

Mitigation Measure	Implementing Action	Timing of Verification	Responsible Department or Agency	Compliance Verification
4.1 Aesthetics				
<p>Mitigation Measure AES-1: The Project shall incorporate into all construction contracts and ensure implementation of the following measures:</p> <ol style="list-style-type: none"> To the extent feasible, during all site preparation and exterior construction activities, a screened security fence shall be placed and maintained around the perimeter of the Project site abutting residential areas. Visual screening along Central Avenue and bordering the perimeter of the property abutting residential areas shall be placed and maintained and removed upon completion of construction work. The County shall determine the appropriate height, material and final placement of such fencing, as appropriate and effective given the relative change in elevation and viewpoints to the site. Construction staging areas shall be located in the interior of the Project site, away from the property boundary and remain clear of all trash, weeds and debris etc. Construction staging areas may include other areas of the Project site when necessary, but shall be located away from adjacent properties and I-680 to minimize visibility from public view to the extent feasible. 	Preparation of construction contracts.	<p>Prior to issuance of grading and/or building permits.</p> <p>Ongoing throughout construction.</p>	DCD	<p>Review and approval of construction contracts.</p> <p>Review of plans for screened security fence, Central Avenue visual screen, and construction staging areas.</p>
4.2 Air Quality				
<p>Mitigation Measure AIR-1: Best Management Practices for Controlling Particulate Emissions. The Project applicant shall implement the following BAAQMD Best Management Practices for particulate control. These measures will reduce particulate emissions primarily during soil movement, grading and demolition activities but also during vehicle and equipment movement on unpaved areas.</p> <ol style="list-style-type: none"> All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. All haul trucks transporting soil, sand, or other loose material off-site 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. All vehicle speeds on unpaved roads shall be limited to 15 mph. All roadways, driveways, and sidewalks to be paved shall be 	Implementation of BMPs.	Ongoing throughout construction.	DCD	Verify implementation and compliance with BMPs.

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<p>completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</p> <p>6. 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, § 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</p> <p>7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in accordance with manufacturer's specifications prior to operation.</p> <p>8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.</p>				

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<p>reported to the CNDDDB, mapped, and documented in a technical memorandum provided to the County.</p> <p>b) If federally or state listed species are identified during floristic preconstruction surveys, the Project proponent shall mark these plants for avoidance and comply with applicable laws (i.e., the federal and State Endangered Species Acts) including through coordination or consultation with regulatory agencies (i.e., USFWS and/or CDFW), as appropriate, and as described in items d and e, below.</p> <p>c) If other special-status plant populations (i.e., California Rare Plant Ranked or locally significant plants) are identified during floristic preconstruction surveys and can be avoided during project implementation, they shall be clearly marked in the field by a qualified botanist and avoided during construction activities. If a Rank 3 or Rank 4 plant species is detected during the survey, the survey report shall analyze species rarity consistent with CEQA Guidelines (Section 15380) to determine if species protection is warranted. If the plants do not warrant protection, then no further action is needed for these species.</p> <p>d) If special-status plant populations are identified and cannot be avoided, the Project proponent shall coordinate or consult with the County and regulatory agencies, as appropriate, on relocation of special-status plants. To the extent feasible, special-status plants that would be impacted by the Project shall be relocated within local suitable habitat. This can be done either through salvage and transplanting or by collection and propagation of seeds or other vegetative material. Any plant relocation or reintroduction through seeds or other vegetative material would be done under the supervision of a qualified botanist or restoration ecologist.</p> <p>e) If rare plants can be avoided, prior to vegetation removal, ground clearing or ground disturbance, all on-site construction personnel shall be instructed as to the species' presence and the importance of avoiding impacts to rare plant species and their habitat through the Worker Environmental Awareness Program training (see Mitigation Measure BIO-2a, below).</p> <p>f) The Project proponent shall prepare a Rare Plant Relocation/Reintroduction and Monitoring Plan for relocated or reintroduced special-status plants which shall detail relocation or reintroduction methods or appropriate replacement ratios (e.g., at least 1:1 based on number of relocated plants or the area occupied by rare plants, as appropriate for the species) and methods for</p>	<p>Prepare Rare Plant Relocation/Reintroduction and Monitoring Plan</p>	<p>Upon completion of focused surveys.</p>	<p>Same as above.</p>	<p>Same as above.</p>

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<p>implementation (e.g., planting methods, need for supplemental irrigation, or weed control), success criteria (e.g., greater than 70% survival or ground coverage following 5 years), monitoring and reporting protocols, and contingency measures that shall be implemented if the initial mitigation fails (e.g., replanting to achieve success criteria). The plan shall be developed in coordination with the appropriate agencies prior to the start of local construction activities with the objective of providing equal or better habitat and populations than the impacted area(s). The County shall approve the plan.</p> <p>g) If special-status plants are relocated from the Project or reintroduction of plants or seed is implemented, the Project proponent shall maintain and monitor the relocation sites and/or restored areas for 5 years following the completion of construction and restoration activities. The Project proponent shall submit monitoring reports to the County at the completion of restoration and for 5 years following restoration implementation. Monitoring reports shall include photo-documentation, planting specifications, a site layout map, descriptions of materials used, and justification for any deviations from the mitigation plan.</p>	<p>Maintenance, monitoring and monitoring reports.</p>	<p>At the completion of restoration and for 5 years following restoration implementation.</p>	<p>Same as above.</p>	<p>Same as above.</p>
<p>Mitigation Measure BIO-2a: Worker Environmental Awareness Program Training. A Project-specific Worker Environmental Awareness Program (WEAP) training shall be developed and implemented by a qualified biologist for the Project and attended by all construction personnel prior to beginning work onsite. Typical credentials for a qualified biologist include a minimum of four years of academic training and professional experience in biological sciences and related resource management activities, and a minimum of two years of experience conducting surveys for each species that may be present within the Project area. The training could consist of a recorded presentation that could be reused for new personnel. The WEAP training shall generally address but not be limited to the following:</p> <ol style="list-style-type: none"> 1) Applicable State and federal laws, environmental regulations, project permit conditions, and penalties for non-compliance; 2) Special-status plant and animal species with potential to occur at or in the vicinity of the Project site, their habitat, the importance of these species and their habitat, the general measures that are being implemented to conserve these species as they relate to the Project, and the boundaries within which the project construction shall occur, avoidance measures, and a protocol for encountering such species including a communication chain; 	<p>Prepare/Implement WEAP Training.</p>	<p>Prior to beginning any work onsite.</p>	<p>DCD</p>	<p>Confirm completion of training.</p>

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3) Pre-construction surveys associated with each phase of work; 4) Known sensitive resource areas in the Project vicinity that are to be avoided and/or protected as well as approved Project work areas; and 5) Best management practices (BMPs) and their location on the Project site for erosion control and/or species exclusion.				
<p>Mitigation Measure BIO-2b: General Conservation Measures during Construction. The County shall ensure that the following general measures are implemented by the contractor during construction to prevent and minimize impacts on special-status species and sensitive biological resources:</p> <ol style="list-style-type: none"> 1) Ground disturbance and construction footprints will be minimized to the greatest degree feasible. 2) Project-related Vehicles shall observe a 15 mile-per-hour speed limit within the Project site. 3) The contractor shall provide closed garbage containers for the disposal of all food-related trash items. All garbage shall be collected daily from the Project site and placed in a closed container from which garbage shall be removed weekly. Construction personnel shall not feed or otherwise attract fish or wildlife to the Project site. 4) As necessary, erosion control measures shall be implemented to prevent any soil or other materials from entering any nearby aquatic habitat. Erosion control measures shall be installed at work site boundaries adjacent to aquatic habitat to prevent soil from eroding or falling into the area. 5) Erosion control measures shall be implemented as described in the Project SWPPP. Sediment control measures shall be furnished, constructed, maintained, and later removed. Plastic monofilament of any kind (including those labeled as biodegradable, photodegradable, or UV-degradable) shall not be used. Only natural burlap, coir, or jute wrapped fiber rolls that are certified weed-free shall be used. 6) All fueling and maintenance of vehicles and equipment and the location of Project staging areas shall occur at least 100 feet from any aquatic habitat and associated freshwater and saltmarsh vegetation. Spill kits containing cleanup materials shall be available on-site. 7) No equipment used in support of Project implementation (e.g. excavator) shall enter or cross waters in the Project area while water 	Implementation of Conservation Measures.	Ongoing throughout construction.	DCD	Implementation of construction measures.

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<p>is flowing.</p> <p>8) Project personnel shall be required to report immediately any harm, injury, or mortality of a listed species (federal or state) during construction, including entrapment, to the construction foreman, qualified biologist, or County staff. The County or their consultant shall provide verbal notification to the USFWS Endangered Species Office in Sacramento, California, and/or to the local CDFW warden or biologist (as applicable) within 1 working day of the incident. The County or their consultant shall follow up with written notification to the appropriate agencies within 5 working days of the incident. All special-status species observations shall be recorded on California Natural Diversity Data Base (CNDDB) field sheets/IPaC and sent to the CDFW/USFWS and by County staff or their consultant.</p>				
<p>Mitigation Measure BIO-2c: Avoidance, Minimization, and Protection Measures for Sensitive Amphibians and Reptiles. The following conservation measures shall be implemented to minimize or eliminate potential adverse impacts on California red-legged frog (CRLF) and western pond turtle (WPT) during Project construction:</p> <p>1) Consistent with the USFWS <i>California Red-legged Frog Survey Protocol</i>, a habitat assessment shall be prepared and submitted to the USFWS to support their determination of the species' potential to occur on site. If the USFWS agrees that the habitat assessment establishes species absence, or if subsequent protocol-level surveys requested by the USFWS following their review of the habitat assessment establish species absence, then no further action shall be needed to protect this species. In the absence of USFWS coordination, CRLF shall be presumed present within suitable aquatic habitat on the site and protective measures described below shall be followed.</p> <p>2) A qualified biologist shall survey the work sites within 5 calendar days prior to the onset of construction for CRLF and WPT to determine presence (and life stage) of these species on the Project site.</p> <p>Additionally, a qualified biologist shall conduct a pre-construction survey of Project aquatic habitat for CRLF and WPT immediately prior to the start of construction activities, beginning with installation of exclusion fencing (see 3, below). The surveys will consist of walking the Project work limits adjacent to areas where natural habitat is present to ascertain presence of these species (e.g., grasslands adjacent to suitable aquatic habitat within the Project</p>	<p>Implement conservation measures: Prior to any construction activity.</p>	<p>Upon submittal of habitat assessment.</p>	<p>DCD, USFWS and CDFW, as applicable.</p>	<p>Review and approve/confirm surveys/habitat assessment and implementation and compliance with all measures (e.g., relocation, fencing).</p>

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<p>site).</p> <p>3) Prior to conducting preconstruction surveys, the qualified biologist shall prepare a relocation plan that describes the appropriate survey and handling methods for WPT and identifies nearby relocation sites where individuals would be relocated if found during the preconstruction surveys. The relocation plan shall be submitted to CDFW for review prior to the start of construction activities. The animal shall be relocated to equivalent or better WPT habitat relative to where it was found.</p> <p>4) A qualified biologist shall monitor installation of exclusion fencing (see 4, below) to identify, capture, and relocate WPT if found, and halt or observe work in the vicinity of CRLF if encountered onsite. The qualified biologist shall have the authority to stop construction activities proximate to these species and develop alternative work practices, in consultation with construction personnel and resource agencies (as appropriate), if construction activities are likely to affect special-status species or other sensitive biological resources.</p> <p>Unless explicitly authorized by the USFWS (e.g., through issuance of a Biological Opinion, CRLF shall not be relocated if encountered within the Project site. Rather CRLF shall be allowed to disperse of their own volition while all work is halted within 50 feet of individuals. If a CRLF is not dispersing on its own volition, the qualified biologist shall monitor the frog while exclusion fence installation or other work continues, as long as they can ensure the safety of the frog. The qualified biologist shall immediately inform the construction manager that work should be halted or modified (in the case of a buffer or non-dispersing individual), if necessary, to avert avoidable take of listed species. Should egg masses, metamorphs, or tadpoles of CRLF be identified within Project site aquatic habitat during these initial surveys or at any time during Project construction, the USFWS shall be contacted prior to continuation of work near the discovery.</p> <p>If WPT and/or CRLF are not observed during pre-construction surveys or installation of the exclusion fence, continued biological monitoring during construction is not necessary. If either of these species are observed onsite at any time, the Project Applicant shall coordinate with USFWS and /or CDFW as necessary to determine the appropriate measures to avoid species' take.</p> <p>5) The Project Applicant or its contractors shall install temporary exclusion fencing around key project boundaries (i.e., at the work</p>				

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<p>limit of aquatic habitat and associated marsh vegetation to be preserved under the Project) and around all staging and laydown areas to exclude CRLF and WPT from Project construction activities.</p> <ul style="list-style-type: none"> • Fencing shall be installed immediately prior to the start of construction activities under the supervision of a qualified biologist. • The Project Applicant or their contractor shall ensure that the temporary exclusion fencing is continuously maintained until all Project construction activities are completed. Daily fence inspections shall be conducted by the qualified biologist during the first week of construction. Thereafter, the qualified biologist may train the contractor to conduct regular inspections and coordinate findings with the qualified biologist. Similarly, vehicles or equipment parked overnight at the Project staging areas or work areas shall be inspected for harboring species each morning by the qualified biologist (or the trained contractor) before they are moved. • The wildlife exclusion fencing shall be a minimum height of 3 feet above ground surface, with an additional 4 to 6 inches of fence material buried such that animals cannot burrow under the fence. • The exclusion fence shall not cross the marsh associated with Pacheco Creek along the south edge of the site or bisect marsh vegetation to allow wildlife movement to continue through these areas when work is not occurring. <p>6) All onsite excavations of a depth of 8 inches or greater shall be either backfilled at the end of each workday, covered with heavy metal plates, or escape ramps shall be installed at a 3:1 grade to allow wildlife that fall in a means to escape.</p>				

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<p>Mitigation Measure BIO-3a: Nesting Bird Protection Measures.</p> <p>1) Project staging, project construction, vegetation removal (e.g., clearing and grubbing), vegetation management activities requiring heavy equipment, or tree trimming shall be performed outside of the bird nesting season (February 1st through August 31st) to avoid impacts to nesting birds; if these activities must be performed during the nesting bird season, a qualified biologist shall be retained to conduct a pre-construction survey in the project construction and staging areas for nesting birds and verify the presence or absence of nesting birds no more than 5 calendar days prior to construction activities or after any construction breaks of 5 calendar days or more. Surveys shall be performed for the project construction and staging areas and suitable habitat within 250 feet of the project construction and staging areas in order to locate any active passerine (perching bird) nests and within 500 feet of the project construction and staging areas to locate any active raptor (birds of prey) nest. If nesting birds and raptors do not occur within 250 and 500 feet of the Project area, respectively, then no further action is required if construction begins within 5 calendar days.</p> <p>2) If active nests are located during the pre-construction bird nesting surveys, no- disturbance buffer zones shall be established around nests, with a buffer size established by the qualified biologist. Typically, these buffer distances are between 50 feet and 250 feet for passerines and between 300 feet and 500 feet for raptors. These distances may be adjusted depending on the level of surrounding ambient activity and if an obstruction, such as a building or structure, is within line-of-sight between the nest and construction. Reduced buffers may be allowed if a full-time qualified biologist is present to monitor the nest and has authority to halt construction if bird behavior indicates continued activities could lead to nest failure. Buffered zones shall be avoided during construction-related activities until young have fledged or the nest is otherwise abandoned.</p>	<p>Pre-construction surveys.</p>	<p>Prior to staging, vegetation removal/management, and construction activity during bird nesting season.</p>	<p>DCD</p>	<p>Implementation of all measures.</p>
<p>Mitigation Measure BIO-3b: Avoid and Minimize Impacts to California Black Rail and Ridgway's Rail.</p> <p>To minimize or avoid the loss of individual California black rail and Ridgway's rail, construction activities, including vegetation management activities requiring heavy equipment, adjacent to tidal marsh areas (within 500 feet [150 meters] or a distance determined in coordination with USFWS or CDFW, shall be avoided during the breeding season from February 1 through August 31.</p>	<p>Pre-construction surveys.</p>	<p>Prior to construction activity during specified period of peak detectability of rail breeding season.</p>	<p>DCD and USFWS or CDFW</p>	<p>Confirm protocol-level surveys conducted and implementation of any established vegetation measures.</p>

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<ul style="list-style-type: none"> • If areas within or adjacent to rail habitat cannot be avoided during the breeding season (February 1 through August 31), protocol-level surveys shall be conducted to determine rail nesting locations. The surveys will focus on potential habitat that could be disturbed by construction activities during the breeding season to ensure that rails are not breeding in these locations. <p>Survey methods for rails will follow the Site-Specific Protocol for Monitoring Marsh Birds, which was developed for use by USFWS and partners to improve bay-wide monitoring accuracy by standardizing surveys and increasing the ability to share data (Wood et al. 2017). Surveys are conducted during the approximate period of peak detectability, January 15 to March 25 and are structured to efficiently sample an area in three rounds of surveys by broadcasting calls of target species during specific periods of each survey round. Call broadcasting increases the probability of detection compared to passive surveys when no call broadcasting is employed. This protocol has since been adopted by Invasive Spartina Project (ISP) and Point Blue Conservation Science to survey Ridgway's rails at sites throughout San Francisco Bay Estuary. The survey protocol for Ridgway's rail is summarized below.</p> <ul style="list-style-type: none"> - Previously used survey locations (points) should be used when available to maintain consistency with past survey results. New survey points should be at least 200 meters apart along transects in or adjacent to areas representative of potentially suitable marsh habitat. Points should be located to minimize disturbances to marsh vegetation. Up to 8 points can be located on a transect. - At each transect, three surveys (rounds) are to be conducted, with the first round of surveys initiated between January 15 and February 6, the second round performed February 7 to February 28, and the third round March 1 to March 25. Surveys should be spaced at least one week apart and the period between March 25 to April 15 can be used to complete surveys delayed by logistical or weather issues. A Federal Endangered Species Act Section 10(a)(1)(A) permit is required to conduct active surveys. - Each point on a transect will be surveyed for 10 minutes each round. A recording of calls available from USFWS is broadcast at each point. The recording consists of 5 minutes of silence, followed by a 30-second recording of Ridgway's rail vocalizations, followed by 30 seconds of silence, followed 				
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<p>by a 30-second recording of California black rail, followed by 3.5 minutes of silence.</p> <ul style="list-style-type: none"> • If no breeding Ridgway's rails or black rails are detected during surveys, or if their breeding territories can be avoided by 500 feet (150 meters), then Project activities may proceed at that location. • If protocol surveys determine that breeding Ridgway's rails or black rails are present in the Project area, the following measures would apply to project activities conducted during their breeding season (February 1- August 31): <ul style="list-style-type: none"> – A USFWS- and CDFW-approved biologist with experience recognizing Ridgway's rail and black rail vocalizations will be on site during construction activities occurring within 500 feet (150 meters) of suitable rail breeding habitat. – If a Ridgway's rail or black rail vocalizes or flushes within 10 meters, it is possible that a nest or young are nearby. If an alarmed bird or nest is detected, work will be stopped, and workers will leave the immediate area carefully and quickly. An alternate route will be selected that avoids this area, and the location of the sighting will be recorded to inform future activities in the area. – All crews working within 500 feet of aquatic habitats during rail breeding season will be trained and supervised by a USFWS- and CDFW-approved rail biologist. – If any activities will be conducted during the rail breeding season in Ridgway's rail- or black rail-occupied marshes, biologists will have maps or GPS locations of the most current occurrences on the site and will proceed cautiously and minimize time spent in areas where rails were detected. • For vegetation management activities in suitable habitat for Ridgway's rail or black rail, the following measures will be implemented: <ul style="list-style-type: none"> – Any herbicides to be used will be EPA-certified for use in/adjacent to aquatic environments. – Vegetation management activities will be limited to areas outside of tidal marsh and non-tidal pickleweed marsh habitats. 				
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<p>of salt marsh harvest mouse.</p> <ul style="list-style-type: none"> • A USFWS- and CDFW-approved biologist with previous salt marsh harvest mouse monitoring and/or surveying experience will be on site during construction activities occurring in suitable habitat. The biologist will document compliance with the project permit conditions and avoidance and conservation measures. The USFWS-and CDFW-approved biologist has the authority to stop project activities if any of the requirements associated with these measures is not being fulfilled. If salt marsh harvest mouse is observed in the work area, construction activities will cease in the immediate vicinity of the salt marsh harvest mouse. The individual will be allowed to leave the area before work is resumed. If the individual does not move on its own volition, the USFWS-approved biologist would contact USFWS (and CDFW if appropriate) for further guidance on how to proceed. • If the USFWS- and CDFW-approved biologist has requested work stoppage because of take of any of the listed species, or if a dead or injured salt marsh harvest mouse is observed, the USFWS and CDFW will be notified within one day by email or telephone. • For vegetation management activities in suitable habitat for salt marsh harvest mouse, the following measures shall be implemented: <ul style="list-style-type: none"> – Any herbicides to be used will be EPA certified for use in/adjacent to aquatic environments. – Work in upland habitat within 100 feet of salt marsh harvest mouse habitat will be scheduled to avoid extreme high tides when there is potential for salt marsh harvest mouse to move to higher, drier grounds, such as ruderal and grassland habitats. 				
<p>Mitigation Measure BIO-4b: Avoidance and Minimization Measures for Bats. A qualified biologist who is experienced with bat surveying techniques, behavior, roosting habitat, and identification of local bat species, no more than 5 calendar days prior to construction activities, shall conduct a pre-construction habitat assessment of the Project site to characterize potential bat habitat and identify potentially active roost sites. No further action is required if the pre-construction habitat assessment does not identify bat habitat or signs of potentially active bat roosts within the Project site (e.g., guano, urine staining, dead bats, etc.).</p> <p>If the surveying biologist identifies potential roosting habitat or potentially active bat roosts within or in the immediate vicinity of the Project site, including trees</p>	<p>Pre-construction surveys for bats.</p> <p>Avoidance and/or vegetation management.</p>	<p>Conducted no more than 5 calendar days prior to construction activities. Upon completion of surveys conducted prior to any construction activity.</p> <p>During specified bat maternity roosting season specified.</p>	<p>DCD; CDFW if required</p> <p>Same as above.</p>	<p>Confirm surveys conducted and implementation of any applicable vegetation measures.</p> <p>Same as above.</p>

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<p>that could be trimmed or removed under the Project, the following measures shall be implemented:</p> <ol style="list-style-type: none"> 1) Removal of- or disturbance to trees identified as potential bat roosting habitat or active roosts shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, to the extent feasible. These dates avoid bat maternity roosting season (approximately April 15 to August 31) and period of winter torpor (approximately October 15 to February 28). <ol style="list-style-type: none"> a. If removal of- or disturbance to trees identified as potential bat roosting habitat or active roosts during the periods when bats are active is not feasible, a qualified biologist will conduct pre-construction surveys within 5 calendar days prior to disturbance to further evaluate bat activity within the potential habitat or roost site. b. If active bat roosts are not identified in potential habitat during pre-construction surveys, no further action is required prior to removal of- or disturbance to trees within the pre-construction survey area. c. If active bat roosts or evidence of roosting is identified during pre-construction surveys, the qualified biologist shall determine, if possible, the type of roost and species. <ol style="list-style-type: none"> i) If special-status bat species or maternity or hibernation roosts are detected during these surveys, appropriate species- and roost-specific avoidance and protection measures shall be developed by the qualified biologist. Such measures may include postponing the removal of or disturbance to trees, or establishing exclusionary work buffers while the roost is active. A minimum 100-foot no disturbance buffer shall be established around special-status species, maternity, or hibernation roosts until the qualified biologist determines they are no longer active. The size of the no-disturbance buffer may be adjusted by the qualified biologist, in coordination with CDFW, depending on the species present, roost type, existing screening around the roost site (such as dense vegetation), as well as the type of construction activity that would occur around the roost site, and if construction would not alter the behavior of the adult or young in a way that would cause injury or death to those individuals. <p>Active maternity roosts shall not be disturbed without</p>				
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<p>advance CDFW approval until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist.</p> <p>ii) If a common species, non-maternity or hibernation roost (e.g., bachelor daytime roost) is identified, disturbance to- or removal of trees or structures may occur under the supervision of a qualified biologist as described under 3).</p> <p>2) The qualified biologist shall be present during tree disturbance or removal if active non-maternity or hibernation bat roosts or potential roosting habitat are present. Trees with active non-maternity or hibernation roosts of common species or potential habitat shall be disturbed or removed only under clear weather conditions when precipitation is not forecast for three days and when daytime temperatures are at least 50°F to ensure bats are active and can abandon any potential roosts as disturbance from the clearing activities occurs, and when wind speeds are less than 15 mph.</p> <p>Trimming or removal of trees with active (non-maternity or hibernation) or potentially active roost sites of common bat species shall follow a two-step removal process:</p> <ul style="list-style-type: none"> a. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using hand tools (e.g., chainsaws). b. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using hand tools or other equipment (e.g. excavator or backhoe). c. All felled trees shall remain on the ground for at least 24 hours prior to chipping, off-site removal, or other processing to allow any bats to escape, or be inspected once felled by the qualified biologist to ensure no bats remain within the tree and/or branches. <p>3) Bat roosts that begin during construction are presumed to be unaffected as long as a similar type of construction activity continues, and no buffer would be necessary. Direct impacts on bat roosts or take of individual bats will be avoided.</p>	<p>On-site Monitoring.</p>	<p>During tree disturbance or removal, if active non-maternity or hibernation bat roosts or potential roosting habitat are present.</p>	<p>Same as above</p>	<p>Same as above</p>
<p>Mitigation Measure BIO-5a: Salvage and Reintroduction of Creeping</p>	<p>Pre-construction</p>	<p>Upon completion of</p>	<p>DCD; CDFW if</p>	<p>Confirm surveys conducted</p>

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<p>1) Planting replacement trees within the Project site on areas of the hill that will be preserved as open space following development.</p> <p>The Project sponsor shall contract with a qualified restoration ecologist to prepare a Habitat Mitigation and Monitoring Plan (HMMP) for oak woodland habitat to be restored as part of the Project. The HMMP would be subject to approval by Contra Costa County. The HMMP shall include a detailed description of restoration/enhancement/preservation actions proposed such as a planting plan, a weed control plan to prevent the spread of invasive and non-native species within restored areas, and erosion control measures to be installed around the restored area following mitigation planting to avoid or minimize sediment runoff throughout the Project site; restoration performance criteria for the restored area that establish success thresholds over a period of 5 years; and proposed monitoring/maintenance program to evaluate the restoration performance criteria, under which progress of restored areas are tracked to ensure survival of the mitigation plantings. The program shall document overall health and vigor of mitigation plantings throughout the monitoring period and provide recommendations for adaptive management as needed to ensure the site is successful, according to the established performance criteria. An annual report documenting the results and providing recommendations for improvements throughout the year shall be provided to the County.</p> <p>In designing the Tree Replacement Plan, the arborist shall review the final project grading plans to ensure that adequate tree preservation methods, guidelines, and conditions are in place. The project arborist shall host pre-demolition meetings with the general contractor and demolition contractor to determine clearance pruning, stump removal techniques, fencing placement and, timing to establish a Tree Protection Zone (TPZ). The arborist shall conduct post-demolition meetings to review and confirm tree protection fencing for grading and construction. All vehicles, equipment, and storage of job site materials and debris, shall be kept outside of the TPZ. The arborist shall incorporate standard protocols set forth in the American National Standards Institute (ANSI) <i>A300 Construction Management Standard, Part 5</i> and the International Society of Arboriculture's <i>Best Management Practices: Managing Trees During Construction</i>.</p> <p>2) Paying an in-lieu fee to a natural resource agency or a non-profit organization that would use the fees to protect or enhance oak woodland habitat of the region.</p> <p>If an in-lieu fee is used for mitigation, the amount of the in-lieu fee shall be determined either by calculating the value of the land with</p>	<p>Implementation/ Reporting: Annually, over a period of 5 years during and after construction.</p> <p>Pre/post-Demolition meetings.</p> <p>Fee Payment.</p>	<p>Throughout implementation period.</p> <p>Prior to and following any demolition activities.</p> <p>Prior to any activities on the site.</p>		
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<p>oak woodland habitat proposed for removal, or by some other calculation. An alternate calculation shall reflect differences in the quality of habitat proposed for removal, and may consider the cost of comparable habitat (fee title or easement) in nearby areas. The amount of the in-lieu fee and entity receiving the funds shall be subject to review and approval by Contra Costa County.</p>				
<p>Mitigation Measure BIO-6a: Protection of Jurisdictional Wetlands and Other Waters. For Project development within or adjacent to state and federal jurisdictional wetlands and waters, protection measures shall be applied to protect these features. These measures shall include the following:</p> <ol style="list-style-type: none"> 1) An updated wetland delineation shall be submitted to USACE for verification to establish the boundaries and current jurisdictional status of the aquatic features in the site. The verified wetland delineation shall be used to quantify the Project impacts to aquatic resources for permitting purposes. 2) To the maximum extent feasible, Project construction activities within or adjacent to wetlands or waters shall be conducted during the dry season (between June 15 and October 15) and the disturbance footprint shall be minimized in these areas. 3) Stabilize disturbed, exposed slopes immediately upon completion of construction activities (e.g., following cut and fill activities and installation of bioretention pond infrastructure) to prevent any soil or other materials from entering aquatic habitat. Plastic monofilament of any kind (including those labeled as biodegradable, photodegradable, or UV-degradable) shall not be used. Only natural burlap, coir, coconut or jute wrapped fiber rolls and mats shall be used. 4) A protective barrier (fence) shall be erected around any wetlands or waters designated for complete avoidance in Project construction plans and regulatory permits to isolate it from construction or other ground-disturbing activities. 5) A fencing material meeting the requirements of both water quality protection and wildlife exclusion may be used. Fences must be properly installed with final approval by a County representative, including adequate supports or wire backing for use if windy conditions are anticipated, and with the lower edge keyed in to the soil to ensure a proper barrier. Signage shall be installed on the fencing to identify sensitive habitat areas and restrict construction activities; 6) No equipment mobilization, grading, clearing, or storage of vehicles, equipment or machinery, or similar activity shall occur until a County representative has inspected and approved the wetland protection 	<p>Implementation of Protection Measures.</p> <p>Preparation/Submittal of Updated Wetland Delineation.</p>	<p>Prior to and throughout all site disturbance and construction activities.</p> <p>Prior to and throughout all site disturbance and construction activities.</p>	<p>DCD and USACE</p>	<p>Review and verify delineation and implementation of protection measures.</p>

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<p>fence;</p> <p>7) The Project proponent shall ensure that the temporary fence is continuously maintained until all construction or other ground-disturbing activities are completed; and</p> <p>8) Drip pans and/or liners shall be stationed beneath all equipment staged nearby jurisdictional features overnight to minimize spill of deleterious materials into jurisdictional waters. Equipment maintenance and refueling in support of project implementation shall be performed in designated upland staging areas and work areas, and spill kits shall be available on-site. Maintenance activity and fueling must occur at least 100 feet from jurisdictional wetlands and other waters or farther as specified in the Project permits and authorizations.</p>				
<p>Mitigation Measure BIO-6b: Permits and Compensation for Impacts to Wetlands and Waters.</p> <p>To offset unavoidable permanent impacts to approximately 0.02 acres of the side-hill seep and the fill of less than 0.1 acres for construction of the storm drain outfall along the bank of Pacheco Creek, the Project applicant shall secure the appropriate permits and provide compensatory mitigation as determined by the regulatory agencies with jurisdiction over the impacted aquatic resources during the permitting process. To establish the jurisdictional status of the various aquatic features in the site, the updated wetland delineation will be submitted to USACE for verification. The necessary permits will depend on the jurisdictional status of the features. While the outfall in Pacheco Creek is expected to require permits from USACE (Nationwide 7), CDFW (1602 Streambed Alteration Agreement), and RWQCB (401 Certification), the permitting scenario of the side-hill seep is less predictable. It is possible USACE will verify this feature as outside Clean Water Act jurisdiction due to spatial and hydrological isolation from other Waters of the U.S. If the seep is verified as non-jurisdictional, the Regional Water Quality Control Board Water would be expected to issue a Notice of Applicability to authorize its fill pursuant to Water Quality Order No. 2004-0004-DWQ.</p> <p>At a minimum, or as determined by the USACE, compensation acreage for impacted wetlands and waters would meet a 1:1 ratio (created/restored/enhanced: impacted) to achieve no net loss of aquatic resources. Compensation may be accomplished through the purchase of credits at an agency-approved mitigation bank or in-lieu fee program. Alternatively, compensation may be accomplished through on-site or off-site creation, restoration, or enhancement of jurisdictional resources, subject to the approval of the permitting agencies. On-site or off-site creation/restoration/enhancement plans must be prepared by a qualified biologist prior to construction, include a planting plan and planting methods,</p>	<p>Permitting and Compensatory Mitigation.</p> <p>Monitoring of compensation acreage for at least five years.</p>	<p>Prior to and throughout site disturbance and construction activities.</p> <p>Annually, for at least five years after implementation of compensation acreage.</p>	<p>DCD; USACE and other jurisdictional status it verifies</p>	<p>Review and verify issuance of permits and implementation of required compensation.</p>

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<p>monitoring and reporting requirements, performance criteria (e.g., species diversity and vegetative cover thresholds), and maintenance requirements, and is subject to review and modification by resource agency permits. Implementation of creation/restoration/enhancement activities by the Project applicant (or permittee) shall occur prior to Project impacts, whenever possible, to avoid temporal loss. On- or off-site creation/restoration/enhancement sites shall be monitored by the applicant for at least five years to ensure their success, or as otherwise required by resource agencies.</p>				
<p>4.4 Cultural Resources and Tribal Cultural Resources</p>				
<p>Mitigation Measure CUL-1a: If prehistoric or historic-period archaeological resources are encountered during Project implementation, including ground disturbance associated with project construction, all construction activities within 100 feet shall halt, and a qualified archaeologist, defined as an archaeologist meeting the U.S. Secretary of the Interior’s Professional Qualification Standards for Archeology, shall inspect the find within 24 hours of discovery and notify the County of their initial assessment. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse.</p> <p>If the County determines, based on recommendations from a qualified archaeologist and a Native American representative (if the resource is Native American-related), that the resource may qualify as a historical resource or unique archaeological resource (as defined in CEQA Guidelines Section 15064.5) or a tribal cultural resource (as defined in PRC Section 21080.3), the resource shall be avoided if feasible. If avoidance is not feasible, the County shall consult with appropriate Native American tribes (if the resource is Native American-related), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource, determined by a qualified professional or California Native American tribe, as is appropriate (according to PRC Section 21084.3). All significant cultural materials recovered shall, at the discretion of the consulting professional, be subject to scientific analysis, professional museum curation, and documentation according to current professional standards.</p>	<p>Upon find of prehistoric or historic-period archaeological resources</p>	<p>Prior to any ground disturbance and throughout construction</p>	<p>DCD; Native American representative, if required</p>	<p>Confirm suspension of work upon find; Make resource determination; Approve avoidance or other applicable measures.</p>

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<p>In considering any suggested mitigation proposed by the consulting professional to mitigate impacts to cultural resources, the County shall determine whether avoidance is feasible in light of factors such as the nature of the find, project design, costs, and other considerations.</p> <p>If avoidance is infeasible, other appropriate measures, such as data recovery, shall be instituted. The resource shall be treated with the appropriate dignity, taking into account the resource's historical or cultural value, meaning, and traditional use, as determined by a qualified professional or California Native American tribe, as is appropriate. Work may proceed on other parts of the project site while mitigation for cultural resources is carried out. All significant cultural materials recovered shall, at the discretion of the consulting professional, be subject to scientific analysis, professional museum curation, and documentation according to current professional standards. At the County's discretion, all work performed by the consulting professional shall be paid for by the proponent and at the County's discretion, the professional may work under contract with the County.</p>				
<p>Mitigation Measure CUL-1b: In the event of discovery or recognition of any human remains during construction activities, the following steps shall be taken:</p> <ol style="list-style-type: none"> 1. There shall be no further excavation or disturbance of the location where human remains are found or within 100 feet until: <ol style="list-style-type: none"> A. The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and B. If the coroner determines the remains to be Native American: <ol style="list-style-type: none"> (1) The coroner shall contact the Native American Heritage Commission within 24 hours; (2) The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American; (3) The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or 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 on the property in a location not subject to further subsurface disturbance: 	<p>Upon find of prehistoric or historic-period archaeological resources</p>	<p>Prior to any ground disturbance and throughout construction</p>	<p>DCD; Native American representative, if required</p>	<p>Confirm suspension of work upon find; Make resource determination; Approve avoidance or other applicable measures.</p>

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<p>A. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the Commission;</p> <p>(1) The identified descendant fails to make a recommendation; or</p> <p>(2) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.</p>				
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4.5 Geology and Soils

<p>Mitigation Measure GEO-1: Grading Plans. The Project applicant shall include in the Project’s preliminary grading plan the recommendations made in Engeo’s <i>Geotechnical Exploration Bay View Subdivision</i> report dated August 15, 2003, the <i>Geotechnical Review of Rough Grading Plan and Supplemental Recommendations</i> dated June 27, 2006, and supplemental <i>Plan Review and Response to Peer Review Comments Memo</i> dated June 19, 2019, and <i>Response to CCCFCD Comments Regarding Geotechnical Feasibility Bayview</i> dated May 29, 2020, except as superseded by specific geotechnical recommendations related to engineering or the physical aspects of Project construction in the <i>Geologic Peer Reviews</i> dated August 9, 2006, April 14, 2006 and June 30, 2020 by Darwin Myers Associates (DMA) on behalf of the County, to the extent that all recommendations apply to the proposed grading plan. These recommendations include oversight of grading operations which shall be conducted by a California Certified Engineering Geologist or Registered Professional Geotechnical Engineer.</p>	<p>Submittal of preliminary grading plan.</p>	<p>At least 60 days prior to issuance of grading permits.</p>	<p>DCD; County Peer Reviewing Engineering Geologist or Geotechnical Engineer</p>	<p>Review of design –level geotechnical report and grading monitoring plan.</p>
<p>The final grading plans shall be in accordance with the <i>Contra Costa County Grading Ordinance (Title 7 Division 716)</i> and reviewed and approved by the Contra Costa Department of Conservation and Development prior to the commencement of Project construction. If any slopes or areas of concern are observed to be unstable during grading, the California certified engineering geologist or registered professional geotechnical engineer shall oversee the removal of the suspected material and reconstruction of the slope as a buttress fill slope with engineered slope stabilization features such as geogrid reinforcement.</p>	<p>Submittal of final grading plan.</p>	<p>At least 60 days prior to issuance of grading permits.</p>		
<p>Final inspection of excavated slopes and graded slopes shall be completed by a California certified engineering geologist or registered professional geotechnical engineer with knowledge of the Project conditions. The slope stability considerations for the site shall be submitted to and approved of by the</p>	<p>Submittal and final inspection of excavated slopes and</p>	<p>Following rough grading and prior to issuance of the first residential permit.</p>		<p>Review of final excavation and grading.</p>

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<p>Contra Costa Department of Conservation and Development prior to the commencement of Project construction.</p>	<p>graded slopes.</p>			
<p>Mitigation Measure GEO-2: Design-level Geotechnical Investigation. The Project applicant shall prepare and submit to the County a site-specific, design level geotechnical investigation for the Project. The investigation shall analyze expected ground motions at the site from known active faults in accordance with the 2019 California Building Code (“Title 24”), which requires that all designs accommodate ground accelerations expected from known active faults. The investigation shall review improvement and grading plans and update geotechnical design recommendations for proposed walls, foundations, foundation slabs and surrounding related improvements (e.g., utilities, roadways, parking lots and sidewalks) including maintaining pipeline safety for existing pipelines. The report shall be subject to technical review and approval by a California certified engineering geologist or registered professional geotechnical engineer.</p>	<p>Prepare and submit to the County a site-specific, design level geotechnical investigation – seismic.</p>	<p>At least 60 days prior to issuance of grading permits.</p>	<p>DCD; County Peer Reviewing Engineering Geologist or Geotechnical Engineer</p>	<p>Review of design-level geotechnical report.</p>
<p>All recommendations by the engineering geologist and/or geotechnical engineer shall be incorporated into the final design. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the Project design phase, shall be incorporated in the Project, all foundations and other project structures must comply with the performance standards set forth in the California Building Code. The final seismic considerations for the site shall be submitted to and approved of by the Contra Costa Department of Conservation and Development prior to the commencement of Project construction.</p>	<p>Incorporate recommendation into final design – seismic.</p>	<p>Ongoing: Throughout grading and construction activities.</p>		
<p>Mitigation Measure GEO-3: Fill Placement. The Project applicant shall incorporate the geotechnical recommendations pertaining to proposed fill placement and site preparation including the fill transition zone areas for the grading plan for the Project, as specified in Engeo’s <i>Geotechnical Exploration Bay View Subdivision</i> report dated August 15, 2003, and the <i>Geotechnical Review of Rough Grading Plan and Supplemental Recommendations</i> dated June 27, 2006, and supplemental <i>Plan Review and Response to Peer Review Comments Memo</i> dated June 19, 2019 and <i>Response to CCCFCD Comments Regarding Geotechnical Feasibility</i> dated May 29, 2020, except as superseded by specific geotechnical recommendations related to engineering or the physical aspects of Project construction in the <i>Geologic Peer Reviews</i> dated August 9, 2006, April 14, 2006, and June 30, 2020 by Darwin Myers Associates (DMA) on behalf of the County. In addition, the Project applicant shall adhere to County grading and construction policies to reduce the potential for geologic hazards, including settlement and differential settlement. All construction activities and design criteria shall comply with applicable codes and requirements of the 2019 California Building Code (“Title 24”). The final grading plan reflecting the applicant recommendation for the site pertaining to fill placement shall be submitted to and approved by the Contra Costa</p>	<p>Fill placement and transition zone areas in grading plan.</p>	<p>At least 60 days prior to issuance of grading permits.</p>	<p>DCD; County Peer Reviewing Engineering Geologist or Geotechnical Engineer</p>	<p>Review of design-level geotechnical report.</p>

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Department of Conservation and Development prior to the commencement of Project construction.				
Mitigation Measure GEO-4: Terraced Slopes/Drainage. The Project applicant shall ensure routine inspections and maintenance of terraced slopes conducted by qualified professionals. Maintenance measures shall include maintaining vegetative cover of exposed slopes upland of the proposed development after construction, for the operational life of the Project, consistent with the provisions of the Project's SWPPP, as identified in Section 4.7, <i>Hydrology and Water Quality</i> , in this EIR. Drainage conveyances on the cut terraces shall be maintained to ensure a minimum of 85 percent of total conveyance capacity, as specified in the Stormwater Management Facilities Operation and Maintenance Agreement. Any evidence of gully or rill erosional effects shall be remedied immediately by the Project applicant through additional hydroseeding or other industry standard measures and best practices for erosion control.	Routine inspections and maintenance of terraced slopes.	Ongoing until the mitigation conditions are met.	DCD; Stormwater Management Facilities Operation and Maintenance Agreement.	Review and approval of revegetation plan. Review and approve conveyance capacity, as specified in the Stormwater Management Facilities Operation and Maintenance Agreement
Mitigation Measure GEO-5: Paleontological Resources Treatment. If paleontological resources are encountered, all construction activities within 100 feet shall halt and the County shall be notified. A qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards shall inspect the findings within 24 hours of discovery.	If paleontological resources are encountered during construction.	Within 24 hours of discovery.	DCD; Peer reviewing qualified paleontologist.	Receive notification of discovery.
If it is determined that the Project could damage a paleontological resource or a unique geologic feature (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA <i>Guidelines</i> , with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement.	Implement mitigation for avoidance.	Upon qualified paleontologist's determination of potential damage.	DCD; Peer reviewing qualified paleontologist.	Review and approve detailed treatment plan, per PRC Section 21083.2 of the CEQA Guidelines.
If avoidance is not feasible, a qualified paleontologist shall prepare and implement a detailed treatment plan in consultation with the County. Treatment of unique paleontological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the Project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.	Implement a detailed treatment plan. Distribute plan results.	Upon qualified paleontologist's determination of potential damage and avoidance infeasibility.	DCD; Peer reviewing qualified paleontologist.	Confirm implementation of detailed treatment plan, per PRC Section 21083.2 of the CEQA Guidelines. Confirm timely reporting of plan results
4.6 Greenhouse Gas Emissions and Energy				

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<p>Project homes. The Project applicant shall also submit to the County documents that quantify the number or rate of EV ownership and for all Project homes for the prior year.</p> <p>The target for this measure is that at least 50 percent of residents with EV chargers (corresponding to 35 percent of project households) own an EV and use the EV for 80 percent of household driving by 2035, however, this target may vary depending on the level of implementation and resulting emissions reduction achieved by other measures in this mitigation measure.</p> <p>5) <u>Additional Energy Measures.</u></p> <p>a. <i>High-Efficiency Appliances. Throughout occupancy of the Project, and if appliances are offered by homebuilders, the Project applicant shall offer homebuyers Energy Star-rated high-efficiency appliances (or other equivalent technology) that have efficiency levels at or above measures required by CALGreen, for installation in Project homes.</i></p> <p>B. Implementation, Monitoring and Enforcement.</p> <p>1) <u>Implementation.</u></p> <p>The Project applicant shall implement the approved GHG Reduction Plan (Plan) throughout operation of the Project.</p> <p><i>On-site Measures:</i> For physical GHG reduction measures to be incorporated into the design of the Project (Mitigation Measures GHG-1, A.2, A.3, A.4a, and A5), the measures shall be included on the drawings and submitted to the County Planning Director or his/her designee for review and confirmation prior to issuance of the first grading-related and/or building permit for horizontal construction of each of the up to three development phases proposed.</p> <p>The County Planning Director or his/her designee shall confirm completion of the implementation of these measures as part of the final inspection and prior to issuance of the final certificate of occupancy (CO) for each development phase of the Project. For operational GHG reduction measures (Mitigation Measures GHG-1, A.1 and A.4b), the measures shall be implemented on an indefinite and ongoing basis, as described in Section C.2, <i>Reporting and Monitoring</i>, of this mitigation measure.</p> <p>2) <u>Reporting and Monitoring.</u></p> <p><i>Reporting:</i> The Project applicant shall submit a GHG Reduction</p>	<p>Implementation of GHG emissions reduction measures.</p> <p>Submittal of GHG Reduction Report: Within</p>	<p>Prior to the County's approval of the first construction or grading-related permit for the Project for each development phase.</p> <p>With the County's final inspection and prior to issuance of the final CO for</p>		<p>Verify implementation of measures and emissions reduction.</p> <p>Verify ongoing implementation of measures and emissions reduction.</p>
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<p>Report (Report) to the County Planning Director or his/her designee within one year after the County issues the final CO for each development phase of the Project. The Report shall summarize the Project's implementation of GHG reduction measures, over past, current, and anticipated Project phases, if applicable; describe compliance with the conditions of the Plan; show calculations of the emissions reduction achieved toward the minimum reduction required (182 MT CO₂e /year); and include a brief summary of any revisions to the Plan since any previous Report was submitted.</p> <p><i>Monitoring:</i> The County or its designee shall review the Report to verify that the Plan is being implemented in full and monitored in accordance with the terms of this mitigation measure. The Plan shall be considered fully attained when the County or its designee makes the determination, based on substantial evidence, that the proposed Project has achieved the required emissions reduction of at least approximately 182 MT CO₂e /year and is unlikely to exceed the applicable significance threshold at any time in the future, after implementation of this mitigation.</p> <p><i>Enforcement.</i> Notwithstanding the foregoing, the County retains its discretion to enforce all mechanisms under the Municipal Code and other laws to enforce non-compliance with the requirements of this mitigation measure.</p> <p>The County retains the right to request a Corrective Action Plan if the Report is not submitted, or if the GHG Reduction Measures in the Plan are not being fully implemented and/or maintained, and also retains the right to enforce provisions of that Corrective Action Plan if specified actions are not taken or are not successful at addressing the violation within the specified period of time.</p> <p>The County shall have the discretion to reasonably modify the timing of reporting, with reasonable notice and opportunity to comment by the Applicant, to coincide with other related monitoring and reporting required for the Project.</p>	<p>one year after issuance of final CO for each development phase.</p> <p>Submittal of Monitoring Report.</p>	<p>each development phase.</p> <p>Ongoing after completion of each development phase, to be modified at County's discretion.</p>		
<p>4.7 Hazards and Hazardous Materials</p>				
<p>Mitigation Measure HAZ-1: The use of construction best management practices shall be implemented as part of construction to minimize the potential negative effects of accidental release of hazardous materials to groundwater and soils. These shall include the following:</p> <ol style="list-style-type: none"> 1. Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction; 2. Avoid overtopping construction equipment fuel gas tanks; 3. During routine maintenance of construction equipment, properly 	<p>Start of construction activities.</p>	<p>Prior to issuance of grading and/or building permits.</p> <p>Monitoring: Ongoing throughout construction.</p>	<p>DCD</p>	<p>Review and approval of construction contracts.</p>

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<p>contain and remove grease and oils; and</p> <p>4. Properly dispose of discarded containers of fuels and other chemicals.</p>				
<p>Mitigation Measure HAZ-2: The Project shall ensure the following fill and excavation parameters are met to reduce the risk of damage to pipelines:</p> <p>1. Before the commencement of any grading activities, the tops of the five pipelines shall be accurately located on site, and confirmed to be a minimum of 6 feet below the existing ground surface. If it is determined that the any pipeline top is less than six feet below the surface, and will be at risk of impact during proposed grading excavation, one of the following additional safety measures shall be undertaken: deepening the pipeline, providing mechanical protection such as steel or concrete barriers, or elevating the proposed final road elevation.</p> <p>2. Maximum fill heights over the Santa Fe Pacific Partners L.P. ("SFPP"); Kinder Morgan Energy Partners, L.P. ("KMP"); and Crimson-Chevron KLM ("KLM") and Chevron pipelines shall exert a calculated stress of more than what the pipelines can safely tolerate, as determined by a professional engineer in accord with applicable industry standards and safety regulations based on observed pipe material and other factors</p>	<p>Preparation of final plan for grading and excavation.</p>	<p>Prior to issuance of grading and/or building permits.</p> <p>Monitoring: Ongoing throughout construction.</p>	<p>DCD; and peer reviewing professional engineer</p>	<p>Review and verify implementation and adherence of all parameters.</p>
<p>3. Prior to final design and construction, a refined analysis of field determined bay mud thickness and bay mud consolidation properties shall be conducted. Though not anticipated, if bay mud is found to exert a calculated stress of more than what the pipeline can safely tolerate, as determined by a professional engineer in accord with applicable industry standards and safety regulations based on observed pipe material and other factors, then one or both of the following additional safety measures shall be undertaken: reduce proposed fill thickness or use lightweight fill such as cellular concrete or Geofoam encasement (or its equivalent).</p>	<p>Refined field analysis.</p>	<p>Prior to final design and construction.</p>	<p>DCD; and peer reviewing professional engineer</p>	<p>Review and approval of refined analysis.</p>
<p>4. The as-built burial depths of the pipelines and the final proposed subgrade elevations shall result in all pipelines having a minimum burial depth in accord with prevailing regulatory code or pipe owner requirement, whichever is more stringent. If any pipeline does not have a cover in accordance with regulatory minimums, one of the following additional safety measures shall be undertaken: deepening the pipeline, providing mechanical protection such as steel or concrete barriers, or elevating the proposed final road elevation.</p>	<p>Confirmation of final as-built pipeline burial depths.</p>	<p>Final grading inspection.</p>	<p>DCD; and peer reviewing professional engineer</p>	<p>Confirm adequate as-building burial depths.</p>

4.10 Noise

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<p>Mitigation Measure NOI-1: The applicant shall create and implement a development-specific noise reduction plan to reduce noise at sensitive receptors along Central Avenue to below 75 dBA Lmax, which shall be enforced via contract specifications. Contractors may elect any combination of legal, non-polluting methods to maintain or reduce construction-related noise to threshold levels or lower, as long as those methods do not result in other significant environmental impacts or create a substantial public nuisance. Examples of measures that can effectively reduce noise impacts include locating equipment in shielded and/or less noise-sensitive areas, selection of equipment that emits low noise levels, and/or installation of noise barriers such as enclosures to block the line of sight between the noise source and the nearest receptors. Other feasible controls could include, but shall not be limited to, fan silencers, enclosures, and mechanical equipment screen walls.</p>	<p>Create and implement a development-specific noise reduction plan. Preparation of construction contracts.</p>	<p>Prior to issuance of grading and/or building permits.</p> <p>Monitoring: Ongoing throughout construction.</p>	<p>DCD</p>	<p>Review and approval of development-specific noise reduction plan.</p> <p>Review and approval of construction contracts.</p>
<p>In addition, the applicant shall require contractors to limit construction activities in the northernmost 500 feet of the project site to daytime hours between 8:00 am and 5:00 pm Monday through Friday. The plan for attenuating construction-related noises shall be implemented prior to the initiation of any work that triggers the need for such a plan.</p>	<p>Start of construction activity.</p>	<p>Monitoring: Ongoing throughout construction</p>	<p>DCD</p>	<p>Respond to reported construction activities outside of allowed hours/days.</p> <p>Review and approve noise attenuation plan, as needed.</p>
<p>4.12 Public Services and Utilities</p>				
<p>Mitigation Measure PUB-1: The project sponsor shall equip all dwelling units with residential automatic fire sprinkler systems complying with the 2002 edition of the National Fire Protection Association Standard 13D, subject to the review and approval of the Contra Costa County Fire Protection District.</p>	<p>Submittal of residential building plans.</p>	<p>Prior to filing of the parcel map.</p> <p>Prior to issuance of the first residential permit.</p>	<p>DCD and Contra Costa County Fire Protection District</p>	<p>Review and approval of plans for automatic fire sprinkler system.</p> <p>Review and approval of the automatic fire sprinkler system.</p>
<p>4.13 Transportation</p>				
<p>Mitigation Measure TRF-1: The Project applicant and construction contractor(s) shall develop and submit a Construction Management and Traffic Control Plan for the review and approval of the County's Public Works Department. The Construction Management and Traffic Control Plan shall be submitted to the Public Works Department a minimum of 60 days prior to the initiation of construction activities:</p> <ul style="list-style-type: none"> A set of comprehensive traffic control measures, including scheduling of major truck trips to avoid peak traffic hours, types of vehicles and maximum speed limits for each type of vehicle, expected daily truck trips, staging areas, emergency routes and access, detour signs if required, lane closure procedures, flag person requirements, signs, cones for drivers, a street sweeping plan and designated construction access routes. Identification of roadways to be used for the movement of 	<p>Development and submittal of Construction Management and Traffic Control Plan.</p>	<p>Prior to issuance of grading and/or building permits.</p> <p>Sixty (60) days prior to commencement of construction activities.</p>	<p>DCD and Contra Costa County Department of Public Works</p>	<p>Review and approval of Construction Management and Traffic Control Plan.</p>

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<p>construction vehicles to minimize impacts on motor vehicle, bicycle and pedestrian traffic, circulation and safety, and specifically to minimize impacts to the greatest extent possible on streets in the Project area.</p> <ul style="list-style-type: none"> Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur. 				
<p>Mitigation Measure TRF-2: Prior to commencement of Project construction activities, which would include any construction-related deliveries to the site, the Project applicant shall document to the satisfaction of the Contra Costa County Public Works Department, the road conditions of the construction route that would be used by Project construction-related vehicles.</p>	<p>Document pre-construction road conditions.</p>	<p>Prior to issuance of grading and/or building permits.</p>	<p>DCD and Contra Costa County Department of Public Works</p>	<p>Review and approval of documented road conditions on construction routes.</p>
<p>The Project applicant shall also document the construction route road conditions after Project construction has been completed. The Project applicant shall repair roads that are damaged by construction related activities to County standards and to a structural condition equal to that which existed prior to construction activity. As a security to ensure that damaged roads are adequately repaired, the Project applicant shall make an initial monetary deposit, in an amount to be determined by the Department of Public Works, to an account to be used for roadway rehabilitation or reconstruction.</p>	<p>Document construction route road conditions.</p>	<p>Prior to commencement of construction activities, with final inspection.</p>	<p>DCD and Contra Costa County Department of Public Works</p>	<p>Review and approval of post-project construction road conditions on construction route.</p>
<p>If the County must ultimately undertake the road repairs, and repair costs exceed the initial payment, then the Project applicant shall pay the additional amount necessary to fully repair the roads to pre-construction conditions.</p>	<p>County undertaking the road repairs.</p>	<p>Prior to refunding the initial monetary deposit.</p>	<p>DCD and Contra Costa County Department of Public Works</p>	<p>Confirm any reimbursement amount to County.</p>
<p>Mitigation Measure TRF-3: Transportation and Parking Demand Management (TDM) Plan. Prior to issuance of building permits, the Project applicant shall develop a TDM program for the proposed Project, including any anticipated phasing, and shall submit the TDM Program to the County Department of Conservation and Development for review and approval. The TDM Program shall identify trip reduction strategies as well as mechanisms for funding and overseeing the delivery of trip reduction programs and strategies. The TDM Program shall be designed to achieve the trip reduction, as required to reduce the VMT per resident from 20.6 to 16.5, to the extent feasible, consistent with a 20 percent reduction in the near-term.</p> <p>Trip reduction strategies may include, but are not limited to, the following:</p> <ol style="list-style-type: none"> Pedestrian improvements, on-site or off-site, to connect to existing and planned pedestrian facilities, nearby transit stops, services, schools, shops, etc. Bicycle network improvements, on-site or off-site, to connect to existing and planned bicycle facilities, nearby transit stops, services, schools, shops, etc. 	<p>Develop/Submit TDM program.</p>	<p>Prior to issuance of initial building permit.</p>	<p>DCD and Contra Costa County Department of Public Works</p>	<p>Review/Approve TDM program; Verify implementation of program.</p>

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<p>3. Enhancements to bus service during peak commute times</p> <p>4. Compliance with a future County VMT/TDM ordinance</p> <p>5. Participation in a future County VMT fee program</p>				
<p>Mitigation Measure TRF-4: In accordance with County requirements and design standards provide even surface pavement, appropriate signage, delineation, and other features on Palms Drive (and Central Avenue if it becomes a public street) to improve vehicle transportation conditions and eliminate obstacles (or hazards).</p>	<p>Implement pavement, signage and other street improvements on Palms Drive and Central Avenue.</p>	<p>Prior to and after implementation of street improvements on Palms Drive and Central Avenue.</p>	<p>DCD and Contra Costa County Department of Public Works</p>	<p>Review/approve proposed street improvements; Verify implementation of surface pavement, signage and other features.</p>
<p>Mitigation Measure TRF-6: In accordance with County requirements and design standards, the project applicant shall provide:</p> <ul style="list-style-type: none"> • Continuous sidewalks on at least one side of Palms Drive and Central Avenue to connect the project site to the existing pedestrian facilities on Arthur Road to improve pedestrian transportation conditions. • Even surface pavement, appropriate signage, delineation, and other features on Palms Drive and Central Avenue to improve bicycle transportation conditions. • Sidewalks for all streets within the project site including facilities on both sides of each street and curb ramps at each street intersection. 	<p>Submittal of Project site plan / VTM</p>	<p>Prior to issuance of the first residential permit.</p>	<p>DCD, Contra Costa County Department of Public Works</p>	<p>Review and approval of improvement measures.</p>
<p>Mitigation Measure TRF-7a: In accordance with County requirements and design standards, the project applicant shall provide even surface pavement, appropriate signage, delineation, and other features on Palms Drive and Central Avenue to accommodate emergency vehicles.</p>	<p>Submittal of Project site plan / VTM.</p>	<p>Prior to issuance of the first residential permit.</p>	<p>DCD, Contra Costa County Department of Public Works</p>	<p>Review and approval of improvement measures.</p>
<p>4.14 Utilities and Service Systems</p>				
<p>Mitigation Measure UTIL-2: The Project sponsor shall implement the following mitigation measures for construction-related effects from installation and expansion of the proposed new waterline:</p> <ul style="list-style-type: none"> a) Mitigation Measure AIR-1 (Best Management Practices for Controlling Particulate Emissions) b) Mitigation Measure BIO-2a (Worker Environmental Awareness Program Training) (see Impact BIO-2) c) Mitigation Measure BIO-2b (General Conservation Measures during Construction) (see Impact BIO-2) d) Mitigation Measure BIO-6a (Protection of Jurisdictional Wetlands 	<p>Installation / Expansion of New Waterline.</p>	<p>Prior to and throughout construction.</p>	<p>DCD, Contra Costa County Department of Public Works (also see specific mitigations in applicable sections in the MMRP)</p>	<p>Review and approval of all measures (also see specific mitigations in applicable sections in the MMRP).</p>

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<p>and Other Waters)) (see Impact BIO-6)</p> <ul style="list-style-type: none"> e) Mitigation Measure CUL-1a (Prehistoric or Historic-Period Archaeological Resources) (see Impact CUL-1) f) Mitigation Measure CUL-1b (Human Remains) (see Impact CUL-1) g) Mitigation Measure GEO-2 (Design-level Geotechnical Compliance) (see Impact GEO-3) h) Mitigation Measure GEO-3 (Fill Placement) i) Mitigation Measure GEO-4 (Terraced Slopes/Drainage) j) Mitigation Measure GEO-5 (Paleontological Resources Treatment) k) Mitigation Measure HAZ-1 (Release of Hazardous Materials) (see Impact HAZ-1) l) Mitigation Measure HAZ-2 (Pipeline Damage Risk) (see Impact HAZ-2) m) Mitigation Measure NOI-1 (Construction Noise) (see Impact NOI-1) n) Mitigation Measure TRF-1 (Construction Traffic) (see Impact TRF-1) o) Mitigation Measure TRF-2 (Public Roadway Damage or Wear) (see Impact HAZ-2) 				
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