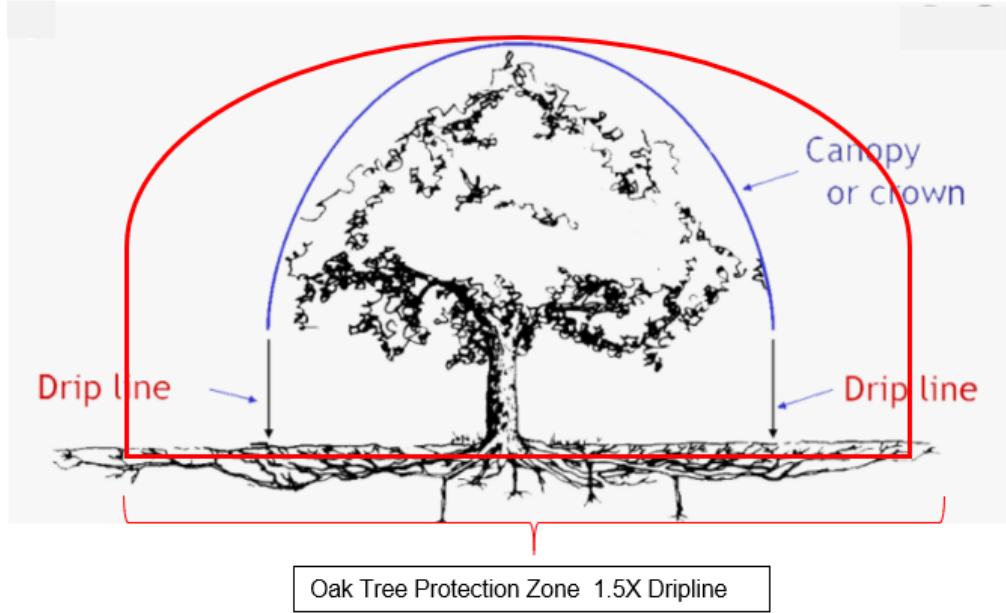


Attachment A. Mitigation Monitoring and Reporting Program: TUD Tuolumne City Water Main Project

Mitigation Monitoring and Reporting Plan
TUD Tuolumne City Water Main Project

<i>Mitigation Measure Reference</i>	<i>Mitigation Measure</i>	<i>Limits, Performance Standards</i>	<i>Timing</i>	<i>Frequency</i>	<i>Responsible Entity (RE)</i>	<i>Initial</i>	<i>Date</i>
Aesthetics							
AES-1	<p>Rock Wall Protection Prior to commencing construction activities involving heavy equipment within 10 feet of stacked rock walls, highly visible safety fencing shall be installed adjacent to the walls to prevent inadvertent encroachment. Safety fencing shall be retained until all heavy equipment work is completed. Alternative barriers providing the same or better level of rock wall protection may be approved by the Project manager with District approval.</p>		Prior to construction activities involving heavy equipment within 10 feet of stacked rock walls	Throughout Project construction	Construction contractor		

<p>AES-2</p>	<p>Large Native Oak Tree Protection To the maximum extent feasible and practicable, throughout project construction activities occurring within one and one-half times the driplines of native Valley, blue or live oaks measuring 24" or greater in diameter at breast height:</p> <ul style="list-style-type: none"> • Limit ground-disturbing activities to outside the dripline of native oaks and preferably outside one and one-half times the dripline; • No storage equipment, supplies, vehicles, debris, construction wastewater, paint, stucco, concrete or any other clean-up waste, and temporary or permanent structures shall be placed within the driplines • Avoid cutting oak roots. <u>Hand-digging may be required when working within the root zone.</u> • Use boring or trenchless installation rather than open trenching within driplines where possible • Avoid equipment damage to limbs, trunks, and roots of oaks trees • Do not attach signs, ropes, cables or other items to trees • <u>ESA fencing shall be installed surrounding the dripline plus 1/2 dripline of each of the following heritage trees prior to ground disturbance (See following figures). Activities within 1-1/2 times the driplines of these trees shall comply with the preceding. Any activities occurring within the driplines of these trees shall require review and approval by a qualified arborist prior to conducting such work.</u>  <p>The diagram illustrates the protection zone for an oak tree. It shows a tree with a canopy or crown. A red line represents the dripline, which is the outer edge of the tree's canopy. A blue line represents the canopy or crown. A red bracket below the dripline indicates the Oak Tree Protection Zone, which is 1.5 times the dripline. Labels include 'Canopy or crown', 'Drip line', and 'Oak Tree Protection Zone 1.5X Dripline'.</p>		<p>Throughout construction activities located within one and one-half times the dripline of native Valley, blue or live oaks measuring 24" or greater diameter at breast height</p>	<p>Throughout Project construction</p>	<p>Construction contractor</p>		
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Mitigation Monitoring and Reporting Plan
TUD Tuolumne City Water Main Project

Mitigation Measure Reference	Mitigation Measure	Limits, Performance Standards	Timing	Frequency	Responsible Entity (RE)	Initial	Date
Air Quality							
AQ-1	<p>Dust Control The construction contractor shall be responsible for dust abatement during construction and development operations. A water truck or other watering device shall be on the construction site on all working days when natural precipitation does not provide adequate moisture for complete dust control. Said watering device shall be used to spray water on the site at the end of each day and at all other intervals, as need dictates, to control dust. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions using application of water. A water truck shall be present on site throughout construction activities.</p>		Throughout Project construction	Throughout Project construction when inadequate moisture exists	Construction contractor		
AQ-2	<p>Equipment Emissions Throughout Project construction:</p> <p>A. Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations (CCR) Title 17, Section 93114 (Compliance with Caltrans' Standard Specifications, Section 14-9).</p> <p>B. The extended idling of heavy-duty diesel-powered construction equipment within 500 feet of nearby sensitive receptors (i.e., residential dwellings) is prohibited during periods when the equipment is not in use.</p>	See condition.	Throughout Project construction	Throughout Project construction	Construction contractor		
Biological Resources							
BIO-1	<p>Environmental Awareness Training All contractors involved in site development and environmental specialists (e.g., biologist, archaeologist) will attend a mandatory Environmental Awareness Training prior to any site disturbances. The program will address proper implementation of minimization and avoidance measures contained herein.</p>		Prior to site disturbance	Prior to site disturbance and for new employees prior to commencing site work	Construction contractor		
BIO-2	<p>Preconstruction Surveys Suitable Bat Roosting, Nursery, or Foraging Areas & Provisions for Protection, if Identified 15 days or less before commencing ground-disturbing activities between April and September of the construction year, a qualified biologist will survey snags, trees, rock crevices, and other suitable cavities and structures in the Project area for bats. If bats are not found and there is no evidence of bat use, construction may proceed.</p> <p>If bats are found or evidence of use by bats is present, CDFW shall be consulted for guidance on measures to avoid or minimize disturbance to the colony or nursery. Subject to CDFW approval, measures may include excluding bats from roosts before construction begins.</p>		Prior to site disturbance	Prior to site disturbance	Construction contractor		

Mitigation Monitoring and Reporting Plan
TUD Tuolumne City Water Main Project

Mitigation Measure Reference	Mitigation Measure	Limits, Performance Standards	Timing	Frequency	Responsible Entity (RE)	Initial	Date
BIO-3	<p>Hours of Construction Project construction shall be limited to 7:00 a.m. to 7:00 p.m. Monday through Saturday unless an emergency situation exists. No work will be performed on Sundays and District holidays, except in emergency situations.</p>		Throughout project construction	Throughout project construction	Construction contractor		
BIO-4	<p>Preconstruction Surveys for Nesting Birds Prior to construction occurring between February 1st and August 30th (e.g., excavation, ground disturbance, or vegetation removal) a preconstruction survey for nesting birds will be conducted in accordance with the CDFW guidelines and a no-disturbance buffer will be established, if necessary.</p> <ul style="list-style-type: none"> • If equipment staging, site preparation, vegetation removal, grading, excavation or other project-related construction activities are scheduled during the avian nesting season (generally February 1 through August 30), a focused survey for active nests would be conducted by a qualified biologist within 15 days prior to the beginning of project-related activities. Surveys shall be conducted in all suitable habitat in the Project site. The minimum survey radii surrounding the work area shall be the following: <ul style="list-style-type: none"> i) 250± feet for passerines; ii) 500± feet for small raptors such as accipiters; iii) 1,000± feet for larger raptors such as buteos. Surveys shall be conducted at the appropriate times of day, and during appropriate nesting times and shall concentrate on areas of suitable habitat. • If an active nest is found, the bird shall be identified to species and the approximate distance from the closest work site to the nest estimated. No additional measures need be implemented if active nests are more than the following distances from the nearest work site: (a) 300± feet for raptors; or (b) 75± feet for other non-special-status bird species. Disturbance of active nests shall be avoided to the extent possible until it is determined that nesting is complete and the young have fledged. For species protected under the California Fish and Game Code (CFGC), if active nests are closer than those distances to the nearest work site and there is the potential for bird disturbance, CDFW will be contacted for approval to work within 300± feet of raptors, or 75± feet of other non-special-status bird species. 	See condition	Prior to any construction to take place between February 1 st and August 30 th of the construction year	Once	Project biologist Construction contractor		
BIO-5	<p>Avoid Inadvertent Animal Trapping During Construction To avoid inadvertently trapping special status or common animal species during construction, all excavated steep-walled holes or trenches more than two feet deep shall be covered at the end of each working day with trench plates. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped animal is discovered, the contractor shall place an escape ramp or other appropriate structure to allow the animal to escape. Alternatively, the contractor shall contact the project biologist or California Department of Fish and Wildlife for assistance. Similarly, stored pipes or other materials providing potential cover for animals will be inspected prior to installation or use to ensure that they are unoccupied.</p>		Throughout project construction	Throughout project construction	Construction contractor Project biologist (as necessary)		

Mitigation Monitoring and Reporting Plan
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<i>Mitigation Measure Reference</i>	<i>Mitigation Measure</i>	<i>Limits, Performance Standards</i>	<i>Timing</i>	<i>Frequency</i>	<i>Responsible Entity (RE)</i>	<i>Initial</i>	<i>Date</i>
BIO-6	<p>Construction Plans Review and Resource Avoidance The TCSD cultural resource professional and project biologist shall perform a review of the final draft construction plans and coordinate with the project engineer to plot cultural resource locations and biological resources within the County right-of-way or immediately adjacent that shall be avoided during project activities. Resource locations shall be flagged for avoidance prior to construction activity. See also AES-1 related to protecting rock walls.</p> <p>Biological resources to be avoided include: Wetlands adjacent to, but outside of, the construction area.</p> <p>Cultural resources to be avoided include: rock walls and steps lining (adjacent to) streets and the cistern/well structure located at the intersection of Maple and Apple Colony Road.</p> <p>Any alteration to the Project boundaries as originally evaluated shall require additional review and evaluation.</p>		Prior to finalizing construction plans and commencing project construction.	Throughout project construction	Construction contractor Qualified cultural resources professional Project biologist		

Mitigation Monitoring and Reporting Plan
TUD Tuolumne City Water Main Project

<i>Mitigation Measure Reference</i>	<i>Mitigation Measure</i>	<i>Limits, Performance Standards</i>	<i>Timing</i>	<i>Frequency</i>	<i>Responsible Entity (RE)</i>	<i>Initial</i>	<i>Date</i>
BIO-7	<p>Unavoidable Disturbances to Wetlands and Other Waters For drainages, wetlands, springs (see Figure 6) that cannot be avoided fully through project design or construction methods, the following is required:</p> <p>A. If unavoidable, prior to site disturbance, the District will submit a complete Streambed Alteration Agreement application to the California Department of Fish and Wildlife prior to creating disturbances within the banks of drainages identified in Figure 7 (i.e., disturbances include grading, open trenching, vegetation removal, surface soil disturbances).</p> <p>B. If unavoidable, for projects involving grading or open trenching or surface soil disturbances within drainages or resulting in disturbances to wetlands (including springs), the District will secure a Section 404 federal Clean Water Act permit from the US Army Corps of Engineers and Section 401 permit from the Regional Water Quality Control Board prior to such disturbances.</p> <p>C. The preceding are not required for trenchless pipe installation that does not disturb vegetation within drainages, does not require open trenching within the banks of a drainage, and that does not result in soil disturbances or fill within drainages, wetlands, or springs.</p> <p>D. Recommendations for fully avoid impacts (if none of the preceding are feasible) are:</p> <ul style="list-style-type: none"> • Relocate the Apple Colony Line from its intersection with Maple Avenue south to within the street (rather than along the eastern shoulder) to avoid the wetland area surrounding the well, spring box or cistern. • Eliminate rehabilitation/replacement of lines west of the ballfields, or relocate them to existing paved streets. • Eliminate the new line crossing the drainage at the end of the alley below Cedar Street and extending easterly to Cedar. 		Prior to any site disturbances occurring adjacent to or within wetlands or other waters of the United States	Prior to any site disturbances occurring adjacent to or within wetlands or other waters of the United States	District Construction contractor Project biologist (if necessary)		

Mitigation Monitoring and Reporting Plan
TUD Tuolumne City Water Main Project

<i>Mitigation Measure Reference</i>	<i>Mitigation Measure</i>	<i>Limits, Performance Standards</i>	<i>Timing</i>	<i>Frequency</i>	<i>Responsible Entity (RE)</i>	<i>Initial</i>	<i>Date</i>
BIO-8	<p>Install Barrier /Silt Fencing to Protect Sensitive Resources Including Drainages and Wetlands Prior to implementing any staging, construction, or ground disturbing activities:</p> <p>Install high-visibility orange construction/safety fencing and silt fencing, fiber rolls, or equivalent erosion and sediment control devices adjacent to safety fencing to prevent disturbances and erosion into adjacent drainages for work proposed adjacent to areas identified in Figure 6.</p> <p>No construction-related materials, equipment, trash or other related debris shall be allowed, stored, or staged within the fenced area. Fencing shall remain in place until the project is completed. The Project engineer in coordination with a qualified biologist will approve the location and installation of fencing with the goal of protecting water quality in the adjacent drainages prior to site disturbance. Silt fencing or other materials, as required, will be installed consistent with the applicable water quality requirements specified in the Project's Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP). Fencing or other erosion control materials or devices shall be shown on the final construction documents.</p> <p>These areas will be avoided throughout Project construction and shall be monitored by the project manager throughout construction.</p>		Prior to any site disturbances occurring adjacent to or within wetlands or other waters of the United States	Prior to any site disturbances occurring adjacent to or within wetlands or other waters of the United States	District Construction contractor Project biologist (if necessary)		

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TUD Tuolumne City Water Main Project

Mitigation Measure Reference	Mitigation Measure	Limits, Performance Standards	Timing	Frequency	Responsible Entity (RE)	Initial	Date
BIO-9	<p>Best Management Practices (BMPs) to Protect Water Quality (Including NOI/NPDES/SWPPP)</p> <ul style="list-style-type: none"> The Contractor shall prepare an Erosion Control Plan for implementation for any construction to take place between October 15 and May 15 of any year. In the absence of such an approved plan, all construction shall cease on or before October 15, except that necessary to implement erosion control measures. If necessary, the plan shall be submitted to District (or the Public Works Department of the Community Resources Agency if requested in conjunction with an encroachment permit) for review and approval. Submit to the State Water Resources Control Board Storm Water Permitting Unit, a Notice of Intent (NOI) to obtain coverage under the General Construction Activity Storm Water Permit - California's National Pollution Discharge Elimination System (NPDES) general permit for construction related storm water discharges for the disturbance of one acre or more. Disturbances of less than one acre may also require an NOI for coverage under the NPDES General Permit for construction-related storm water discharge and the State Water Resources Control Board Permitting Unit shall be contacted for determination of permit requirements. Commercial and Industrial developments may require an NOI even if less than one acre is to be disturbed. Obtain coverage or an exemption from these requirements. [Federal Water Pollution Control Act, Section 401, California Clean Water Act]. The permit may include preparation of a Stormwater Pollution Prevention Plan (SWPPP). 		Erosion control plans will be prepared and implemented prior to any construction to take place between October 15 and May 15 of any year. The Notice of Intent to obtain Coverage shall be submitted prior to any site disturbances.	See previous	Construction contractor		
BIO-10	<p>Minimize the Spread of Invasive Plant Species Throughout project construction:</p> <ul style="list-style-type: none"> All hay, straw, hay bales, straw bales, seed, mulch or other material used for erosion control on the project site shall be free of noxious weed¹ seeds and propagules (Food and Agriculture Code Sections 6305, 6341 and 6461). All equipment brought to the project site shall be thoroughly cleaned of all dirt and vegetation prior to entering the site to prevent importing noxious weeds and shall be cleaned of all dirt and vegetation prior to exiting the site to prevent exporting noxious weeds. (Food and Agriculture Code Section 5401). All material brought to the site, including rock, gravel, road base, sand, and top soil, shall be free of noxious weeds and propagules. (Food and Agriculture Code Sections 6305, 6341 and 6461). 		Throughout project construction	Throughout project construction	Construction contractor		
Cultural Resources							

¹ Noxious weeds are as defined in Title 3, Division 4, Chapter 6, Section 4500 of the California Code of Regulations and the California Quarantine Policy – Weeds (Food and Agriculture Code, Sections 6305, 6341, and 6461)

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CULT-1	Construction Plans Review and Resource Avoidance – See Mitigation Measure BIO-6		See BIO-6	See BIO-6	See BIO-6		
CULT -2	Environmental Awareness Training - See Mitigation Measure BIO-1		See BIO-1	See BIO-1	See BIO-1		

CULT-3	<p>Cultural Resources Monitor Most, if not all, of the <u>new</u> pipelines in new locations are located in relatively undisturbed ground beneath paved roads therefore, a qualified professional archaeologist shall be present throughout trenching activities for each <u>new</u> pipeline located in a new location (i.e., this condition does not refer to replacing existing pipelines in the same location). If a cultural resource is discovered during monitoring, the Contractor shall comply with the following provisions:</p> <p>A. The qualified professional archaeological monitor discovering the cultural resource shall notify the TCSD by telephone within 1 hour of the discovery or the next working day if the department is closed.</p> <p>B. When the cultural resource is located outside the area of disturbance, a qualified archaeologist shall be allowed to photodocument and record the resource and construction activities may continue during this process.</p> <p>C. When the cultural resource is located within the area of disturbance, all activities that may impact the resource shall cease immediately upon discovery of the resource. All activity that does not affect the cultural resource as determined by the monitor may continue. A qualified archaeologist shall be allowed to conduct a site survey to ascertain the need for evaluation work.</p> <p>D. When the cultural resource is determined to not be significant, the project archaeologist shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the qualified archaeologist.</p> <p>E. When a cultural resource is determined to be significant or potentially significant, the resource shall be avoided with said resource having boundaries established around its perimeter by a qualified archaeologist or a cultural resource management plan consistent with the National Historic Preservation Act (NHPA) Guidelines shall be prepared by a qualified archaeologist to establish measures formulated and implemented in accordance with Sections 21083.2 and 21084.3 of the California Environmental Quality Act (CEQA) and NHPA to address the effects of construction on the resource. The qualified archaeologist shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the qualified archaeologist. All further activity shall comply with the cultural resources management plan.</p> <p>For the purposes of implementing this measure, a “qualified professional” is an individual that meets the Secretary of the Interior’s Standards, and a “cultural resource” is any building, structure, object, site, district, or other item of cultural, social, religious, economic, political, scientific, agricultural, educational, military, engineering or architectural significance to the citizens of Tuolumne County, the State of California, or the nation which is 50 years of age or older or has been listed on or is eligible for listing on the National Register of Historic Places, the California Register of Cultural Resources, or any local register.</p>		During trenching activities to install <u>new</u> pipelines	During trenching activities to install <u>new</u> pipelines	Construction contractor Professional archaeologist		
CULT-4	Inadvertent Discoveries		Throughout Project construction	Throughout Project construction	Construction contractor		

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	<p>If a cultural resource is discovered during construction activities, the contractor shall comply with the following provisions:</p> <ul style="list-style-type: none"> A. The Contractor's construction manager/inspector shall notify the Tuolumne City Sanitary District construction manager/inspector by telephone within 1 hour of the discovery or the next working day if the department is closed. The TCSD shall promptly notify their qualified professional archaeologist. B. When the cultural resource is located outside the area of disturbance, a qualified professional shall be allowed to photodocument and record the resource and construction activities may continue during this process. C. When the cultural resource is located within the area of disturbance, all activities that may impact the resource shall cease immediately upon discovery of the resource. All activity that does not affect the cultural resource as determined by a qualified professional may continue. A qualified professional archaeologist shall be allowed to do a site survey to ascertain the need for evaluation work. D. When the cultural resource is determined to not be significant, the qualified professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the qualified professional. E. When a resource is determined to be significant, the resource shall be avoided with said resource having boundaries established around its perimeter by a qualified professional or a cultural resource management plan shall be prepared by a qualified professional to establish measures formulated and implemented in accordance with Sections 21083.2 and 21084.1 of the California Environmental Quality Act (CEQA) to address the effects of construction on the resource. The qualified professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the qualified professional. <p>For the purposes of implementing this measure, a "qualified professional" is an individual previously determined to be a qualified professional by the Tuolumne County Community Development Department Planning Division (https://www.tuolumnecounty.ca.gov/DocumentCenter/View/9984) and a "cultural resource" is any building, structure, object, site, district, or other item of cultural, social, religious, economic, political, scientific, agricultural, educational, military, engineering or architectural significance to the citizens of Tuolumne County, the State of California, or the nation which is 50 years of age or older or has been listed on or is eligible for listing on the National Register of Historic Places, the California Register of Cultural Resources, or any local register.</p>				District Qualified Archaeologist		

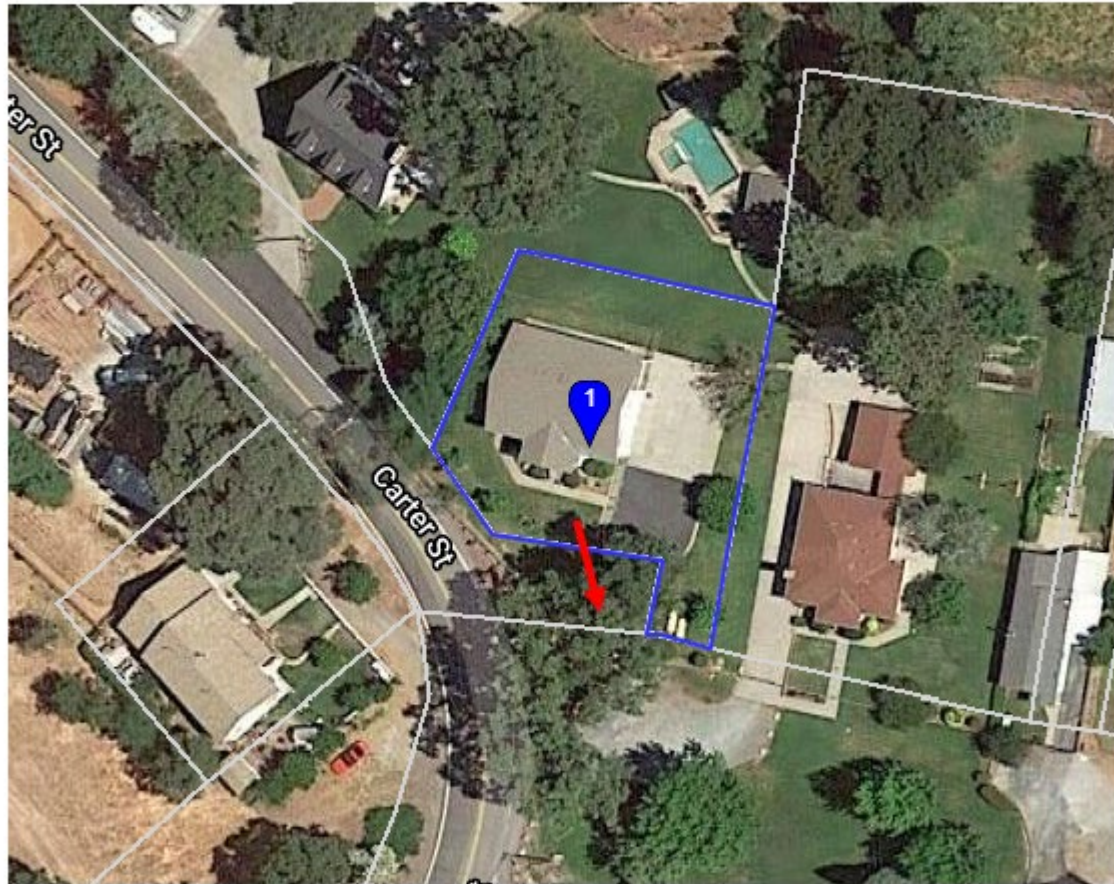
Mitigation Monitoring and Reporting Plan
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CULT-5	<p>Treatment of Human Remains and Sacred Objects No human remains or sacred objects have been identified in the project area, but there is always a possibility that excavation, or other actions could expose human burials previously unknown. Such remains are protected by state and federal laws and all project personnel must comply fully with applicable laws regarding the treatment of human remains including contacting the County coroner. The policies set forth in the American Indian Religious Freedom Act of 1978 and amendments (92 Stat. 469) should be honored by TCSD and its contractors. If the discovery is on private land, provision for treatment and disposition of any human remains will be in accordance with Section 7050.5 of the California Health and Safety Code, Sections 5097.94, 5097.98, of the California Public Resources Code, and Section 15064.5 of the California Code of Regulations implementing the California Public Resources Code, Sections 2100-21177.</p>	CA PRC Sections 5097.94, 5097.98, H&S Code 7050.5 CCR 15064.5	Throughout Project Construction	Throughout Project Construction	Construction contractor Tuolumne County coroner Most likely descendent (if applicable)		
GEOLOGY & SOILS; HYDROLOGY AND WATER QUALITY							
GEO-1	Erosion Control – See BIO-9		See BIO-8	See BIO-8	See BIO-8		
HAZARDS & HAZARDOUS MATERIALS, TRANSPORTATION							
HAZ-1	<p>Traffic Access Management Plan Prior to commencing work within public roadways, the Contractor will prepare (to the District's satisfaction), and throughout project construction will implement, a traffic access management plan to maintain emergency ingress, egress, and daily traffic flows throughout the Project boundaries. The access management plan should address public notification of upcoming construction, anticipated road closures, and detours (e.g., mailers in invoices, publication in local newspaper, website notices, postings along streets to be closed, electronic message boards). The District will coordinate road closures with the Tuolumne City Fire Department, Mother Lode Christian School and Summerville Elementary School to ensure that emergency ingress and egress is addressed prior to and during street closures.</p> <p><u>In particular:</u></p> <ul style="list-style-type: none"> • <u>Short Street is used as an exit for the Mother Lode Christian School in the afternoon. The Traffic Access management plan shall address this or an alternate route in consultation with the school.</u> • <u>Coordinate with the owner at 18562 Woolworth Avenue to retain a parking space close to her home for disabled access during construction.</u> 		Prior to initiating construction	Throughout project construction	Construction contractor District Tuolumne County Community Resources Agency Roads Tuolumne City Fire Dpt. Mother Lode Christian School Summerville Elementary School		
NOISE							
BIO-3	Hours of Construction - See BIO-3		See BIO-3	See BIO-3	See BIO-3		

FIGURES

AES-2:

A. 19085 Carter Street (APN 009-020-024) - 5-foot oak three feet from the property line. Note: This will require moving the proposed waterline south of its proposed route.



B. 18562 Woolworth (APNs 009-041-001 and 009-041-003) Heritage Pecan Tree at fence at NE corner of Birch Street and Woolworth Avenue.

