



**Mitigation Monitoring and Reporting Program
for the
Avenue 66 Trunk Sewer Project**

SCH#: 2021100018

Prepared by:

William Patterson, Environmental Supervisor
75515 Hovley Lane East
Palm Desert, CA 92211
wpatterson@cvwd.org
(760) 398-2651

With assistance from:



9655 Chesapeake Drive, Suite 320
San Diego, CA 92123
858-875-7400

March 2022

Mitigation Monitoring and Reporting Program

The California Environmental Quality Act (CEQA) requires that when a lead agency adopts a Mitigated Negative Declaration (MND), it shall prepare a monitoring or reporting program for all required mitigation measures (CEQA Guidelines Section 15097). This Mitigation Monitoring and Reporting Program (MMRP) describes the monitoring and reporting program for mitigation measures adopted by Coachella Valley Water District (CVWD) to avoid or substantially reduce impacts related to the *Avenue 66 Trunk Sewer Project* (project) to less than significant levels. CVWD and its contractors are required to implement the adopted mitigation measures for the proposed project in accordance with the MND. This MMRP contains a checklist and description of all adopted mitigation measures, including the responsible parties, timing, and completion criteria.

Program Administration

The MMRP shall be administered by CVWD. Mitigation measures shall be incorporated into design and construction contracts, as appropriate, to ensure full implementation. The MMRP shall be maintained by the designated CVWD Project Manager and be available for inspection upon request at CVWD offices.

Project Description

The *Avenue 66 Trunk Sewer Project* would extend CVWD sewer facilities along Avenue 66 from Polk Street to Harrison Street to provide sanitation service to the Sunbird Mobile Home Park (Sunbird MHP, located on Echols Road near Harrison Street) and the Torres-Martinez Community Center (TMCC, located south of Avenue 66 between Polk and Tyler Streets). The proposed project involves construction and operation of 19,625 linear feet (LF) of sewer pipeline and a new lift station, as well as abandonment of existing onsite community septic systems. The project would connect the Sunbird MHP and TMCC to CVWD's existing sanitation system tributary to Lift Station 55-21 (LS 55-21) and then to CVWD's Water Reclamation Plant No. 4 (WRP-4). The project would construct approximately 1,304 LF of 6" sewer force main and a lift station at Harrison Street and Echols Road; 10,245 LF of 8" and 10" sewer gravity main; and 7,002 LF of 4", 6", and 8" sewer gravity lateral, as well as stub outs along Avenue 66 for future connections. The pipeline would be installed below grade within existing paved streets and rights-of-way with an average excavation depth of ten to 14 feet and maximum depth of 25 feet. The pipeline alignment would primarily traverse public roads and a portion of the Torres-Martinez Desert Cahuilla Indian reservation land.

Mitigation Monitoring Requirements

A mitigation monitoring checklist has been developed for the proposed project and is intended for use by CVWD, as lead agency and designated monitoring entity for the proposed project. The checklist, presented as **Table 1**, summarizes the mitigation requirements for the proposed project, anticipates timing, and identifies responsible parties for ensuring implementation of each mitigation measure. These mitigation measures are presented using the naming conventions and categories in the MND.

Table 1: Avenue 66 Trunk Sewer Project - Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring and Reporting Actions	Implementation Schedule	Monitoring Frequency	Responsible Party	Review and Approval by:	Verification: Status/ Date Completed/ Initials
<p>Mitigation Measure AES-1: Design of Aboveground Structures</p> <p>To minimize visual impacts on public views, permanent, aboveground structures (lift station) shall be designed to blend into the existing visual character of their surroundings, including building and wall height, color, and exterior architectural treatments.</p>	<p>1. Include measure in contract documents</p> <p>2. Confirm design plans consider existing surrounding visual character such as building and wall height, color, and exterior architectural treatments</p> <p>3. Confirm design elements are incorporated during construction</p>	<p>1. Contracting</p> <p>2. Pre-Construction</p> <p>3. Construction</p>	<p>1. Once</p> <p>2. Once, prior to construction</p> <p>3. Once, during construction</p>	<p>1. CVWD</p> <p>2. CVWD, Construction Contractor</p> <p>3. Construction Contractor</p>	CVWD	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p>
<p>Mitigation Measure BIO-1: Pre-Construction Burrowing Owl Surveys</p> <p>To avoid potential impacts to burrowing owl, a pre-construction clearance survey for burrowing owl shall be conducted no more than fourteen (14) days prior to initiation of construction activities. The burrowing owl pre-construction survey shall be conducted on-foot within the proposed disturbance area including a 500-foot buffer. The survey methods will be consistent with the <i>Staff Report on Burrowing Owl Mitigation</i> (CDFW 2012) and shall consist of walking parallel transects spaced adequately to obtain 100% visual coverage of the site. The survey shall be conducted by a biologist familiar with the identification of burrowing owl and their habitat.</p> <p>If burrowing owls are found within the project area during the pre-construction surveys, active burrows will be avoided. If possible, the timing and location of construction activities will be adjusted to avoid the occupied burrow by the appropriate distance (see below), where possible. Due to the size of the project, it is anticipated that the construction schedule and location can be modified to avoid all potential impacts to occupied burrows during the breeding season. Buffer zones for occupied burrows will be established at 500 feet during the breeding season (February 1 to August 31) and at 100 feet for the non-breeding season. These buffers may be adjusted in consultation with California Department of Fish and Wildlife and Coachella Valley Conservation Commission and monitored at the discretion of a qualified biologist. The buffer zone will be clearly marked with flagging and/or construction fencing</p>	<p>1. Include measure in contract documents.</p> <p>2. Confirm qualified biologist conducted pre-construction survey for burrowing owl within the appropriate time frame and established a buffer zone, as appropriate.</p> <p>3. Avoid construction within the buffer zone of active burrows.</p>	<p>1. Contracting</p> <p>2. Pre-Construction</p> <p>3. Construction</p>	<p>1. Once</p> <p>2. Once, within 14 days prior to construction, or if construction re-starts</p> <p>3. Continuously throughout construction, if applicable</p>	<p>1. CVWD</p> <p>2. CVWD, Construction Contractor</p> <p>3. Construction Contractor</p>	CVWD	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p>
<p>Mitigation Measure BIO-2: Nesting Birds</p> <p>To avoid disturbance of nesting birds, including raptor species protected by the Migratory Bird Treaty Act and the California Fish and Game Code 3503, activities related to the proposed project including, but not limited to, vegetation removal, ground disturbance, and construction shall occur outside of the bird breeding season (typically January 1 to September 15) to the extent practicable.</p> <p>If construction must occur within the bird breeding season (January 1 through September 15), CVWD shall, no more than three days prior to initiation of ground disturbance and/or vegetation removal, contract with a qualified biologist to conduct a nesting bird and raptor pre-construction survey within the disturbance footprint plus a 100-foot buffer (300-foot for raptors), where feasible. If the proposed project is phased or construction activities stop for more than one week, a subsequent pre-construction nesting bird and raptor survey will be required prior to each phase of construction within the project site.</p> <p>Pre-construction nesting bird and raptor surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird and raptor survey results, if applicable, shall be submitted to the lead agency for review and approval prior to ground and/or vegetation disturbance activities.</p> <p>If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for songbirds, and up to 500 feet for raptors depending upon the species and the proposed work activity, and California Department of Fish and Wildlife (CDFW) approval shall be determined and demarcated by a qualified biologist with bright</p>	<p>1. Include measure in contract documents.</p> <p>2. Avoid construction activities between January 1 and September 15.</p> <p>OR</p> <p>3. Confirm a qualified biologist conducted pre-construction nesting bird and raptor surveys and submitted a report of survey results within the appropriate time frame, and established a no-work buffer zone, as appropriate.</p>	<p>1. Contracting</p> <p>2. Construction</p> <p>OR</p> <p>3. Pre-construction</p>	<p>1. Once</p> <p>2. Once</p> <p>OR</p> <p>3. Once, within 3 days prior to construction, or if construction re-starts</p>	<p>1. CVWD</p> <p>2. Construction Contractor</p> <p>OR</p> <p>3. CVWD, Construction Contractor</p>	CVWD	<p>1. _____</p> <p>2. _____</p> <p>OR</p> <p>3. _____</p>

Mitigation Measure	Monitoring and Reporting Actions	Implementation Schedule	Monitoring Frequency	Responsible Party	Review and Approval by:	Verification: Status/ Date Completed/ Initials
orange construction fencing or other suitable flagging. Buffers will be determined in conjunction with CDFW through the development of a nesting bird management plan. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed, and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.	4. Confirm construction is avoided in the no-work buffer zone until biologist determines that the nest is inactive.	4. Construction	4. Continuously throughout construction, if applicable	4. Construction Contractor		4. _____
<p>Mitigation Measure CUL-1: Phase II Work Plan, Archaeological Investigation, and Report</p> <p>As the Avenue 66 Trunk Sewer Project will conduct ground disturbing work within the boundaries of two known Tribal Cultural Resources within Martinez Historical District, the Martinez Road site P-33-020028 (CA-RIV-10171) and the multicomponent site P-33-001292/h (CA-RIV-1292H) along the western edge of Martinez Road, a Phase II Work Plan, Phase II Archaeological Investigation, and a Phase II Technical Report shall be conducted prior to the issuance of an installation agreement by the Torres-Martinez Desert Cahuilla Indians to determine if intact deposits remain.</p> <p>A Phase II Work Plan (Work Plan) shall be created prior to the Phase II field work to guide the investigation. The Phase II Work Plan shall include, but not be limited to, the following elements: an overview of the project and regulatory context; a description of the environmental and cultural setting, relying on relevant portions of the Cultural Resources Technical Report (Gusick 2020); background on the results of previous investigations, cultural resources reports, and coordination with Native American groups; and the methods and research design to identify potential themes and questions, data expectations, significance thresholds, and protocols, all culminating in a detailed plan for the methods of testing within the Area of Direct Impact (ADI) for the project and artifact analysis with current industry standards.</p> <p>To avoid potential impacts to unknown subsurface resources in the Area of Direct Impact (ADI) in the vicinity of the Martinez Road site P-33-020028 (CA-RIV-10171) and the multicomponent site P-33-001292/h (CA-RIV-1292H) along the western edge of Martinez Road, a Phase II Archaeological Investigation (Field Work) shall be conducted. The Phase II Archaeological Investigation (Field Work) is the field work portion and shall be conducted in accordance with the Society for California Archaeology's Fieldwork and Reporting Guidelines. This work effort shall be conducted under the direction of an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. The Phase II Field Work excavations shall be limited to the ADI, which is the area that will be directly disturbed by project-related excavation. Field work methods shall be defined in the Work Plan and may include shovel test pits, test units, transport of recovered materials to the laboratory, specialized analysis, and cataloguing of lithic artifacts, charcoal, and faunal remains. Field work also may include magnetic resistivity survey.</p> <p>After the Phase II Field Work, a Phase II Technical Report (Technical Report) shall be created documenting the effort. The Technical Report shall include any necessary archival research to identify significant historical associations based on mapping of encountered artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposits carried out during the Phase II Field Work. The significance of any new data shall be evaluated according to the criteria of the California Register of Historic Resources and if applicable, National Register of Historic Places. The Martinez National Historic District (NRD-1292) would not be reevaluated for listing eligibility. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition).</p>	<p>1. Retain a qualified archaeologist to conduct Phase II Study</p> <p>2. Confirm a Phase II Work Plan has been created prior to the Phase II field investigation.</p> <p>3. Confirm completion of the Phase II field work and technical report.</p>	<p>1. Pre-Installation Agreement</p> <p>2. Pre-Installation Agreement</p> <p>3. Pre-Installation Agreement</p>	<p>1. Once</p> <p>2. Once</p> <p>3. Once</p>	<p>1. CVWD</p> <p>2. CVWD, archaeologist</p> <p>3. CVWD, archaeologist</p>	CVWD	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p>
<p>Mitigation Measure CUL-2: Data Recovery Plan</p> <p>A Phase III Data Recovery Program (DRP) shall be created for the project and include the Phase II Archeological Investigation and technical report information as necessary. The DRP shall be completed in accordance with the California Office of Historic Preservation's Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. The DRP shall be prepared by a qualified archaeologist who meets or exceeds the Secretary of Interior's Professional Qualifications Standards for prehistoric archaeology and be available for comments by the Torres-Martinez Desert Cahuilla Indians and CVWD. The DRP must be submitted for review and approval prior to the start of construction. Ground-disturbing</p>	<p>1. Retain a qualified archaeologist to prepare Data Recovery Plan</p> <p>2. Confirm DRP has been reviewed and approved by Torres-Martinez Desert Cahuilla Indians.</p>	<p>1. Pre-Construction</p> <p>2. Pre-Construction</p>	<p>1. Once</p> <p>2. Once</p>	<p>1. CVWD</p> <p>2. CVWD, archaeologist</p>	CVWD	<p>1. _____</p> <p>2. _____</p>

Mitigation Measure	Monitoring and Reporting Actions	Implementation Schedule	Monitoring Frequency	Responsible Party	Review and Approval by:	Verification: Status/ Date Completed/ Initials
<p>work may continue under the observation of an archaeological or cultural monitor on portions of the project site that do not appear to contain significant archaeological resources. The DRP shall include the following elements:</p> <ul style="list-style-type: none"> • Field Methods and Procedures: Descriptions of proposed field strategies, procedures, and operations. • Research Design/Data Classes/Data Requirements: This will describe the relevant research themes pertinent to the archaeological deposit identified and the data requirements for evaluation for the CRHR. • Background: Results of previous investigations and historical documentation research • Treatment Plan: Expected Artifact Classes and treatment plan for each, including the treatment of human remain and associated funerary objects. The treatment of human remains will be included as detailed in CUL-6. • Cataloguing and Laboratory Analysis: Description of selected cataloguing system and artifact analysis procedures of artifacts recovered and any corresponding field notes, graphics, and lab analyses, including but not limited to faunal analysis of all animal bones, radiocarbon dating when appropriate, protein residue analysis of stone tools and groundstone, and petrographic analysis of ceramic samples to assess general age ranges and source material. • Discard and Deaccession Policy: Description of and rationale for field and post-field discard and deaccession policies for cultural resources. • Interpretive Program: Consideration of an on-site/off-site public interpretive program during the course of the archaeological data recovery program. • Security Measures: Recommend security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities. • Final Report: Description of proposed report format and contents and distribution of results. • Curation: Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities. 	3. Confirm completion of the Phase III DRP.	3. Pre-Construction	3. Once	3. CVWD, archaeologist		3. _____
<p>Mitigation Measure CUL-3: Worker Environmental Awareness Program: Archaeologist Sensitive Training</p> <p>CVWD shall retain a qualified archaeologist to conduct a Worker’s Environmental Awareness Program (WEAP) training for archaeological sensitivity for construction personnel prior to the commencement of any ground disturbing activities. Construction personnel shall be briefed on project-specific circumstances and general observation methods for detecting archeological resources, including tribal cultural resources. The briefing shall include appropriate actions to be taken in the event of questionable evidence or discovery.</p>	<p>1. Include measure in contract documents.</p> <p>2. Confirm qualified archaeologist conducted WEAP training prior to construction</p>	<p>1. Contracting</p> <p>2. Pre-Construction</p>	<p>1. Once</p> <p>2. Once, prior to construction</p>	<p>1. CVWD</p> <p>2. CVWD, Construction Contractor</p>	CVWD	<p>1. _____</p> <p>2. _____</p>
<p>Mitigation Measure CUL-4: Initial Monitoring of Archaeological Resources</p> <p>CVWD shall ensure that initial project-related ground-disturbing activities shall be observed by an archaeological and Native American monitor. These activities shall include initial site preparation, clearing/grubbing of vegetation, and excavation for placement of the sanitation system. The archaeological monitor shall be under the direction of a qualified archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for prehistoric archaeology (National Park Service 1983). If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find shall be evaluated for California Register of Historic Resources and/or National Register of Historic Places eligibility. Archaeological monitoring may be reduced or halted at the discretion of the qualified archaeologist as warranted by conditions such as encountering bedrock, sediments being excavated are fill materials, or negative findings during initial ground-disturbing activities. If monitoring is reduced, spot checking shall occur when ground-disturbance moves to a new location or when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock). Both the project archeologist and Native American monitor will be invited to attend the pre-construction meeting.</p>	<p>1. Include measure in contract documents.</p> <p>2. Confirm archaeological and Native American monitor are invited to attend the pre-construction meeting</p> <p>3. Confirm archaeological and Native American monitor observed initial ground-disturbing activities.</p> <p>4. If resources were encountered during construction, confirm work was halted and the qualified archaeologist was consulted on eligibility, if applicable.</p>	<p>1. Contracting</p> <p>2. Pre-Construction</p> <p>3. Construction</p> <p>4. Construction</p>	<p>1. Once</p> <p>2. Once</p> <p>3. Continuously during initial ground-disturbing activities.</p> <p>4. Throughout construction, if applicable.</p>	<p>1. CVWD</p> <p>2. CVWD, Construction Contractor,</p> <p>3 CVWD, Construction Contractor</p> <p>4. Construction Contractor</p>	CVWD	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p>
<p>Mitigation Measure CUL-5: Unanticipated Discovery of Cultural Resources</p>	1. Include measures in contract documents.	1. Contracting	1. Once	1. CVWD	CVWD	1. _____

Mitigation Measure	Monitoring and Reporting Actions	Implementation Schedule	Monitoring Frequency	Responsible Party	Review and Approval by:	Verification: Status/ Date Completed/ Initials
<p>In the event that cultural resources are unearthed during project construction, the project archeologist, in coordination with CVWD's construction inspector shall temporarily suspend all earth disturbing work within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:</p> <ul style="list-style-type: none"> • If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required. • If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify CVWD's Construction Inspector and Environmental Services Department. CVWD shall consult on a finding of eligibility and implement appropriate treatment measures if the find is determined to be eligible for inclusion in the National Register of Historic Places (NRHP) or California Register of Historical Resources (NRHR). Work may not resume within the no-work radius until CVWD, through consultation as appropriate, determines that the site either: 1) is not eligible for the NRHP or CRHR; or 2) that the treatment measures have been completed to its satisfaction. 	<p>2. If resources are unearthed during construction, confirm work was halted and the qualified archaeologist was consulted on eligibility, and appropriate treatment measures and no-work buffers were implemented.</p> <p>3. Consult on finding and implement treatment measures, if applicable.</p>	<p>2. Construction</p> <p>3. Construction</p>	<p>2. Throughout construction, if applicable.</p> <p>3. Once</p>	<p>2. CVWD, Construction Contractor</p> <p>3. CVWD</p>		<p>2. _____</p> <p>3. _____</p>
<p>Mitigation Measure CUL-6: Unanticipated Discovery of Human Remains</p> <p>The discovery of human remains is a possibility during ground-disturbing activities. In the event that human remains are found, CVWD shall temporarily suspend all earth disturbing work within a 100-foot radius of the discovery. The project archeologist would evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature and location of the find.</p> <p>If the find includes human remains, or remains that are potentially human, the professional archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [SB] 2641). The archaeologist shall notify the Riverside County Coroner (as per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code (PRC), and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.</p> <p>If the find includes human remains, or remains that are potentially human, and the find is located on lands owned by Torres-Martinez Desert Cahuilla Indians, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until a representative from the Torres-Martinez Desert Cahuilla Indians is notified. The Torres-Martinez Desert Cahuilla Indians would have full discretion over the treatment of the remains.</p>	<p>1. Include measure in contract documents.</p> <p>2. Suspend all earth disturbing work within 100 feet of discovery, if applicable.</p> <p>3. Confirm appropriate notifications have occurred, if applicable.</p> <p>4. Verify adequate consultation with MLD has occurred, if applicable.</p> <p>5. Verify reburial site has been appropriately recorded and human remains treated appropriately, if applicable.</p> <p>6. If remains were found on land owned by the Torres-Martinez Desert Cahuilla Indians, suspend all earth disturbing work and verify adequate notification and consultation has occurred, if applicable.</p>	<p>1. Contracting</p> <p>2. Construction</p> <p>3. Construction</p> <p>4. Construction</p> <p>5. Construction</p> <p>6. Construction</p>	<p>1. Once</p> <p>2. Throughout construction, if applicable</p> <p>3. Throughout construction, if applicable</p> <p>4. Throughout construction, if applicable</p> <p>5. Throughout construction, if applicable</p> <p>6. Throughout construction, if applicable</p>	<p>1. CVWD</p> <p>2. Construction Contractor</p> <p>3. CVWD, Construction Contractor</p> <p>4. CVWD, Construction Contractor</p> <p>5. CVWD, Construction Contractor</p> <p>6. CVWD, Construction Contractor</p>	<p>CVWD</p>	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p> <p>6. _____</p>
<p>Mitigation Measure GEO-1: Dewatering</p> <p>Dewatering shall be conducted throughout construction activities in locations that are exposed to existing groundwater to reduce the potential for heaving of soil within excavation areas. To control groundwater seepage to open excavations, sump pits may be utilized. If pumping to sump pits is used as mitigation, sump pits should be filled with ¾-inch clean stone and lined with geotextile filter fabric to prevent excessive particle migration. Pumped water should be discharged away from open</p>	<p>1. Include measure in contract documents</p> <p>2. Confirm design of the dewatering program</p>	<p>1. Contracting</p> <p>2. Pre-Construction</p>	<p>1. Once</p> <p>2. Once, prior to construction</p>	<p>1. CVWD</p> <p>2. CVWD, Construction Contractor</p>	<p>CVWD</p>	<p>1. _____</p> <p>2. _____</p>

Mitigation Measure	Monitoring and Reporting Actions	Implementation Schedule	Monitoring Frequency	Responsible Party	Review and Approval by:	Verification: Status/ Date Completed/ Initials
<p>excavations. Groundwater may also be pumped and hauled to an appropriate discharge location, as approved by CVWD. The Construction Contractor shall be aware that the dewatering and trenching operations will result in significant changes to the effective stresses of the native soil within the construction area that may result in ground movement. The Construction Contractor is solely responsible for designing and implementing the dewatering program and pipeline installation operations to prevent ground movement within and adjacent to the sewer line. CVWD shall review and approve proposed methodology and plans.</p> <p>The proposed project shall be constructed in accordance with existing regulatory requirements and will incorporate the geotechnical engineering recommendations from the 2018 Geotechnical Report.</p>	<p>3. Confirm dewatering program is in compliance with existing regulatory requirements and incorporates the 2018 Geotechnical Report engineering recommendations</p> <p>4. Confirm dewatering program implemented</p>	<p>3. Pre-Construction</p> <p>4. Construction</p>	<p>3. Once, prior to construction</p> <p>4. Continuously throughout construction, if applicable</p>	<p>3. CVWD, Construction Contractor</p> <p>4. Construction Contractor</p>		<p>3. _____</p> <p>4. _____</p>
<p>Mitigation Measure HAZ-1: Hazardous Materials Management and Spill Control Plan</p> <p>Prior to construction, the Construction Contractor is required to submit to CVWD a Hazardous Materials Management Spill Control Plan that includes a project-specific contingency plan for hazardous materials and waste operations, including precautions taken in the proximity of a school zone. The plan shall be applicable to construction activities and shall establish policies and procedures according to applicable codes and regulations, including but not limited to, the California Building and Fire Codes, and federal and California Occupational Safety and Health Administration (OSHA) regulations. Elements of the Plan shall include, but not be limited to the following:</p> <ul style="list-style-type: none"> • A discussion of hazardous materials management, including delineation of hazardous material storage areas, access and egress routes, waterways, emergency assembly areas, and temporary hazardous waste storage areas; • Notification and documentation of procedures; • Spill control and countermeasures, including employee spill prevention/response training and a health and safety plan; • Equipment maintenance; and • Child safety and school operations. 	<p>1. Include measure in contract documents.</p> <p>2. Confirm Construction Contractor has prepared a Hazardous Materials Management and Spill Control Plan.</p> <p>3. Confirm Construction Contractor follows procedures in the Hazardous Materials Management and Spill Control Plan.</p>	<p>1. Contracting</p> <p>2. Pre-Construction</p> <p>3. Construction</p>	<p>1. Once</p> <p>2. Once</p> <p>3. Periodically throughout construction</p>	<p>1. CVWD</p> <p>2. Construction Contractor</p> <p>3. Construction Contractor</p>	<p>CVWD</p>	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p>
<p>Mitigation Measure NOI-1: Noise and Vibration Control During Construction</p> <p>CVWD shall incorporate into the construction contract specifications the following noise and vibration control measures to be implemented by the Construction Contractor:</p> <ul style="list-style-type: none"> • Prior to construction, the Construction Contractor shall provide [CVWD approved] written notification to residents within 500 feet of the proposed facilities undergoing construction, identifying the type, duration, and frequency of construction activities. Notification materials shall be provided in English/Spanish translation and identify a mechanism for residents to contact CVWD's Project Manager related to noise or vibration concerns. • During construction, the Construction Contractor shall use equipment (e.g., jack hammers, pavement breakers, and rock drills) which is hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust would be used. This muffler can lower noise levels from the exhaust by up to 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures will be used such as drilling rather than impact equipment whenever feasible. • During construction, the Construction Contractor shall comply with compaction standards for backfill. Vibration generated during soil compaction may be minimized by using a small compactor. • During sheetpile driving for trench excavation, the Construction Contractor shall use the following measures: pushing the sheetpile in as far as possible with non-vibratory equipment (e.g., excavator) before using the vibrator; using a small, hand-operated vibratory hammer or one with a different operational frequency to further reduce the vibration potential; flooding the soils before tamping with the vibrator; and/or operating vibratory equipment with "throttling" when a vibrator must be used. 	<p>1. Confirm measures are incorporated into the contract specifications.</p> <p>2. Confirm CVWD-approved notices were provided to required residents</p> <p>3. Implement noise and vibration control measures.</p>	<p>1. Contracting</p> <p>2. Pre-Construction</p> <p>3. Construction</p>	<p>1. Once</p> <p>2. Once</p> <p>3. Throughout construction</p>	<p>1. CVWD</p> <p>2. CVWD, Construction Contractor</p> <p>3. Construction Contractor</p>	<p>CVWD</p>	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p>

Mitigation Measure	Monitoring and Reporting Actions	Implementation Schedule	Monitoring Frequency	Responsible Party	Review and Approval by:	Verification: Status/ Date Completed/ Initials
<ul style="list-style-type: none"> All equipment and trucks used by the Construction Contractor for project construction shall use the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) and be maintained in good operating condition to minimize construction noise impacts. All internal combustion engine-drive equipment shall be fitted with intake and exhaust mufflers which are in good condition. During construction, the Construction Contractor shall prohibit unnecessary idling of internal combustion engines. In practice, this would mean turning off equipment if it would not be used for five or more minutes. During construction, the Construction Contractor shall locate stationary noise-generating construction equipment, such as air compressors and generators, as far as possible from homes and businesses. The Construction Contractor shall locate staging areas as far as feasibly possible from sensitive receptors. 						
<p>Mitigation Measure TRA-1: Traffic Control Plan</p> <p>Prior to construction, CVWD shall require its Construction Contractor to implement an approved Traffic Control Plan, to the satisfaction of the CVWD construction inspector and the County. The components of the Traffic Control Plan shall include:</p> <ul style="list-style-type: none"> Identification of construction staging site locations and potential road closures, Alternate routes of traffic detours, including emergency response contact information, Planned routes for construction-related vehicle traffic (haul routes), and Identification of alternative safe routes to maintain pedestrian safety during construction. <p>CVWD's Project Manager shall coordinate with the police, fire, and other emergency services to alert these entities about potential construction delays, project alignment, and construction schedule. CVWD shall minimize the duration of disruptions/closures to roadways and critical access points for emergency services. The Traffic Control Plan shall provide for traffic control measures including flag persons, warning signs, lights, barricades, and cones to provide safe passage of vehicular, bicycle and pedestrian traffic and access by emergency responders. All construction personnel shall be briefed on project-specific circumstances relating to worker and public safety with regards to traffic control. The Traffic Control Plan shall be submitted to CVWD's Project Manager and construction inspector for review and approval prior to construction.</p> <p>CVWD's Construction Inspector shall have the construction schedule and Traffic Control Plan reviewed by the County of Riverside to ensure construction of the proposed project does not conflict with construction activities associated with other construction projects that may be occurring at the same time in the vicinity.</p>	<ol style="list-style-type: none"> 1. Include measure in contract documents 2. Confirm Construction Contractor has prepared a Traffic Control Plan to the satisfaction of the CVWD Project Manager, CVWD Construction Inspector and the County. 3. Confirm CVWD's Project Manager has coordinated with emergency services about construction. 4. Confirm CVWD Construction Inspector has the Traffic Control Plan reviewed by the County of Riverside. 	<ol style="list-style-type: none"> 1. Contracting 2. Pre-Construction 3. Pre-Construction 4. Pre-Construction 	<ol style="list-style-type: none"> 1. Once 2. Once 3. Once 4. Once 	<ol style="list-style-type: none"> 1. CVWD 2. CVWD, Construction Contractor 3. CVWD Project Manager 4. CVWD Construction Inspector 	CVWD	<ol style="list-style-type: none"> 1. _____ 2. _____ 3. _____ 4. _____