

MRWTP Phase Two Expansion Project Mitigation Monitoring and Reporting Plan

Prepared for:

Modesto Irrigation District
1231 Eleventh Street
Modesto, CA 95354
Contact: Greg Dias 209/526-7566

and

City of Modesto
1010 Tenth Street, Suite 4600
Modesto, CA 95353
Contact: Rich Ulm 209/577-5261

Prepared by:

Jones & Stokes
268 Grand Avenue
Oakland, CA 94610-4724
Contact: Michael Murrell Stevenson 510/433-8962

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Acronyms and Abbreviations

CEQA	California Environmental Quality Act
FSEIR	final subsequent environmental impact report
MID	Modesto Irrigation District
City	City of Modesto
MRWTP	Modesto Regional Water Treatment Plant
MMRP	Mitigation Monitoring and Reporting Plan
afa	acre-feet annually
SWRCB	State Water Resources Control Board

Mitigation Monitoring and Reporting Plan

Purpose of and Need for Monitoring

In compliance with the California Environmental Quality Act (CEQA), a final subsequent environmental impact report (FSEIR) was prepared for Modesto Irrigation District (MID) and the City of Modesto's (City's) Modesto Regional Water Treatment Plant (MRWTP) Phase Two Expansion Project (Proposed Project). The FSEIR identified potentially significant impacts in the following resource areas. The FSEIR also identified mitigation measures to reduce these impacts to a less-than-significant level, where feasible.

- Aesthetics and Visual Resources
- Agricultural Resources
- Air Quality
- Water Resources
- Noise
- Population and Housing
- Recreation
- Cultural Resources
- Biological Resources
- Transportation

CEQA requires that a lead agency adopt a mitigation monitoring and reporting plan (MMRP) for the revisions the agency has required to a project and the measures it has proposed to avoid or mitigate significant environmental effects (CEQA Guidelines Section 15097). The purpose of the MMRP is to ensure that the project revisions and mitigation measures identified in the FSEIR are implemented and to identify who is responsible for their implementation.

Table 1 of this MMRP, which follows this introductory section, identifies the mitigation measures for the Proposed Project, the parties responsible for implementing and monitoring the mitigation measures, the timing of each mitigation measure, and a summary of the actions necessary to implement and monitor each measure.

Table 2 of this MMRP, which follows Table 1, lists the environmental commitments described as part of Chapter 2, Project Description of the DEIR. Table 2 follows the same format as Table 1 and identifies the parties responsible for implementing and monitoring the environmental commitments, the timing of each environmental commitment, and a summary of the actions necessary to implement each commitment.

Project Description

The Proposed Project includes two main components:

- Expansion of the MRWTP, which would allow MID to provide an additional 33,600 acre-feet annually (afa) of treated domestic water annually to the City.
- Construction of downstream facilities within the City, including water storage tanks, pump stations, distribution pipelines, and pressure-regulating control valves.

The MRWTP will continue to be owned and operated by MID; the downstream facilities will belong to the City. Water from the MRWTP will continue to be conveyed from the MRWTP near Modesto Reservoir to the City water system through an existing water transmission system constructed as part of the Phase One project.

The water treatment plant expansion will occur on the same parcel as the existing MRWTP site. The MRWTP expansion is substantively similar to the Phase Two expansion described in the 1990 EIR.

Improvements to the City water distribution system will consist of three water storage tanks and related appurtenances, including pump stations, pipelines to connect the water storage tanks to the City's existing distribution infrastructure, up to 30 control valves on turnouts, and three additional main pipelines to move water throughout the City. While most of these project components were identified in the project description in the 1990 EIR, they were not subjected to a site-specific environmental analysis in that document. In this SEIR, nine alternative tank sites and seven alternative main pipeline alignments are considered at an equal level of detail to allow flexibility in ultimate design and construction.

As part of the Proposed Project, MID has filed a petition with the State Water Resources Control Board (SWRCB) for a transfer to the City of 67,200 afa of water. This transfer and the associated facilities described above will supply water in support of current and planned growth within the City of Modesto as envisioned in the City and MID's 2000 *Urban Water Management Plan* (City of Modesto and Modesto Irrigation District 2000),¹ the *City of Modesto Urban Area General Plan* (City of Modesto 1995),² and the Master EIR for the City of Modesto General Plan and Related Amendments (City of Modesto 2003).³

¹ City of Modesto and Modesto Irrigation District. 2000. Prepared by Black and Veatch. Modesto, CA.

² City of Modesto. 1995. Modesto, CA. Adopted August 1995. Amended March 2003.

³ City of Modesto. 2003. Prepared for City of Modesto Community and Economic Development Department by Jones & Stokes.

Mitigation Monitoring Program

This MMRP has been prepared for the Proposed Project in accordance with Public Resources Code 21081.6, which specifies that when a public agency makes findings required by paragraph (1) of subdivision (a) of Section 21081, it “...shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” Public Resources Code 21081.6 further specifies that the MMRP will “...ensure compliance during project implementation.”

This MMRP is intended to ensure the effective implementation of mitigation measures that are within MID and the City’s authority to implement, including monitoring where identified, throughout all phases of development and operation of the Proposed Project.

MID and the City will designate separate individuals for monitoring implementation of their respective portions of the project.

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Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
AGRICULTURAL RESOURCES				
Mitigation Measure AG-4: Compensation for Loss of Farmland				
<p>The California Farmland Conservancy Program is established under Public Resources Code Section 10200-10277 to promote the long-term preservation of agricultural lands in California through the use of agricultural conservation easements. In addition to funding provided for agricultural easement acquisition, Conservancy grant funds are available for project which develop policy or planning oriented to agricultural land protection, and for improvements to land already under an agricultural conservation easement (e.g., erosion control, riparian area improvements, etc.). The program is authorized to accept donations from private entities if the Department of Conservation is the designated beneficiary of the donation and it uses the funds for purposes of the program in a county specified by the donor (Public Resources Code Section 10231.5).</p>	<p>Prior to construction on tank sites N-1, N-2, N-3, W-2, or W-3</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall obtain documentation of contribution to the California Farmland Conservancy or an equivalent program for farmland preservation in Stanislaus County.</p>
<p>The loss of farmland associated with development of tank sites N-1, N-2, N-3, W-2 and W-3 could be partially mitigated through contribution to the Farmland Conservancy Fund, or to an equivalent program for funding farmland preservation in Stanislaus County, as a condition precedent to the issuance of necessary project approvals. The amount of such a contribution would allow the conservation of one acre of farmland in Stanislaus County for each acre of farmland converted by the proposed project, and would reflect the then-current value of an agricultural easement on comparable prime agricultural land of equal size to the acreage of the farmland lost under the proposed project, and a 10% increment for program administration under the Farmland Conservancy Program, or an equivalent program for funding farmland preservation projects in Stanislaus County.</p>				
<p>The valuation of such an easement would be determined by the City in consultation with the California Department of Conservation. Where current information on such valuation is not available, the City would need to obtain an appraisal of the valuation of an agricultural easement on comparable agricultural land in the project vicinity to inform the City's determination as to valuation.</p>				
<p>Contribution to the California Farmland Conservancy, or an equivalent program, to fund farmland preservation projects in Stanislaus County would serve to compensate for the loss of farmland that directly results from the proposed project. However, preservation of Prime Farmland through agricultural easements on other Prime Farmland parcels would not</p>				

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>mitigate the direct loss of Prime Farmland resulting from the project to a less-than-significant level.</p> <p>Restoration and/or recovery of Prime Farmland from existing urban uses to offset the loss of Prime Farmland would mitigate the loss caused by the proposed project. However, such a measure would be unreasonably costly and inefficient and would, therefore, be infeasible.</p>				
<p>WATER RESOURCES</p>				
<p>Mitigation Measure WR-12a: Street Sweeping</p> <p>To minimize the amount of pollutants entering the storm drain system, water storage tank roadways and other paved areas will be cleaned regularly using street sweeping equipment. Additionally, litter and debris that may accumulate on the project site will be regularly collected and properly disposed of at a landfill in accordance with proper waste disposal procedures. These activities shall be the responsibility of City and/or its contractors.</p>	<p>During project construction and operation on all storage tank sites</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services and Water Superintendent</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services and Water Superintendent</p>	<p>1. During construction, the City shall require that all contractors keep worksite clean from rubbish and debris.</p> <p>2. During project operation, the City shall, not less than annually and prior to the first anticipated storm event, clean paved areas on all water tank sites.</p>
<p>Mitigation Measure WR-12b: Best Management Practices to Maximize Storm Water Quality</p> <p>BMPs shall be used on the tank sites to maximize storm water quality during project operations. The BMPs shall include a combination of source control and treatment systems, and shall be selected to be consistent with the City’s Comprehensive Stormwater Management Program.</p> <p>BMPs may include but not be limited to the following:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Grass strips, high infiltration substrates, and grassy swales shall be used where feasible throughout the tank sites to reduce runoff, serve as bio-filters, and provide initial storm water treatment. This type of treatment would apply particularly to paved areas. <input type="checkbox"/> Physical devices shall be placed at outlets of pipes and channels to reduce the velocity or the energy of exiting water. Outlet protection helps to prevent scour and to minimize the potential for downstream erosion by reducing the velocity or energy of concentrated storm water flows. <input type="checkbox"/> Pervious/porous pavement shall be used to reduce runoff when economically feasible. The pavement is a unique cement-based 	<p>During project design, construction, and operation on all storage tank sites</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services and Water Superintendent</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services and Water Superintendent</p>	<p>1. During construction and design, the City shall prepare and implement a Stormwater Management Plan that includes BMPs for maximizing storm water quality.</p> <p>2. During project operation, the City shall regularly inspect and maintain the BMPs to ensure that they function properly.</p>

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>concrete product that has a porous structure which allows rainwater to pass directly through the pavement and into the soil.</p>				
<p>The City and/or its contractors shall select a combination of BMPs that is expected to remove contaminants from storm water discharges. The final selection and design of BMPs shall provide maximum contaminant removal, represent the best available technology that is economically achievable, and shall explicitly identify the expected level of effectiveness at contaminant removal.</p>				
<p>The City and/or its contractors shall inspect following construction to ensure that all identified BMPs have been properly installed. The project shall adopt a regular maintenance and monitoring schedule to ensure that these BMPs function properly during project operations. If necessary, additional BMPs shall be designed and implemented if those originally constructed do not achieve the identified performance standard.</p>				
<p>Mitigation Measure WR-12c: Appropriate Design on Retention Facilities</p>	<p>During project design and construction on all storage tank sites</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall design and construct all infiltration features so that the bottom of the feature is not less than 10 feet above the groundwater table.</p>
<p>All infiltration features shall be constructed to maximize the distance between the base of the infiltration feature and the groundwater table, and in no case shall the bottom of the feature be less than 10 feet above the groundwater table.</p>				
<p>CULTURAL RESOURCES</p>				
<p>Mitigation Measure CR-1: Stop work, contact qualified archaeologist, assess significance of the find, and develop appropriate treatment measures</p>	<p>During construction on all project facilities</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>During construction, MID and the City shall stop work if buried archaeological resources are found. A qualified archeologist shall be contacted to assess the significance of the find and develop appropriate treatment measures.</p>
<p>If buried archaeological resources, such as chipped or ground stone, historic debris, building foundations, or human bone, are inadvertently discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the MID, the City, and other appropriate agencies.</p>				

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Mitigation Measure CR-2: Stop work, notify county coroner, and notify California Native American Heritage Commission if remains are Native American in origin</p>	<p>During construction on all project facilities</p>	<p>MID and City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>MID and City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>During construction, MID and the City shall stop work if human remains of Native American origin are found. The County Coroner and California Native American Heritage Commission shall be contacted.</p>
<p>If human remains of Native American origin are discovered during project construction, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Pub. Res. Code Sec. 5097). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:</p>				
<p>a. the coroner of the county has been informed and has determined that no investigation of the cause of death is required; and</p>				
<p>b. if the remains are of Native American origin,</p>				
<p>1. the descendants of the deceased Native Americans have made a recommendation 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</p>				
<p>2. the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.</p>				
<p>According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100) and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission.</p>				
<p>Mitigation Measure CR-4a: Conduct cultural resources surveys in Archaeological Resources Zones prior to construction</p>	<p>Prior to construction on pipeline alignments on those portions of Yosemite</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Prior to construction within Archeological Resources Zones, the City shall require a qualified archaeologist to conduct cultural resources</p>
<p>According to Policy 2a, this area should be surveyed for cultural resources prior to proposed development (City of Modesto 1995a). Prior to construction, all project alignments within Archaeological Resources Zones</p>				

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>will be examined by a qualified archaeologist to determine if any cultural resources are present. Any cultural resources located as a result of surveys will be evaluated for listing in the CRHR. If the resource(s) is found to be significant and eligible for listing in the CRHR, Mitigation Measure CR-4b will be implemented.</p>	<p>Boulevard, M&ET Railroad, or Oregon Drive within Archaeological Resource Zones</p>			<p>surveys.</p>
<p>Mitigation Measure CR-4b: Complete a Cultural Resources Treatment Plan</p>				
<p>If significant resources are found under Mitigation Measure CR-4a, the City will review the pipeline alignment and re-align the portion of the pipe affected or a treatment plan will be prepared prior to onset of construction that will provide detailed research design and methodology for test excavations and archival research to identify and evaluate the resources. The treatment plan will also provide provisions for a complete data recovery excavation. The treatment plan will provide for at least the following activities:</p>	<p>Prior to construction on pipeline alignments on those portions of Yosemite Boulevard, M&ET Railroad, or Oregon Drive within Archaeological Resource Zones</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>If archeological resources are found during the cultural resources surveys, the City shall prepare a Cultural Resources Treatment Plan to address data recovery excavations.</p>
<p>a. <i>Conduct test excavations and archival research to determine resource significance.</i> When avoidance is infeasible, the treatment plan will outline how evaluations of potentially significant archaeological resources will be conducted, including archival research and test excavation and evaluation methods necessary to determine eligibility for listing in the CRHR.</p>				
<p>b. <i>Data recovery excavations of significant archaeological resources that cannot be avoided.</i> If, following identification and evaluation efforts, archaeological sites and historic resources are determined to meet the criteria for inclusion in the CRHR, and avoidance or redesign of the project is not feasible, then research and fieldwork to recover and analyze the data contained in that site will be conducted. This work may involve additional archival and historical research; excavation; analysis of the artifacts, features, and other data discovered; presentation of the results in a technical report; and curation of the recovered artifacts and accompanying data. Native American consultation will continue throughout data recovery efforts.</p>				
<p>c. <i>Treatment of human remains.</i> The treatment plan will outline the regulatory requirements to be followed when human remains are found</p>				

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
(also described above in regulatory framework) and will indicate where burials might be encountered.				
BIOLOGICAL RESOURCES				
<p>Mitigation Measure Bio-2a: Conduct Preconstruction Surveys for Valley Elderberry Longhorn Beetle and Avoid or Compensate for Loss of Habitat</p> <p>For any construction activity within 100 feet of the six elderberry shrubs at Tank Sites S-2 and S-3 and near Dry Creek along the Southern main pipeline alignments, the City shall hire a qualified biologist to conduct a preconstruction survey of the alignment corridor and document the extent of habitat for the VELB. The information gathered in this survey would include the number of elderberry stems greater than 1 inch in diameter and the number of emergence holes in these stems for each elderberry shrub encountered. If no VELB habitat is found within 100 feet of a project alignment, then no further mitigation is required.</p> <p>The City then would implement the USFWS guidelines for avoiding impacts on the VELB by avoiding construction activities within 100 ft of any elderberry shrub where feasible (Mitigation Measure BIO-2b). Where avoidance is not feasible, the City would obtain authorization from the USFWS pursuant to the ESA, and prepare and implement a mitigation plan consistent with USFWS guidelines to compensate for impacts on the VELB and loss of habitat.</p> <p>USFWS guidelines call for avoidance of VELB habitat wherever possible. When avoidance is not possible, the guidelines direct that all elderberry plants be transplanted to an appropriate site when feasible, and that all stems 1 inch or greater in diameter be replaced by planting replacement plants at appropriate locations in the project vicinity determined in consultation with the resource agencies (Mitigation Measure Bio-2c). The replacement ratio depends on the percentage of affected elderberry shrubs that have beetle emergence holes. The guidelines require the project proponent to monitor the transplanted shrubs and replacement plants for 10 years from the date of transplanting to monitor the success of the mitigation efforts, and replacement would be necessary for plants that do not succeed.</p>	<p>Prior to construction on tank sites S-2 or S-3, and near Dry Creek along the Southern pipeline alignments</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Prior to construction, the City shall contract with a qualified biologist to survey and document the location of elderberry shrubs. The City shall implement the measures listed in Mitigation Measure BIO-2b or their functional equivalent, as recommended by the qualified biologist.</p>

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Mitigation Measures BIO-2b: Avoid and Protect VELB Habitat</p> <p>Complete avoidance is assumed when a 100-foot buffer is established and maintained around elderberry plants containing stems measuring 1 inch or greater in diameter at ground level. Firebreaks may not be included in the buffer zone. In buffer areas, construction-related disturbance should be minimized and any damaged area should be promptly restored following construction. The City shall consult the USFWS before any disturbances within the buffer area are considered. The following measures include establishment and maintenance of a buffer zone:</p> <ul style="list-style-type: none"> <input type="checkbox"/> The City shall hire a qualified biologist to identify and mark all elderberry shrubs with stems 1 inch or more in diameter within 100 feet of the impact area. A 100-foot buffer will be established around all elderberry shrubs, and no construction activities will be permitted within the buffer zone without consultation with USFWS. In areas where encroachment on the 100-foot buffer has been approved by USFWS, no ground-disturbing activities will be permitted within 20 feet of the dripline of each elderberry shrub unless the activity is necessary to complete the project. If no VELB habitat is found within 100 feet of a project alignment, then no further mitigation is required. <input type="checkbox"/> Orange fencing will be placed around all shrubs to avoid inadvertent effects. <input type="checkbox"/> Signs will be erected every 50 feet along the edge of the avoidance area with the following information: “This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.” The signs will be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction. <input type="checkbox"/> The City’s contractor will present an environmental education program to all construction personnel to brief them on the need to avoid damaging the elderberry shrubs and the possible penalty for not complying with these requirements. <input type="checkbox"/> Any damage done to the buffer area (area within 100 feet of elderberry plants) during construction must be repaired and the area restored. Erosion control must be provided and the area must be revegetated with appropriate native plants. 	<p>During construction on tank sites S-2 or S-3, and near Dry Creek along the Southern pipeline alignments</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>If elderberry shrubs are found within 100 feet of a construction zone, then during construction, the City shall establish a 100-foot buffer around elderberry plants containing stems measuring 1 inch or greater in diameter, where feasible, and implement the measures listed in Mitigation Measure BIO-2b to maintain the buffer zone or their functional equivalent.</p>

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> <input type="checkbox"/> Buffer areas must be protected after construction from adverse effects of the project through measures including fencing, signs, weeding, and removing trash. <input type="checkbox"/> The use of insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant will be prohibited. <input type="checkbox"/> Grasses or ground cover will be mowed from July through April to reduce fire hazard. No mowing should occur within 5 feet of elderberry plant stems. <input type="checkbox"/> The City of Modesto must provide a written description of how the buffer areas are to be restored, protected, and maintained after construction is completed. <input type="checkbox"/> To prevent inadvertent trimming of elderberry shrubs (habitat for VELB) during future maintenance activities, the City will also prepare a Maintenance Plan that provides the location of all elderberry shrubs growing near the water storage tank sites and along the pipeline corridors. The Maintenance Plan will also include a photo and description of an elderberry shrub and information about VELB and its legal status and requirements under ESA. 	<p>During construction on tank sites S-2 or S-3, and near Dry Creek along the Southern pipeline alignments</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>If the proposed project cannot avoid elderberry shrubs by 100 feet, the City shall implement the measures listed in Mitigation Measure BIO-2c or their functional equivalents.</p>
<p>Mitigation Measures BIO-2c. Transplant Elderberry Shrubs</p> <p>If the proposed project cannot avoid elderberry shrubs by 100 feet (or 20 feet with USFWS consultation), the following mitigation measures will be implemented:</p> <ul style="list-style-type: none"> <input type="checkbox"/> All elderberry shrubs with one or more stems measuring 1 inch or more in diameter that will be directly affected by construction activities (i.e., that will be destroyed) will be transplanted to a conservation area. <input type="checkbox"/> Each affected shrub will be replaced in a conservation area with elderberry seedlings or cuttings at a ratio between 1:1 and 8:1, depending on the diameter of the stem at ground level, whether the shrub is located in riparian habitat, and whether the shrub has evidence of exit holes. <input type="checkbox"/> A mix of native tree/plant species associated with the elderberry shrubs at the project site will be planted in the conservation area at ratios of 1:1 for elderberry shrubs without exit holes or 2:1 for elderberry shrubs with exit holes (native tree/plant species to each elderberry seedling or cutting). A mixture of native grasses and forbs should also be planted 	<p>During construction on tank sites S-2 or S-3, and near Dry Creek along the Southern pipeline alignments</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>If the proposed project cannot avoid elderberry shrubs by 100 feet, the City shall implement the measures listed in Mitigation Measure BIO-2c or their functional equivalents.</p>

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>in the conservation area.</p> <ul style="list-style-type: none"> <li>□ Each transplanted elderberry shrub should have at least 1,800 square feet of area. As many as five additional elderberry seedlings or cuttings and up to five associated natives may also be planted within the 1,800-square-foot transplant area. 				
<p>Mitigation Measure BIO-3: Implement the DFG Guidelines for Swainson’s Hawk Foraging Habitat Mitigation</p> <p>The City will retain a qualified wildlife biologist to conduct preconstruction surveys for Swainson’s Hawk foraging habitat on undeveloped tank sites and/or pipelines outside of existing roadways. The preconstruction surveys will be conducted to determine whether active Swainson’s Hawk nests are present within 10 miles of the project construction sites and will include, at a minimum, a study of the eight previously recorded nest sites. If the project construction site is not suitable Swainson’s Hawk foraging habitat, then no further mitigation is required. If agricultural habitat is removed within 10 miles of a known, active Swainson’s Hawk nest, the City will compensate to the extent specified by DFG to replace lost foraging habitat. Habitat compensation ratios will depend on the distance of the affected habitat from known, active nests, as specified in DFG mitigation guidelines for Swainson’s hawks. The publication Staff Report Regarding Mitigation for Impacts to Swainson’s Hawk (<i>Buteo swainsoni</i>) in the Central Valley of California, published by DFG (1994), recommends mitigation for the removal of suitable Swainson’s hawk foraging habitat at a ratio determined by the distance to the nearest active nest. The City will implement the measures identified or their functional equivalents, based on the recommendations of the qualified wildlife biologist.</p>	<p>Prior to construction on all undeveloped storage tank sites and pipelines outside of existing roadways</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Prior to construction, the City shall contract with a qualified wildlife biologist to survey undeveloped tank sites and/or pipelines outside of existing roadways for Swainson’s Hawk foraging habitat. If foraging habitat is found, the City shall implement DFG mitigation guidelines or their functional equivalent.</p>
<p>Mitigation Measure BIO-4: Retain a Qualified Biologist to Conduct a Preconstruction Survey for Nesting Swainson’s Hawk</p> <p>If construction is scheduled to occur during the Swainson’s Hawk breeding season (generally March 1–August 15), the City will retain a qualified wildlife biologist to conduct preconstruction surveys for nesting Swainson’s Hawks on undeveloped tank sites and/or pipelines outside of existing roadways. The preconstruction surveys will be conducted to determine whether there is suitable nesting habitat within a 0.5-mile radius of the construction site. If no Swainson’s Hawks are found nesting within the</p>	<p>Prior to construction on all undeveloped storage tank sites and all pipeline alignments outside of existing</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Prior to construction, the City shall contract with a qualified wildlife biologist to survey undeveloped tank sites and/or pipelines outside of existing roadways for Swainson’s Hawk nesting habitat. If nesting habitat is found, the City shall implement DFG mitigation guidelines or their</p>

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>areas surveyed, then no further mitigation is required. If Swainson’s Hawks are found nesting within a 0.5-mile radius of the construction site, DFG will be consulted to determine whether a no-disturbance buffer would be required until after the young have fledged (as determined by a qualified wildlife biologist). Impact avoidance measures will be conducted pursuant to DFG mitigation guidelines. The City will implement the measures identified or their functional equivalents, based on the recommendations of the qualified wildlife biologist.</p>	<p>roadways</p>			<p>functional equivalent.</p>
<p>Mitigation Measure BIO-5: Conduct Preconstruction Surveys for Active Burrowing Owl Burrows and Implement the California Department of Fish and Game Guidelines for Burrowing Owl Mitigation, if Necessary</p> <p>DFG (1994) recommends that preconstruction surveys be conducted to locate active Burrowing Owl burrows in the project area and in a 250-foot-wide buffer zone around the project area. The City will retain a qualified biologist to conduct preconstruction surveys for active burrows on undeveloped tank sites and/or pipelines outside of existing roadways. The preconstruction surveys will include a nesting season survey and a wintering season survey during the year immediately preceding construction. If no Burrowing Owls are detected, then no further mitigation is required. If active Burrowing Owls are detected in the survey area, the City will implement the following measures or their functional equivalents, based on the recommendations of the qualified wildlife biologist.</p>	<p>Prior to construction on all undeveloped storage tank sites and all pipeline alignments outside of existing roadways</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Prior to construction, the City shall contract with a qualified wildlife biologist to survey undeveloped tank sites and/or pipelines outside of existing roadways for active Burrowing Owl burrows. If active burrows are found, the City shall implement DFG mitigation guidelines or their functional equivalent.</p>
<ul style="list-style-type: none"> <input type="checkbox"/> Occupied burrows will not be disturbed during the nesting season (February 1–August 31). <input type="checkbox"/> When destruction of occupied burrows is unavoidable during the non-nesting season (September 1–January 31), unsuitable burrows will be enhanced (enlarged or cleared of debris) or new burrows created (installing artificial burrows) at a ratio of 2:1 on protected lands approved by DFG. Newly created burrows will follow guidelines established by DFG. <input type="checkbox"/> If owls must be moved away from the project area, passive relocation techniques (e.g., installing one-way doors at burrow entrances) will be used instead of trapping. At least 1 week will be necessary to accomplish passive relocation and to allow owls to acclimate to alternate burrows. 				

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>If active Burrowing Owl burrows are found and the owls must be relocated, the City will offset the loss of foraging and burrow habitat in the project area by acquiring and permanently protecting a minimum of 6.5 acres of foraging habitat per occupied burrow identified in the project area. The protected lands should be located adjacent to the occupied Burrowing Owl habitat in the project area or at another occupied site near the project area. The location of the protected lands will be determined in coordination with DFG. The City will also prepare a monitoring plan and provide long-term management and monitoring of the protected lands. The monitoring plan will specify success criteria, identify remedial measures, and require an annual report to be submitted DFG.</p>	<p>If avoidance is the preferred method of dealing with potential impacts, no disturbance should occur within 160 feet of occupied burrows during the nonbreeding season (September 1–January 31) or within 250 feet during the breeding season. Avoidance also requires that at least 6.5 acres of foraging habitat (calculated based on an approximately 300-foot foraging radius of an occupied burrow), contiguous with occupied burrow sites, be permanently preserved for each pair of breeding Burrowing Owls or single unpaired resident bird. The configuration of the protected site will be submitted to DFG for approval.</p>			
<p>TRANSPORTATION</p>				
<p>Mitigation Measure TR-4: Maintain Traffic Lanes and Limit Hours of Construction</p>	<p>The City of Modesto’s selected contractor will not conduct construction on arterial streets during the peak traffic period, and where feasible, will maintain the existing number of traffic lanes through pipeline construction. For pipeline segments with construction V/C ratios over 1.5 and construction duration that would exceed two weeks, if the contractor is unable to maintain the existing number of traffic lanes through pipeline construction zones, construction activities will be limited to evening hours.¹ This practice applies to the following routes:</p>	<p>During construction on all storage tank sites and all pipeline alignments on arterial streets</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall prohibit all contractors from conducting construction on arterial streets during peak traffic periods.</p>

¹ Construction V/C ratios were calculated for the peak traffic period. For segments with construction V/C ratios between 1.0 and 1.5, the off-peak (midday) construction V/C was not calculated but is anticipated to be close to or below 1.0. For this reason, midday construction for these segments is not anticipated to result in LOS failure and would be allowed.

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> <input type="checkbox"/> Carpenter Avenue, south of Maze Boulevard <input type="checkbox"/> Yosemite Boulevard, near Codoni Avenue <input type="checkbox"/> Briggsmore Avenue 				
CUMULATIVE				
Mitigation Measure CUME1: Implement Enhanced Measures to Control PM10 Generation, as Recommended by SJVUAPCD, Regulation VIII (amended 2004)				
The City and MID will require construction contractors to implement the SJVUAPCD's optional and enhanced PM10 control measures, listed below, or their functional equivalents.				
<input type="checkbox"/> Limit traffic speeds on unpaved roads to 15 mph.	Prior to and during construction on all project facilities	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services	During construction, MID and the City shall require all contractors to comply with SJVUAPCD Regulation VIII or their functional equivalents.
<input type="checkbox"/> On sites with a slope greater than 1%, install sandbags or other erosion control measures to prevent silt runoff to public roadways.				
<input type="checkbox"/> Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.				
<input type="checkbox"/> Install wind and/or water breaks at windward side(s) of construction areas.				
<input type="checkbox"/> Suspend excavation and grading activity when Regulation VIII's 20% opacity limitation is exceeded.				
<input type="checkbox"/> Ensure that the accumulation of mud or dirt is expeditiously removed from adjacent public streets throughout the duration of construction activities, where such accumulation is visible (the use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions).				
<input type="checkbox"/> Limit the area subject to excavation, grading, or other construction activity at any one time.				
These measures will be incorporated into project construction documents (plans and specifications) to ensure that they are contractually enforceable. For each phase of the project, the entity responsible for retaining construction contractors will be responsible for ensuring that these measures are correctly and effectively implemented; MID will be				

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
responsible during construction of MID facilities, and the City will be responsible during the construction of City facilities.				
<p>Mitigation Measure CUME2: Require Use of Measures to Reduce Emissions</p> <p>The City and MID will require construction contractors to implement the following measures to reduce emissions of combustion byproducts, or their functional equivalents.</p> <ul style="list-style-type: none"> ❑ Minimize idling time to 10-minute maximum. ❑ Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use to the minimum practical. ❑ Take steps to curtail construction activity during periods of high ambient pollution concentrations, such as reducing construction activity during the peak hours of vehicular traffic on adjacent roadways. 	<p>During construction on all project facilities</p>	<p>MID and City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>MID and City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>During construction, MID and the City shall require all contractors to implement emissions-reducing measures.</p>
<p>These measures will be incorporated into project construction documents (plans and specifications) to ensure that they are contractually enforceable. For each phase of the project, the entity responsible for retaining construction contractors will be responsible for ensuring that these measures are correctly and effectively implemented; MID will be responsible during construction of MID facilities, and the City will be responsible during the construction of City facilities.</p>				

Environmental Commitment	Timing	Implementing Party	Monitoring Party	Monitoring Actions
GENERAL CONSTRUCTION MEASURES				
GC-1 – Temporary road striping, signing, traffic lighting, and traffic control will be implemented for residential and business areas affected by construction.	During construction on all storage tank sites and all pipeline alignments	City of Modesto – Deputy Director, Capital Improvement Services	City of Modesto – Deputy Director, Capital Improvement Services	During construction, the City shall require all contractors to implement traffic control measures.
GC-2 – Continuous access and parking provisions will be provided for residences and business areas.	During construction on all storage tank sites and all pipeline alignments	City of Modesto – Deputy Director, Capital Improvement Services	City of Modesto – Deputy Director, Capital Improvement Services	During construction, the City shall require all contractors to provide access and parking for residences and businesses.
GC-3 – Existing landscaping that is removed or damaged during construction will be replaced. Areas without landscaping that are disturbed by construction will be allowed to return to a natural vegetated state. Standard erosion control practices will be implemented in compliance with current state regulations to ensure restoration is successful and to minimize soil loss.	After construction on all project facilities	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services	Following construction, MID and the City shall require contractors to revegetate disturbed landscaping and implement erosion control practices.
GC-4 – Planned road improvements (e.g., raised medians, turn lanes, street alignments) will be coordinated to minimize disruptions associated with this project and other projects.	Prior to and during construction on all pipeline alignments	City of Modesto – Deputy Director, Capital Improvement Services	City of Modesto – Deputy Director, Capital Improvement Services	The City shall coordinate pipeline construction with other planned roadway improvements.
GC-5 – Work area in residential areas will be restricted to the maximum length of open trench for a given segment at any given time (i.e., 200 to 500 feet).	During construction on all pipeline alignments	City of Modesto – Deputy Director, Capital Improvement Services	City of Modesto – Deputy Director, Capital Improvement Services	During construction in residential areas, the City shall restrict the maximum length of open trench.
GC-6 – Dust suppression and cleanup provisions (e.g., street sweeping, sidewalk cleaning, and debris removal) will be implemented, as needed by the City of Modesto and MID.	During construction on all project facilities	MID <i>and</i> City of Modesto –	MID <i>and</i> City of Modesto –	During construction, MID and the City shall require all contractors to implement dust suppression and cleanup

Environmental Commitment	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>GC-7 – Roadway surfaces damaged by construction activities, including hauling operations, will be restored to preexisting conditions.</p>	<p>After construction on all project facilities</p>	<p>Deputy Director, Capital Improvement Services</p>	<p>Deputy Director, Capital Improvement Services</p>	<p>provisions.</p>
<p>GC-8 – A point of contact will be established to handle ongoing public outreach and address construction concerns. Affected residents will be notified prior to onset of construction in their area regarding contact information for this point of contact.</p>	<p>During construction on all pipeline alignments</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Following construction, MID and the City shall restore roadway surfaces to preexisting conditions.</p>
<p>GC-9 – Fact sheets and public updates to inform the community about progress of the project will be provided.</p>	<p>During construction on all project facilities</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>MID and the City shall distribute fact sheets and public updates about project construction.</p>
<p>GC-10 – Community facilities affected by construction will be restored to preexisting conditions.</p>	<p>After construction on all project facilities</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Following construction, MID and the City shall restore community facilities to preexisting conditions.</p>

Environmental Commitment	Timing	Implementing Party	Monitoring Party	Monitoring Actions
PIPELINE INSTALLATION IN INTERSECTIONS				
PI-1 – For construction of pipelines in certain intersections, jack-and-bore construction techniques will be implemented when warranted. Jack and bore involves tunneling beneath the intersection such that the intersection itself is not adversely affected, as described previously.	During construction of pipelines at arterial roadway intersections	City of Modesto – Deputy Director, Capital Improvement Services	City of Modesto – Deputy Director, Capital Improvement Services	During construction of pipelines, the City shall implement jack-and-bore construction techniques at arterial roadway intersections.
AIR QUALITY				
AQ-1 – The project will comply with San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) Regulation VIII to control the generation of construction-related fugitive dust (PM10) emissions during construction activities. SJVUAPCD Regulation VIII is summarized in Table 2-1, <i>San Joaquin Valley Unified Air Pollution Control District Regulation VIII Control Measures for Construction Emissions of PM-10</i> [of the Draft EIR].	During construction on all project facilities	MID and City of Modesto – Deputy Director, Capital Improvement Services	MID and City of Modesto – Deputy Director, Capital Improvement Services	During construction, MID and the City shall require all contractors to comply with SJVUAPCD Regulation VIII.
AQ-2 – MID and/or the City, as applicable, will require all construction contractors employed during any phase of project construction to ensure that diesel and gasoline-powered equipment is correctly tuned and maintained according to manufacturer specifications and California air quality regulations. This requirement will be incorporated into project construction documents (plans and specifications) to ensure that it is contractually enforceable. The project applicant will similarly ensure that all vehicles and other equipment used for operation and maintenance activities once the project is on line are tuned and maintained per manufacturer specifications and current California regulations.	During construction on all project facilities	MID and City of Modesto – Deputy Director, Capital Improvement Services	MID and City of Modesto – Deputy Director, Capital Improvement Services	During construction, MID and the City shall require all contractors to comply with SJVUAPCD Regulation VIII.
WATER QUALITY PROTECTION MEASURES				
WQ-1 – Because the proposed project is anticipated to result in the disturbance of more than 1 acre, coverage under the Central Valley Regional Water Quality Control Board’s (RWQCB’s) NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit) will be obtained. Obtaining coverage under the General Construction Permit requires that MID and the City obtain permit coverage and prepare a stormwater pollution prevention	Prior to and during construction on all project facilities	MID and City of Modesto – Deputy Director, Capital Improvement	MID and City of Modesto – Deputy Director, Capital Improvement	MID and the City shall each prepare and implement a SWPPP for their respective portions of the project construction to control erosion, sedimentation, and other pollutants during project

Environmental Commitment	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>plan (SWPPP) for their respective portions of the project.</p> <p>The SWPPP is required to describe the best management practices (BMPs) that will be implemented to control accelerated erosion, sedimentation, and other pollutants during and after project construction. The specific BMPs that will be incorporated into the erosion and sediment control plan and SWPPP will be determined during the final design phase of the Phase Two project, and will be implemented by the construction contractor in accordance with the RWQCB Field Manual. As a performance standard, these measures selected will represent the Best Available Technology that is economically achievable, and will be selected to achieve maximum sediment removal and water quality protection.</p> <p>At a minimum, the SWPPP shall provide for the following measures during construction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> regular and thorough street sweeping program; <input type="checkbox"/> detailed Hazardous Materials Spill Prevention Control and Countermeasure Plan (see environmental commitment WQ-2); and <input type="checkbox"/> pavement inspection and repair program. 		Services	Services	construction.
<p>WQ-2 – As part of its NPDES General Construction Permit, a Hazardous Material Spill Prevention Control and Countermeasure Plan will be prepared for the use of construction equipment for the proposed project, and will minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction of the project. This plan will describe storage procedures and construction site housekeeping practices and identify the parties responsible for monitoring and spill response. The measures and monitoring procedures required under the General Construction Permit will minimize the potential for release of hazardous materials to the environment. The City and/or MID, as applicable, will review and approve the Hazardous Materials Spill Prevention Control and Countermeasure Plan before allowing construction to begin. The project proponent will routinely inspect the action area to verify that the BMPs specified in the plan are properly implemented and maintained, and immediately notify the contractor if there is a noncompliance issue and shall require compliance.</p>	Prior to and during construction on all project facilities	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services	MID and the City shall each prepare and implement a Hazardous Materials Spill Prevention Control and Countermeasure Plan for their respective portions of the construction project to minimize spills of hazardous, toxic, or petroleum substances during project construction.

Environmental Commitment	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>WQ-3 – The federal reportable spill quantity for petroleum products, as defined in the U.S. Environmental Protection Agency’s (EPA’s) Code of Federal Regulations (CFR) (40 CFR 110) is any oil spill that (1) violates applicable water quality standards, (2) causes a film or sheen upon or discoloration of the water surface or adjoining shoreline, or (3) causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.</p> <p>If a spill is reportable, the contractor’s superintendent would immediately notify the City of Modesto and/or MID, Stanislaus County Department of Environmental Resources, and the California Department of Toxic Substances Control (DTSC), which have spill response and clean-up ordinances to govern emergency spill response. A written description of reportable releases must be submitted to the RWQCB. This submittal must include a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form.</p>	<p>During construction on all project facilities</p>	<p>MID and City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>MID and City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>During construction, MID and the City shall require all contractors to notify the Stanislaus County Department of Environmental Resources and DTSC of reportable releases. If a reportable release has occurred, a detailed analysis shall be performed by a Registered Environmental Assessor and MID and the City shall select and implement measures to control contamination.</p>
<p>If a reportable spill has occurred and results determine that project activities have adversely affected groundwater quality in excess of water quality standards, a detailed analysis will be performed by a Registered Environmental Assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards, and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the City, MID, and/or their contractors will select and implement measures to control contamination, with a performance standard that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the City and MID.</p>				
<p>NOISE-REDUCING CONSTRUCTION PRACTICES</p>				
<p>NR-1 – The construction contractor will employ noise-reducing construction practices such that noise from construction does not exceed applicable City or County noise ordinance limits. Measures that may be used to limit noise may include but are not limited to:</p>	<p>During construction on all project facilities</p>	<p>MID and City of Modesto – Deputy Director, Capital Improvement</p>	<p>MID and City of Modesto – Deputy Director, Capital Improvement</p>	<p>During construction, MID and the City shall require all contractors to employ noise-reducing construction practices.</p>
<p><input type="checkbox"/> Locating equipment as far as practical from noise-sensitive receptors, including residences and occupied hospital facilities;</p>				

Environmental Commitment	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> <input type="checkbox"/> using sound control devices (e.g., properly operating mufflers) on construction equipment and vehicles; <input type="checkbox"/> using noise-reducing enclosures around noise-generating equipment (i.e., engines), and shrouds or shields around impact tools; and <input type="checkbox"/> limiting the hours of construction activities to the hours indicated in subsection (b) of section 4-9.103 from the City’s Noise Ordinance (between 9:00 p.m. and 7:00 a.m., daily and 9:00 p.m. and 9:00 a.m. Saturdays, Sundays, and Federal and State holidays) when work is within 150 feet of residences. 		Services	Services	
<p>NR-2 – The construction contractor will prepare a detailed Noise Control Plan based on the construction methods proposed. This plan will identify specific measurements that will be taken to ensure compliance with the noise limits specified above. The noise control plan will be reviewed and approved by the City/MID before any noise-generating construction activity begins.</p>	Prior to construction on all project facilities	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services	Prior to construction, MID and the City shall require all contractors to prepare a detailed Noise Control Plan.
<p>NR-3 – Prior to construction, the City will notify residences along the construction areas of the construction schedule in writing. The City will designate a noise disturbance coordinator, who will be responsible for responding to complaints regarding construction noise. The coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents in the identified range. These duties may be delegated to the City’s contractor in the project specifications.</p>	Prior to construction on all storage tank sites and pipeline alignments	City of Modesto – Deputy Director, Capital Improvement Services	City of Modesto – Deputy Director, Capital Improvement Services	Prior to construction, the City shall require all contractors to notify residences of the construction schedule and the designated point of contact for construction concerns.
PALEONTOLOGICAL RESOURCES				
<p>CR-1 – If paleontological resources are discovered during ground-disturbing activities, the construction contractor shall stop work in that area and within 100 feet of the find until a qualified paleontologist can assess the significance of the find and develop appropriate treatment measures. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the</p>	During construction on all project facilities	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement	MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement	During construction, MID and the City shall stop work if paleontological resources are found. A qualified paleontologist shall be contacted to assess the significance of the find and

Environmental Commitment	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>finds. The City or MID, as applicable, shall be responsible for ensuring that the recommendations of the paleontologist regarding treatment and reporting are implemented.</p>		Services	Services	develop appropriate treatment measures.
<p>HAZARDOUS MATERIALS PHASE 1 SITE ASSESSMENT</p>				
<p>HM-1 – Prior to constructing project facilities, the City will engage in further investigation of available environmental records of hazardous materials sites to determine whether the project sites pose any risks. For storage tank sites and pipeline alignments, a Phase I site assessment will be conducted in accordance with ASTM standards, and any recommendations to reduce risks associated with hazardous materials contamination given in that assessment will be implemented to the satisfaction of the appropriate hazardous materials agencies before construction begins. If Phase I assessments indicate the potential for contamination within or adjacent to the tank site or pipeline alignment, Phase II studies will be completed before construction begins. Phase II studies will include soil and groundwater sampling and analysis for anticipated contaminating substances. If soil or groundwater contaminated by potentially hazardous materials is exposed or encountered during construction, the appropriate hazardous materials agencies will be notified. A work plan to characterize and possibly remove contaminants may be required by the appropriate hazardous materials agencies.</p>	<p>Prior to construction on all storage tank sites and pipeline alignments</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Prior to construction of storage tanks and pipeline alignments, the City shall conduct Phase I site assessments for hazardous materials. If needed, Phase II studies and work plans to characterize and remove contaminants shall also be prepared.</p>
<p>HM-2 – MID and the City currently have comprehensive emergency management plans for emergency response to a release or threatened release of any hazardous material used, transported, stored, or handled at the MRWTP or City wells. This plan will be updated to reflect the Phase Two project. In the event of an accidental release, emergency response plans would provide emergency responders with a protocol for containing and disposing of the unintentional release.</p>	<p>Prior to construction on all project facilities</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Prior to construction, MID and the City shall update their comprehensive emergency management plans to reflect the Phase Two project.</p>
<p>CONSTRUCTION SCREENING</p>				
<p>CS-1 – Construction staging areas for equipment, personal vehicle parking, and material storage shall be sited as far as possible from major roadways, and locations shall be approved by the City or MID as appropriate. The locations of the staging areas shall be reflected in the contract documents.</p>	<p>During construction on all project facilities</p>	<p>MID <i>and</i> City of Modesto – Deputy Director,</p>	<p>MID <i>and</i> City of Modesto – Deputy Director,</p>	<p>MID and the City shall require all contractors to site construction staging areas as far as possible from major</p>

Environmental Commitment	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>CS-2 – Opportunities for screening staging areas with existing topography and vegetation will be maximized. If chain-link security fencing is placed around such areas, slats or screening of an earth tone or other neutral color should be used unless obstruction of views into the area poses a security concern.</p>	<p>During construction on all project facilities</p>	<p>Capital Improvement Services MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Capital Improvement Services MID <i>and</i> City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>roadways. MID and the City shall require all contractors to screen construction staging areas.</p>
<p>CS-3 – Construction work hours will be limited to reduce construction impacts on residences near the selected downstream facilities locations.</p>	<p>During construction on all project facilities</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall require all contractors to limit construction work hours in residential areas.</p>
<p>SITE DESIGN</p>				
<p>SD-1 – To reduce visibility from roads and sensitive land uses, the north and west storage tanks and aboveground pressure valve buildings will be placed well away from the site boundaries. These storage tanks and pressure valves will be designed to conform to the existing character of the surrounding land use through use of matching paint colors, fencing materials, and landscaping. The painting palette for each site will be selected to match the colors and tones of the surrounding neighborhood. Building materials used in the tanks and valves will be selected to match the character of surrounding land uses.</p>	<p>During site design for tank sites N-1, N-2, N-3, W-1, W-2, or W-3</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall reduce the visibility of storage tanks and pressure valve buildings through site design, landscaping, materials, and painting.</p>
<p>SD-2 – To reduce visibility of the structure’s height and bulk, partial burial of the north and west water storage tanks and/or control valves will be implemented where feasible. If located in aboveground structures, block wall screening and landscaping will be used.</p>	<p>During site design for tank sites N-1, N-2, N-3, W-1, W-2, or W-3</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall reduce the visibility of storage tanks through partial burial, where feasible, as well as screening and landscaping.</p>
<p>SD-3 – To minimize any effects from introduced light sources and reflected light, all structures and hardware surfaces (with the exception of the southeastern tank) will be finished with paint or other treatments to minimize daytime glare and reflectivity, including components such as grates, railings, piping, roofs, and other metal fixtures. All surfaces</p>	<p>During site design for all tank sites</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall reduce reflected light from storage tanks through non-glare surfacing and painting.</p>

Environmental Commitment	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>affected by the proposed project will be covered with non-glare surfacing.</p>		Services	Services	
<p>SD-4 – To reduce the effects of night illumination, all lights (with the exception of those at the southeastern tank) will be shielded and directed away from sensitive uses and the sky. Lighting will be internally directed with low-level intensity, sufficient only to detect movement within facility grounds. The quantity of lights used shall be the minimum required for property security to minimize incidental light. The lights shall be focused only where needed (such as building entrances) and should not provide a general “wash” of light on building surfaces. Lights shall be cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light onto adjacent properties and open space. All lights shall provide good color rendering and natural light qualities. Low-pressure sodium and high-pressure sodium fixtures that are not color-corrected shall not be used. The lighting design shall also meet minimum safety and security standards.</p>	<p>During site design for all tank sites</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall reduce night illumination from storage tanks through light shielding, low-angle positioning, and color treatment.</p>
<p>SD-5 – To ensure compatibility with surrounding land uses, gates and fencing consistent with the neighborhood will be installed around the north and west tanks. Gates and fencing that are visible from public roadways should be similar to those existing in nearby rural residential neighborhoods. Appropriate fencing materials would include block wall construction with adequate landscaping around the perimeter of facility walls. Appropriate gate materials include wood or black wrought iron (or aluminum fashioned to mimic iron).</p>	<p>During site design for tank sites N-1, N-2, N-3, W-1, W-2, or W-3</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall reduce the visibility of the north and west tanks through gate and fencing materials compatible with surrounding land uses.</p>
<p>SD-6 – A combination of earth berms, landscaping, and/or tree screening along the perimeter of the north and west tank sites will be provided. Trees can be used for screening purposes. (See SD-7 regarding landscaping program)</p>	<p>During site design for tank sites N-1, N-2, N-3, W-1, W-2, or W-3</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall reduce the visibility of the north and west tanks through earth berms, landscaping, and/or tree screening.</p>
<p>SD-7 – A landscaping program will be implemented for the north and west tank sites and aboveground pressure valve buildings. The landscaping program should be developed by a licensed landscape architect in cooperation with the project engineer. The primary goal of the program should be to guide location, selection, installation, and maintenance of landscaping along public roadways and around new facilities to screen views, minimize exposed surface area, and maintain consistency with the surrounding character. Species selection should reflect and respect the existing mature plantings associated with residences in the area and the remaining native vegetation. The program should mandate maintenance of</p>	<p>During site design for tank sites N-1, N-2, N-3, W-1, W-2, or W-3</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>The City shall contract with a licensed landscape architect to prepare a landscaping program for the north and west tank sites. The landscaping program shall screen views, minimize exposed surface area, and maintain consistency with surrounding land uses.</p>

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<p>the landscaping for optimum survivorship, vigor, and appearance, including provisions for irrigation, pruning, mulching, and replacement planting. The owner of the facility will be responsible for maintenance of vegetation on the tank sites.</p> <p>The plant palette of the landscaping shall reflect species that are native and indigenous to the project area. The species used should include trees, shrubs, and an herbaceous understory of varying heights, as well as evergreen and deciduous types. Plant variety will increase the effectiveness of the screen by providing multiple layers, seasonality, more diverse habitat, and reduced susceptibility to disease. Large shrubs that may be used as part of the landscaping for their density and color are <i>Heteromeles arbutifolia</i> (toyon), <i>Fremontodendron</i> “Ken Taylor” (hybrid flannel bush), <i>Ceanothus</i> “Ray Hartman” (Treasure Island blueblossom), and <i>Cercis occidentalis</i> (western redbud). Potential tree species that may be used for their height and structure include <i>Platanus acerifolia</i> “Bloodgood” (London plane), <i>Sequoia sempervirens</i> ‘Aptos Blue’ (coast redwood), and <i>Quercus suber</i> (cork oak).</p>				
TRAFFIC CONTROL PLAN				
<p>TC-1 – The City will require that the contractor prepare and implement a Traffic Control Plan in order to mitigate the project’s construction-related traffic impacts. The Traffic Control Plan will ensure that adequate level of service is maintained, or in areas where level of service standards are not being met, that the project will not further degrade level of service. The Traffic Control Plan will also reduce potential safety hazards and other risks associated with construction activities. The contractor will develop and implement a Traffic Control Plan as part of the overall Construction Management Plan, in accordance with City and Caltrans policies. The Traffic Control Plan will be implemented throughout the course of project construction, and will include the following elements to reduce traffic congestion and improve traffic safety along all impacted roadways.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ensure internal coordination on the part of the City regarding construction hours of operation and lane closures. Develop a plan for communicating construction plans with transit providers, emergency service providers, residences, and businesses located in the project vicinity, and anyone else who may be affected by project construction. <input type="checkbox"/> Follow all City guidelines for lane closures caused by construction 	<p>Prior to construction on all pipeline alignments</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>City of Modesto – Deputy Director, Capital Improvement Services</p>	<p>Prior to construction, the City shall require all contractors to prepare a Traffic Control Plan to mitigate construction-related impacts. The Traffic Control Plan shall include the elements list in Environmental Commitment TC-1.</p>

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<p>activities.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Limit lane closures during peak commuting hours to the extent possible. Identify roadway segments or intersections that are at or approaching level of service (LOS) that exceeds local standards, and provide for construction-generated traffic to avoid these locations at the peak periods, either by traveling different routes or by traveling at non-peak times of day. No lane closures will be allowed during peak commuting hours where level of services standards are not currently met. 				
<ul style="list-style-type: none"> <input type="checkbox"/> Install traffic control devices as specified in the California Department of Transportation’s Manual of Traffic Controls for Construction and Maintenance Works Zones (California Department of Transportation 1996). 				
<ul style="list-style-type: none"> <input type="checkbox"/> Require traffic controls in the construction zones, including flag persons wearing bright orange or red vests and using a “Stop/Slow” paddle to control oncoming traffic. 				
<ul style="list-style-type: none"> <input type="checkbox"/> Require that access to driveways and private roads outside the immediate construction zone be maintained at all times. 				
<ul style="list-style-type: none"> <input type="checkbox"/> Develop a business notification plan for access to local businesses in and adjacent to the construction zone. 				
<ul style="list-style-type: none"> <input type="checkbox"/> Provide alternate routes for bicyclists and pedestrians during sidewalk, bike lane, and recreation trail closures. 				
<ul style="list-style-type: none"> <input type="checkbox"/> Provide notification to the public of temporary closures of roadways, sidewalks, bike lanes, and recreation trails. Require that advance notice signs of upcoming construction activities be posted at least 1 week in advance, so that motorists, bicyclists, and pedestrians are able to avoid traveling through the project area during these times. 				
<ul style="list-style-type: none"> <input type="checkbox"/> Consult with emergency service providers and develop an access and circulation plan for use by emergency vehicles when lane closures and/or detours are in effect. If lane closures occur, provide advance notice to local fire and police departments to ensure that alternative evacuation and emergency routes are designed to maintain response times. 				
<ul style="list-style-type: none"> <input type="checkbox"/> Construction warning signs should be posted in accordance with local 				

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<p>standards or those set forth in the Manual on Uniform Traffic Control Devices (FHWA 2001), in advance of beginning construction in a particular area and at any intersection that provides access to the construction area;</p> <ul style="list-style-type: none"> <li>☐ Require that written notification be provided to all contractor employees regarding appropriate routes to and from the construction site, and the weight and speed limits on local roads used to access the construction site; <li>☐ Specify that signs be posted at all active construction areas giving the name and telephone number or e-mail address of the City staff person designated to receive complaints regarding construction traffic. 				