 15 feet from the base of the near-vertical rock cut at the site’s northern boundary. Alternatively, a catchment wall or other retaining structure, such as soil nails and Tecco mesh or a Geobrugg-type debris barrier, shall be considered as part of a project design feature.	Direct observation of verification	Prior to issuance of a grading permit	City of City of Richmond Planning and Building Division		
<b>7. Transportation and Traffic</b>					
<b>MM TRANS-4a.</b> Prior to issuance of occupancy permits, the project Applicant shall install improvements at the Seaciff Drive/Sandpiper Spit intersection: <ul style="list-style-type: none"> <li>If the City does not grant a design exception to allow construction of a median break and left-turn access into</li> </ul>	Review and approval of street improvement plans by the City of City of Richmond Engineer	Prior to issuance of occupancy permits	City of City of Richmond Engineer		

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<p>the site, the project Applicant shall eliminate the westbound left-turn pocket on Seacliff Drive at Sandpiper Spit to facilitate the U-turn movement.</p> <ul style="list-style-type: none"> <li>• If the City grants a design exception to allow construction of a median break and left-turn access into the site, then the left-turn pocket for Sandpiper Spit shall remain in place.</li> <li>• The Applicant shall install an enhanced trail crossing of the Ferry Point Loop Trail at the Seacliff Drive/Sandpiper Spit intersection to minimize conflicts between pedestrians, bicyclists, and vehicles.</li> </ul>					
<p><b>MM TRANS-4b.</b> Prior to issuance of occupancy permits and ongoing during project operation, the Home Owners Association (HOA) shall maintain landscaping at the project driveways to avoid sight distance conflicts (based on the line of sight of a typical driver, shrubs should not be higher than approximately 30 inches and tree canopies should be approximately six feet from the ground).</p>	Verify inclusion in project specifications, site inspection	Prior to issuance of occupancy permits and ongoing during project operation	City of Richmond Planning and Building Division		
<p><b>MM TRANS-5.</b> Prior to issuance of building permits, the fire department shall review the site plan for emergency vehicle access to ensure that adequate access exists to ensure the safety of residents and property within the project in accordance with all applicable laws.</p>	Verify inclusion in project specifications, site inspection	Prior to issuance of building permits	City of Richmond Fire Department		
<p><b>MM TRANS-6a.</b> Prior to issuance of occupancy permits, the project Applicant shall provide a 10 foot minimum width enhanced pedestrian crosswalk along Seacliff Drive , between the project driveway and the Bay Trail crossing of Seacliff Drive near the intersection with Brickyard Cove Road, based on recommended design treatments from the Bicycle Master Plan Design Guidelines, connecting to the proposed Class I facility along the western edge of the project site.</p>	Verify inclusion in project specifications, site inspection	Prior to issuance of occupancy permits	City of Richmond Engineer		

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<p><b>MM TRANS-6b.</b> Prior to issuance of occupancy permits, the project Applicant shall restrict the Canal Boulevard entrance to emergency vehicle access only to reduce conflicts between bicycles and vehicles. Alternatively, the Applicant shall provide trail crossing treatments on both the driveway approach and the trail consistent with the Bicycle Master Plan Design Guidelines. Bicycle traffic shall not be expected to stop, but signage and striping would be appropriate to alert them to the presence of vehicles. Other bike path treatments across the driveway, such as colored pavement, may also be appropriate. Traffic exiting the site shall be stop-controlled. Signage and striping shall be used to alert drivers of the potential for bicycle traffic along the corridor.</p>	<p>Verify inclusion in project specifications, site inspection</p>	<p>Prior to issuance of occupancy permits</p>	<p>City of Richmond Engineer</p>		
<p><b>MM TRANS-6c.</b> Prior to issuance of occupancy permits, trail intersection improvements shall be installed where the Class 1 trail along the shoreline of the property meets the Shipyard 3 section of Bay Trail at Canal Boulevard, including striping, directional signage and ADA access.</p>	<p>Verify inclusion in project specifications, site inspection</p>	<p>Prior to issuance of occupancy permits</p>	<p>City of Richmond Engineer</p>		
<p><b>MM TRANS-6d</b> The home owners association shall maintain the Bay Trail in perpetuity, including shoreline revetments and all site landscaping.</p>	<p>Verify inclusion in project specifications, site inspection</p>	<p>Prior to issuance of occupancy permits</p>	<p>City of Richmond Planning and Building Division</p>		
<p><b>MM CUMULATIVE TRANS-1:</b> Prior to issuance of building permits, the Project Applicant shall pay applicable local and regional traffic impact fees based on the expected level of vehicle trip generation.</p> <p>See also MM TRANS-4a, TRANS-4b, TRANS-5, TRANS-6a, TRANS-6b, and TRANS-6c, located within Section 3.7, Traffic and Transportation.</p>	<p>Verify payment of all applicable local and regional traffic impact fees</p>	<p>Prior to issuance of building permits</p>	<p>City of Richmond Planning and Building Division</p>		