SOUTH LAND PARK AND RICHMOND GROVE WATER METER RETROFITS PROJECT

Initial Study / Mitigated Negative Declaration

Prepared for

City of SACRAMENTO

October 2017

ESA

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South Land Park and Richmond Grove Water Meter Retrofits Project Initial Study/Mitigated Negative Declaration

Errata

October 20, 2017

This errata sheet presents, in ~~strike-through~~ and double-underline format, the revisions to the South Land Park and Richmond Grove Water Meter Retrofits Project (proposed project) Initial Study/Mitigated Negative Declaration (IS/MND). The revisions to the IS/MND reflected in this errata sheet do not affect the adequacy of the environmental analysis contained in the July 2017 South Land Park and Richmond Grove Water Meter Retrofits Project. Because the changes presented below would not result in any new significant impacts or increase in impact significance from what was identified in the IS/MND, recirculation of the South Land Park and Richmond Grove Water Meter Retrofits Project IS/MND is not required.

Changes to the Draft South Land Park and Richmond Grove Water Meter Retrofits Project IS/MND

Table 2-1 on page 2-5 is revised as follows:

TABLE 2-1.
SMAQMD ATTAINMENT STATUS

Pollutant	Designation/Classification	
	Federal Standards	**State Standards**
Ozone – one hour	~~No Federal~~ Standard Revoked	Nonattainment
Ozone – eight hour	Nonattainment	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Attainment
CO	Attainment/Unclassified	Attainment
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	~~Unclassified~~ Attainment Pending	Attainment
Lead	Unclassified/Attainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified

SOURCE: California Air Resources Board, 2016.Area Designations Maps / State and National. http://www.arb.ca.gov/desig/adm/adm.htm. Accessed October 8, 2016.

The revisions were made in response to the Sacramento Metropolitan Air Quality Management District's (SMAQMD) request to update status of pollutants presented in Table 2-1. These revisions do not alter the conclusions or findings of the IS/MND.

The following text is added to the third paragraph on page 2-13:

Impacts to TCR are discussed below under Tribal Cultural Resources.

The addition is a staff-initiated text change to clarify that Tribal Cultural Resources are addressed in an Environmental Checklist item separate from Cultural Resources. The addition does not alter the conclusions or findings of the IS/MND.

Mitigation Measure CUL-1 on pages 2-14 and 2-15 is revised as follows:

Mitigation Measure CUL-1~~L~~: Workforce Training and Archaeological Monitoring of Project Ground-Disturbing Activities for Previously Recorded Tribal Cultural Resources and Archaeological Resources (P-34-000064, P-34-000104, P-34-000235, and P-34-000248)

a) Prior to grading, a preconstruction training session conducted by a qualified archaeologist shall be held for all construction personnel and staff. Training will cover procedures to be followed and appropriate conduct to be adhered to if archaeological materials, including TCRs, are encountered during the project work. All sessions will be conducted in person. Training will include:

1) Purpose of archaeological monitoring;

2) Identifying archaeological resources; and

3) Maintaining proper discovery protocols during construction.

b) The City shall prepare a map of the project area, in coordination with Native American Tribal Representatives, identifying previously recorded archaeological resources and ~~potential~~ locations of TCRs—these areas to be collectively known as "sensitive areas"—for use by the City, Contractor, archaeologist and Native American monitor. The map shall be subject to California law regarding confidentiality of such materials.

c) All excavation work within the areas identified as sensitive areas shall be hand excavated or excavated with small mechanized equipment. Heavy equipment is prohibited in these areas except for the purposes of lifting equipment and/or materials above ground level.

d) An archaeologist meeting, or supervised by an archaeologist meeting, the Secretary of the Interior's Professional Qualification Standards for Archeology, in addition to a Native American monitor, will conduct archaeological construction monitoring for all project ground-disturbing activities within the sensitive areas agreed upon by the City and Native American Tribal Representatives and kept on file at the City.

e) A Native American monitor shall be employed to conduct monitoring of project construction activities for sensitive areas. The conduct and work of any Native American monitor shall be consistent with the California Native American Heritage Commission (NAHC) Guidelines for Native American Monitors/Consultants (NAHC, 2005).

f) Potential TCRs discovered during project work shall be treated in consultation with the Native American monitor on site.

g) If discovery is made of items of potential archaeological resources, including TCRs, the procedures set forth in Mitigation Measure CUL-2 shall be followed.

The revisions are staff-initiated text changes to clarify Mitigation Measure CUL-1. The revisions do not alter the conclusions or findings of the IS/MND.

Mitigation Measure CUL-2 on pages 2-15 through 2-17 is revised as follows:

Mitigation Measure CUL-2: Unanticipated Discovery Protocol for Archaeological Resources and Human Remains

If prehistoric or historic-period archaeological resources are encountered by the archaeological monitor, Native American monitor, or construction personnel during Project implementation, all construction activities within 100 feet shall halt and the City shall be notified. Prehistoric archaeological materials include, for example, obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. ~~Any TCRs discovered during project work shall be treated in consultation with the Native American monitor on site, with the goal of preserving in place with proper treatment.~~ Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.

A qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, and relevant Native American representatives (to be identified by the NAHC if the resource is Native American in origin) shall inspect the findings within 24 hours of discovery. If the City determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) and that the project has potential to damage or destroy the resource, construction shall cease in an area determined by the archaeologist until a mitigation plan has been prepared and implemented to the satisfaction of the archaeologist (and Native American representatives, if applicable). Any TCRs discovered during project work shall be inspected within 24 hours by the Native American Monitor and shall be treated in consultation with Native American Tribal Representatives on site, with the goal of preserving in place with proper treatment. ~~mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4.~~

Consistent with PRC 21083.2 and CEQA Guidelines Section 15126.4(b)(3), a mitigation plan shall be developed and implemented and shall recommend ~~mitigation shall be accomplished through either~~ preservation in place or, if preservation in place is not feasible, data recovery through excavation. If ~~avoidance or~~ preservation in place is feasible, this may be accomplished through one of the following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and

> *covering the resource before building appropriate facilities on the resource site; or (4) deeding resource site into a permanent conservation easement. If preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to recover the scientifically consequential information from and about the resource, which shall be reviewed and approved by the City prior to any excavation at the resource site. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources, not tribal cultural resources, would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the Project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.*
>
> *In the event of discovery or recognition of any human remains during project implementation, project construction activities within 100 feet of the find shall cease ~~until~~ and the City shall be contacted by onsite construction crews. The City will contact the Sacramento County Coroner in accordance with PRC Section 5097.98 and California Health Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the NAHC. As provided in PRC Section 5097.98, the NAHC will identify the person or persons believed most likely to be descended from the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. ~~has been contacted to determine that no investigation of the cause of death is required. The City shall comply with requirements identified by the NAHC for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines Section 15064.5[d]).~~*

The revisions are staff-initiated text changes to clarify Mitigation Measure CUL-2. The revisions do not alter the conclusions or findings of the IS/MND.

The last sentence of the fifth paragraph on page 2-19 is revised as follows:

> Therefore, the actual likelihood of encountering ~~intact~~ portions of any previously undisturbed TCRs is low.

The revision is a staff-initiated text change for clarification purposes and does not alter the conclusions or findings of the IS/MND.

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ENVIRONMENTAL CHECKLIST

Initial Study

1. Project Title:	South Land Park and Richmond Grove Water Meter Retrofits Project
2. Lead Agency Name and Address:	City of Sacramento
3. Contact Person and Phone Number:	Scott Johnson, Associate Planner Community Development Department (916) 808-5842
4. Project Location:	City of Sacramento, CA
5. Project Sponsor's Name and Address:	Ian Pietz, Senior Engineer City of Sacramento Department of Utilities 1395 35th Avenue Sacramento, CA 95822 (916) 808-1910
6. General Plan Designation(s):	Varies
7. Zoning:	Varies

8. Description of Project: See project description.

9. Surrounding Land Uses and Setting: See project description.

10. Other public agencies whose approval is required: See Table 1-1.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☒ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Printed Name	Agency

CHAPTER 1
Project Description

1.1 Introduction

Assembly Bill (AB) 2572, passed in 2004, requires urban water suppliers to install water meters on all municipal and industrial water service connections within its service area before January 1, 2025, and beginning January 1, 2010, to charge all customers with water meters based on actual volume of water deliveries. The bill also prevents urban water suppliers from receiving state financial assistance unless it is in compliance with the meter and rate requirements. Since 2005, the City of Sacramento has installed over 60,000 water meters and transitioned those customers to metered rates. Due to the City's aging infrastructure, many meter installations also require additional improvements such as relocating backyard water mains to the street or replacing older pipelines. Additionally, water meters and volumetric pricing are two key water conservation measures by which the City can meet its State mandated requirements of achieving a 20% reduction in urban water use by the year 2020 (as required by Senate Bill (SB) x7-7). In response to recent drought conditions and mandated conservation requirements, the City has set its own goal to comply with AB 2572 by 2020.

The proposed South Land Park and Richmond Grove Water Meter Retrofits Project (proposed project) would install an additional 3,200 water meters.

1.2 Project Location

The proposed project would be located in the City of Sacramento within the Central City and Land Park communities. Most of the proposed project would occur in residential neighborhoods, while some components would occur in commercial and multi-family properties. For an overview of the project area, please refer to **Figure 1-1**.

1.3 Project Objectives

The proposed project objectives are to promote water conservation by installing water meters as required by AB 2572.

1.4 Proposed Project

The proposed project would include the following components:

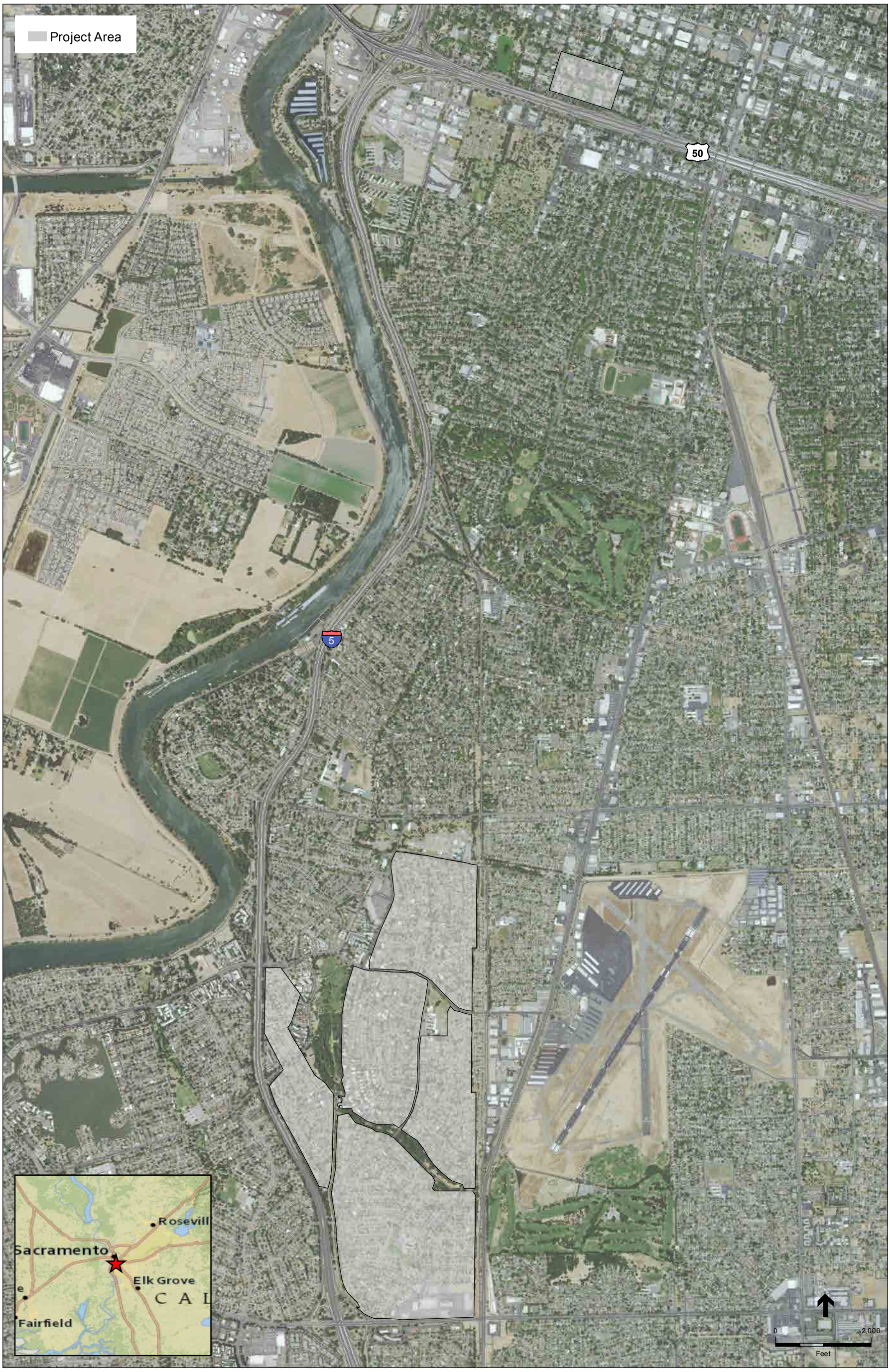
- Installation of approximately 3,200 water meters in residential backyards/alleys and front yards (in or behind sidewalks)

The meters would be installed on existing residential and commercial water service connections. Each water meter would include a combination of meter setters, fittings and piping to connect the meter to the water main. The installation of the water meters would be done in a manner as to minimize ground disturbance. The water meters would be placed in a rectangular meter box (28 inches by 18 inches) with a concrete or Fibrelyte lid flush with the existing landscape grade. Typical excavation for meter box would measure approximately 3 feet by 3 feet, to a depth of approximately 3 feet. After the meter box is installed, landscape areas would be returned to pre-installation conditions (based on pre-construction photographs taken at the site) or disturbed sidewalks would be restored. The City's project manager and inspector would review the pre-construction photographs and site, post-installation, to ensure the area surrounding the meter box is returned to its original condition. Repairs to street surfaces would also be completed, as necessary. Automated Meter Infrastructure (AMI) systems would be installed, consisting of a network of transponders that would send water meter readings to the City's Utility Billing and Operations Center wirelessly. If water service lines need to be replaced, these are typically installed trenchlessly by direction drilling. Water main and water service construction requirements are described in City Standard Specification Section 27 - Water Distributions Systems. The City's Standard Specifications are available online: https://www.cityofsacramento.org/Utilities/Resources/Specs-and-Drawings.

The construction contract documents for this project will include a requirement for staging and stockpiling equipment and soils in a manner that does not impact vernal pool habitats or associated species. Additionally, the construction contract specifications and special provisions require the following as relevant to the proposed project:

- Special Provisions Section 2.01 "Public Right-of Way and Easements": All water mains and services constructed as part of this project are to be placed within public streets and alley rights-of-ways and public easements over private property. The Contractor shall confine his or her operations within the limits of existing street right-of-way or public easements as much as practicable. Where the Contractor must occupy areas outside of public easements, the Contractor shall notify the City Inspector and work to minimize the work area used. In all cases, the Contractor is responsible for repairing damage or replacing improvements to the City and property owner satisfaction where caused by its activities.

- Standard Specifications Section 5.15 "Storage of Materials and Equipment": Prior to commencing the Work, Contractor shall submit a written "Storage of Materials and Equipment Plan" for approval by the Engineer. This Plan shall specify the location, entry date and exit date for all locations where Contractor will store materials or equipment, and a site maintenance plan for all such locations. Additionally, this Plan shall describe the measures that Contractor will undertake to minimize impacts to driveways, residents and the general public in the vicinity of such storage locations during work and non-work hours. If this Plan is not approved by the Engineer, Contractor shall revise and resubmit the Plan as necessary to obtain the Engineer's approval.



SOURCE: USDA, 2014; ESRI, 2012; Carollo, 2016; ESA, 2016

Figure 1-1
Project Area

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Table 1-1 summarizes the anticipated ground disturbance for the project activities.

TABLE 1-1.
APPROXIMATE EXTENTS OF PROPOSED GROUND-DISTURBING ACTIVITY TYPES

Component	Length (ft)	Width (ft)	Depth (ft)
Water meter installation (~3,200)	3	3	3

Construction equipment would vary depending on the contractor but would typically include use of mechanical equipment like back hoes and installation would occur at one construction site at a time generally using one crew. It is anticipated that installation would be completed over a 9 month period beginning in fall 2017.

1.5 Responsible Agencies, Permits, and Approvals

Table 1-2 summarizes the potential permits and/or approvals that may be required prior to construction of the proposed project.

TABLE 1-2.
REGULATORY REQUIREMENTS, PERMITS, AND AUTHORIZATIONS FOR PROJECT FACILITIES

Agency	Type of Approval
State Agencies	
Central Valley Regional Water Quality Control Board (CVRWQCB)	NPDES General Permit for Stormwater Discharge Associated with Construction
Cal OSHA	Construction or Excavation Permit
Local Agencies	
City of Sacramento	Road Encroachment Permit

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CHAPTER 2
Environmental Checklist

2.1 Aesthetics

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
1.	**AESTHETICS — Would the project:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☒

Environmental Setting

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. The proposed project area is primarily characterized by developed uses including residential and support uses, including parks, schools and commercial uses.

Discussion

a, b) **No Impact.** The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads ROW in developed urban and suburban areas of Sacramento. There are no scenic vistas located within the project area and review of the current Caltrans Map of Designated State Scenic Highways indicated that there are no officially designated state scenic highways in the vicinity of the proposed project area (Caltrans, 2016). Therefore, there would be no adverse effect on a scenic vista or damage to trees, rock outcroppings, and historic buildings within a state scenic highway and no impact would occur.

c) **Less than Significant.** In the event that water service lines need to be replaced the use of equipment and temporary storage of soils and materials at work sites which would temporarily change the visual character in the immediate vicinity. However, all disturbed

areas would be restored to pre-project conditions upon completion, including roadways, to match the original grade and surface. Therefore, there would be no permanent change in visual character of the project area. Water meters would be installed adjacent to existing structures in residential neighborhoods and would not be anticipated to result in a change of visual character.

d) **No Impact.** The proposed project would not involve any new permanent sources of light or glare and all construction is scheduled to occur during day time hours so no night lighting would be necessary. Therefore, no impact would occur.

2.2 Agricultural and Forest Resources

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURAL AND FOREST RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:**				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Setting

The proposed project is located in urban and residential areas within Sacramento streets ROW and areas designated for water meters and mains. There are no agricultural land uses or forestry resources in the project area.

Discussion

a, b) **No Impact.** The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads ROW in developed urban and suburban areas of Sacramento. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use (DOC, 2014). In addition, the proposed project area does not contain any designated Williamson Act Contract land. Therefore, there would be no impact.

c, d, e) **No Impact.** The proposed project would be located in developed portions of the City of Sacramento and there are no forest land or timberland located in the proposed project area and no impact would occur.

2.3 Air Quality

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
3.	**AIR QUALITY —** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Environmental Setting

The proposed project is located within the City of Sacramento. The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the primary local agency with respect to air quality for all of Sacramento County, including the City of Sacramento. The City of Sacramento is within the Sacramento Valley Air Basin (SVAB), which also includes all of Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo, and Yuba Counties, the western portion of Placer County, and the eastern portion of Solano County.

As shown in **Table 2-1**, the SMAQMD is classified as non-attainment for ozone (state and federal), PM_{10} (state), and $PM_{2.5}$ (state and federal). Federal and state air quality laws require regions designated as nonattainment to prepare plans that either demonstrates how the region will attain the standard or that demonstrate reasonable improvement in air quality conditions. As noted, the SMAQMD is responsible for developing attainment plans for the SMAQMD, for inclusion into California's State Implementation Plan (SIP).

TABLE 2-1.
SMAQMD ATTAINMENT STATUS

	Designation/Classification	
Pollutant	**Federal Standards**	**State Standards**
Ozone – one hour	Standard Revoked	Nonattainment
Ozone – eight hour	Nonattainment	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Attainment

TABLE 2-1.
SMAQMD ATTAINMENT STATUS

Pollutant	Designation/Classification	
	Federal Standards	**State Standards**
CO	Attainment/Unclassified	Attainment
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment Pending	Attainment
Lead	Unclassified/Attainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified

SOURCE: California Air Resources Board, 2016.Area Designations Maps / State and National. http://www.arb.ca.gov/desig/adm/adm.htm. Accessed October 8, 2016.

Discussion

a) **No Impact.** The Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions) (SMAQMD, 2013), which addresses attainment of the federal 8-hour ozone standard, and the 2015 Triennial Report and Plan Revision (SMAQMD, 2015), are the latest plans issued by the SMAQMD, which incorporate land use assumptions and travel demand modeling from the Sacramento Area Council of Governments (SACOG). To determine compliance with the applicable air quality plan, the SMAQMD recommends comparing the project to the SACOG growth projections included in the *Metropolitan Transportation Plan/Sustainable Communities Strategy* (MTP/SCS) (SACOG, 2016), a comparison of the project's projected vehicle-miles travelled (VMT) and population growth rate. There would be no employment, housing units, or population generated by the proposed project. Other than trips associated with maintenance and operation, the proposed project would not increase daily VMT. Therefore, the proposed project would not conflict with or obstruct implementation of applicable air quality plans and no impact would occur.

b-c) **Less than Significant.** The source of construction-related pollutant emissions are primarily from the use of on-road worker trips and haul trips. Construction activities would only require the use of a backhoe, and would not generate large amounts of pollutant emissions.

Since the proposed installation of water meters would only require minimal use of off-road equipment and there would be minimal worker and haul trips to the project site, construction of the proposed project is not expected to result in the emissions of NOx that would exceed the SMAQMD significance threshold.

Currently, Sacramento County is nonattainment for the PM_{10}, and $PM_{2.5}$ California Ambient Air Quality Standards. Emissions generated by short term construction have the potential to generate substantial high levels of PM_{10}, which are primarily associated with

fugitive dust emissions during site preparation or grading. Exhaust emissions of PM_{10} are also generated by off-road construction equipment such as graders, dozers and excavators. According to the SMAQMD, all projects are required to implement the SMAQMD Basic Emission Control Practices,[1] whether or not the project meets the screening level for NO_x. Since construction activities could include the excavation of trenches for the installation of replacement water services that would connect the proposed water meters to the existing water distribution system, it is expected that fugitive dust emissions could occur. The Basic Emission Control Practices consist of the following best practices feasible for controlling fugitive dust from a construction site:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible track-out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Even though construction activities could include activities that could result in fugitive dust emissions, the proposed project would include all of SMAQMD's Basic Emission Control Practices that are feasible to the project as a design mitigation feature such as minimizing the idling time of on-road trucks to five minutes and making sure all on-road trucks are in proper working conditions according to manufacturer's specifications. Since the proposed project would implement all feasible Basic Emission Control Practices, PM_{10} and $PM_{2.5}$ exhaust emissions generated during the construction of the proposed project would result in a less-than-significant impact.

d) **Less than Significant**. There would be no new sources of toxic air contaminants (TAC) with project operations, and therefore, no increase health risks associated with the operation of the proposed project over existing conditions. Construction of the proposed project would take approximately 9 months to complete. Localized construction activity

[1] Sacramento Metropolitan Air Quality Management District (SMAQMD) 2014. CEQA Guide December 2009, Revised September 2014. Available at: http://www.airquality.org/ceqa/ceqaguideupdate.shtml.

within a construction area is expected to be limited to 1 to 3 months. Due to this relatively short period of exposure at any one location, TAC generated during construction would not be expected to result in concentrations causing significant health risks. In addition, construction related activities associated with the installation of the new water meters would only require the minimal use of off-road equipment known to generate large amounts of TAC emissions. Therefore, health risks associated with construction of the proposed project would be less than significant.

e) **Less than Significant.** The SMAQMD has identified typical odor sources in its CEQA Guide to Air Quality Assessment (SMAQMD, 2009). These include wastewater treatment plants, sanitary landfills, composting and green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting and coating operations, rendering plants, and food packaging plants. The proposed project would not include uses that have been identified by SMAQMD as potential sources of objectionable odors. However onsite construction activities would require minimal use of diesel equipment that could produce odorous exhaust in the immediate vicinity of a work site. However, because construction would occur in be phased and short-term the proposed project is not anticipated to increase odors over current conditions and this impact would be less than significant.

2.4 Biological Resources

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4.	**BIOLOGICAL RESOURCES — Would the project:**				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Environmental Setting

As described in the July 29, 2016 *South Land Park and Richmond Grove Water Meter Retrofits Project - Biological Resources Document* (biological resources technical memorandum) provided in Appendix A, lists of special-status species with potential to occur in the project area region were reviewed and were cross-referenced with a project area habitat map and a map of special-status species occurrences within five miles of the project area to determine the likelihood of the species to occur in the project area. Sources consulted in the preparation of the list of target special-status species include the US Fish and Wildlife Service (USFWS) List of Federal Endangered and Threatened Species (USFWS, 2016), the CNDDB (CDFW, 2016), and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (CNPS, 2016).

Special-status species which have potential to occur in the project area were presented in Table 1 of the biological resources technical memorandum (see Appendix A), along with a project boundary map (Figure 1), a habitat map with project boundaries (Figure 2), a CNDDB special-status wildlife species map with project boundaries (Figure 3), and a CNDDB special-status plant species and natural communities map with project boundaries (Figure 4). Table 1 provides: the

species' federal and/or state listing and California Rare Plant Rank (if applicable); suitable habitat for the species; and, the species' potential to occur in the project area. Fifteen special-status plant and animal species were identified to have the potential to occur in the broad region of the project. Fourteen of these species have potential to occur in or directly adjacent to the project area. Of these 14 species, 13 have low potential to occur and 1 has moderate potential to occur.

Discussion

a) **Less than Significant.** The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads ROW in developed urban and suburban areas of Sacramento. This work would include the use of small construction equipment and utility trucks by work crews. None of the special-status species with potential to occur in the project area are likely to be directly or indirectly impacted by installation of the proposed project. All project activities would occur in and directly around residential, commercial, and office buildings within disturbed, urban habitat (mostly within roads) and would not extend into any of the species' suitable habitat.

One species, purple martin, has moderate potential to occur. However, it is not likely to be impacted by the project activity. Purple martin has documented occurrences in urban areas; it has occurred in several overpasses in and around the project area. Any noise created by installation of the proposed project should not exceed typical noise levels of urban areas, would not substantially increase the human presence in the urban and suburban neighborhoods that make up the project area, and therefore would not impact the purple martins that have been documented within or adjacent to urban areas and are habituated to urban noise. In addition, the proposed project would not include installation of facilities in any overpass where purple martin has been documented, and therefore should not impact these special-status species occurrences. The proposed project would avoid streams, rivers, and riparian areas and; therefore, would not result in direct or indirect impacts to riparian areas, jurisdictional wetlands and waters, or any other special-status species that may occur in these habitats. No special-status species would be impacted by the proposed project because project activity would remain in public-access streets and directly around the structures where the meters are being installed. Because the project activities are expected to have similar noise levels and human presence as the existing urban setting, there would be no impacts to special-status species due to construction noise or work crews.

b) **No Impact.** Because all project activities would occur in and directly around developed parts of the City within disturbed, urban habitat (mostly within roads ROW) there are no sensitive natural communities that occur within the project area. Therefore, the proposed project would have no impact on any sensitive natural communities.

c) **No Impact.** Because all project activities would occur in and directly around developed parts of the City within disturbed, urban habitat (mostly within roads ROW) there are no wetlands on or adjacent to the project area, or in the immediate vicinity of the proposed

project; therefore, the proposed project would have no impact on federally protected wetlands as defined by Section 404 of the Clean Water Act.

d) **No impact.** Given the urban nature of the project area, the proposed project would not obstruct the movement of migratory fish or wildlife species, or impede the usage of any nursery site. Therefore, with regard to these issues, the proposed project would have no impact.

e) **No Impact.** The proposed project would not involve the removal or trimming of any trees. Therefore, it would not conflict with the City tree ordinance and no impacts to protected trees or other biological resources protected by local policies or ordinances would occur.

f) **No Impact.** The project area is not within a Habitat Conservation and Natural Community Conservation Plan. Therefore, the proposed project would have no impact on any Habitat Conservation Plan or Natural Community Conservation Plan.

2.5 Cultural and Tribal Cultural Resources

This section relies upon the information and findings presented in the cultural resources technical report prepared for the project by ESA in June 2017: *South Land Park and Richmond Grove Water Meter Retrofits Project Cultural Resources Inventory Report* (Appendix B). Additional details on background context, Native American correspondence, and cultural resources identified are presented in the technical report.

Cultural Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
5.	**CULTURAL RESOURCES — Would the project:**				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☒
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Environmental Setting

Based on the background research and records searches of the California Historical Resources Information System (CHRIS), there are four previously recorded archaeological resources in the project area: P-34-000064, P-34-000104, P-34-000235, and P-34-000248. None of these resources have been evaluated for eligibility to qualify as an historical resource or unique archaeological resource under CEQA. The resources are summarized in **Table 2-2**.

TABLE 2-2.
IDENTIFIED ARCHAEOLOGICAL RESOURCES IN PROJECT AREA

Primary [P-]	Trinomial [CA-]	Name/Description	Age	Recorder	Current California Register-eligibility	Project Area Portion
34-000064	SAC-37	Habitation mound	Prehistoric	McKee (1934)	Unevaluated	Downtown
34-000104	SAC-77	Mound with artifacts	Prehistoric	Heizer (1934); Kernan (1959)	Unevaluated	Land Park
34-000235	SAC-208	Human remains	Prehistoric	Reeve and Arnold (1957)	Unevaluated	Land Park
34-000248	SAC-221	Rouse Site; midden with artifacts	Prehistoric	Wilson et al. (1956)	Unevaluated	Land Park

The potential for buried or obscured prehistoric archaeological resources and historical archaeological resources in portions of the project area is high. The project area's potential for surficial prehistoric archaeological deposits is low, while the potential for surficial historical archaeological deposits is moderate to high. However, because the proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads ROW in developed urban and suburban areas of Sacramento, the likelihood of encountering intact archaeological deposits, prehistoric or historic-period, is low.

Per the City of Sacramento 2035 General Plan Master Environmental Impact Report (EIR) (Geology, Soils, and Mineral Resources, page 4.5-7), the City of Sacramento is not highly sensitive for paleontological resources due to the absence of fossil-bearing soils and rock formations.

In September 2016, ESA corresponded with the California Native American Heritage Commission (NAHC), requesting a review of the NAHC's Sacred Lands File (SLF) for the project area. The correspondence revealed that SLF has record of archaeological sites in the project area and also indicated that local Native American Tribal Representatives should be contacted regarding the proposed project. On February 13 and March 30, 2017, representatives from the City and the United Auburn Indian Community (UAIC) met in-person to discuss the proposed project and its potential to impact cultural resources and tribal cultural resources (TCR[s]), and approaches to avoiding potential impacts from the proposed project on such resources. In addition to meetings, a number of emails have been exchanged between the City and UAIC representatives regarding the proposed project and ways to avoid impacts to cultural resources and TCRs. Impacts to TCR are discussed below under Tribal Cultural Resources.

Mitigation Measures CUL-1 and CUL-2 were, in part, developed during project consultation with the UAIC, as was the project Archaeological Monitoring and Unanticipated Discovery Plan, which will guide implementation of Mitigation Measures CUL-1 and CUL-2.

Discussion

a) **No Impact**. A significant impact would occur if the project caused a substantial adverse change to a historical resource, herein referring to historic-period architectural resources or the built environment, including buildings, structures, and objects. A substantial adverse change includes the physical demolition, destruction, relocation, or alteration of the resource.

No physical impacts to any buildings themselves are anticipated to result from the proposed project, as construction would occur away from buildings along extant connecting pipeline alignments that connect buildings to the water main in existing road ROW. As such, the proposed project is not anticipated to affect any built environment resources.

b) **Less than Significant with Mitigation**. This section discusses archaeological resources, both as historical resources, according to CEQA Guidelines Section 15064.5, as well as

unique archaeological resources, as defined in PRC Section 21083.2(g). A significant impact would occur if the proposed project would cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

Through a records search and background research, four previously recorded archaeological resources were identified in the project area: P-34-000064, P-34-000104, P-34-000235, P-34-000248. None of these resources have been evaluated for eligibility to qualify as an historical resource, per CEQA Guidelines Section 15064.5, or unique archaeological resource, per PRC Section 21083.2.

Though the potential for buried archaeological resources could be considered high for some portions of the project area not disturbed by modern development, the work proposed by the proposed project would occur primarily in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads ROW in developed urban and suburban areas. Therefore, the actual likelihood of encountering intact portions of any previously unrecorded archaeological resources is low.

Because four previously recorded archaeological resources are in the project area, any impacts to the resources resulting from installation of proposed project facilities could be potentially significant if any of the four resources were found to qualify as an historical resource, per CEQA Guidelines Section 15064.5, or a unique archaeological resource, as defined in PRC Section 21083.2(g), and the impact was found to cause a substantial adverse change in the significance of the resource, as defined in CEQA Guidelines Section 15064.5. If any previously unrecorded archaeological resource is present in the project area and qualifies as a historical resource, per CEQA Guidelines Section 15064.5, or as a unique archaeological resource, as defined in PRC Section 21083.2(g), any impacts to the resource resulting from the proposed project could be potentially significant.

During construction, observation would be employed by the Contractor and the Engineer to ensure that any cultural resources identified are treated in accordance with the guidelines set forth in CEQA in accordance with DOU's standard contract specifications. Specifically, construction activities will be monitored nearing depths of native soil, and trenches will be monitored for any cultural indicators such as changes in soil color, composition, or texture; human bone; artifacts; and structural remains and features.

Mitigation Measures CUL-1 and CUL-2 would be employed to reduce potential significant impacts to previously recorded or previously unrecorded archaeological resources to a less-than-significant level.

Mitigation Measure CUL-1: Workforce Training and Archaeological Monitoring of Project Ground-Disturbing Activities for Previously Recorded Tribal Cultural Resources and Archaeological Resources (P-34-000064, P-34-000104, P-34-000235, and P-34-000248)

a) Prior to grading, a preconstruction training session conducted by a qualified archaeologist shall be held for all construction personnel and staff. Training

will cover procedures to be followed and appropriate conduct to be adhered to if archaeological materials, including TCRs, are encountered during the project work. All sessions will be conducted in person. Training will include:

1) *Purpose of archaeological monitoring;*
2) *Identifying archaeological resources; and*
3) *Maintaining proper discovery protocols during construction.*

b) *The City shall prepare a map of the project area, in coordination with Native American Tribal Representatives, identifying previously recorded archaeological resources and locations of TCRs—these areas to be collectively known as "sensitive areas"—for use by the City, Contractor, archaeologist and Native American monitor. The map shall be subject to California law regarding confidentiality of such materials.*

c) *All excavation work within the areas identified as sensitive areas shall be hand excavated or excavated with small mechanized equipment. Heavy equipment is prohibited in these areas except for the purposes of lifting equipment and/or materials above ground level.*

d) *An archaeologist meeting, or supervised by an archaeologist meeting, the Secretary of the Interior's Professional Qualification Standards for Archeology, in addition to a Native American monitor, will conduct archaeological construction monitoring for all project ground-disturbing activities within the sensitive areas agreed upon by the City and Native American Tribal Representatives and kept on file at the City.*

e) *A Native American monitor shall be employed to conduct monitoring of project construction activities for sensitive areas. The conduct and work of any Native American monitor shall be consistent with the California Native American Heritage Commission (NAHC) Guidelines for Native American Monitors/Consultants (NAHC, 2005).*

f) *Potential TCRs discovered during project work shall be treated in consultation with the Native American monitor on site.*

g) *If discovery is made of items of potential archaeological resources, including TCRs, the procedures set forth in Mitigation Measure CUL-2 shall be followed.*

Mitigation Measure CUL-2: Unanticipated Discovery Protocol for Archaeological Resources and Human Remains

If prehistoric or historic-period archaeological resources are encountered by the archaeological monitor, Native American monitor, or construction personnel during Project implementation, all construction activities within 100 feet shall halt and the City shall be notified. Prehistoric archaeological materials include, for example, obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone,

concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.

A qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, and relevant Native American representatives (to be identified by the NAHC if the resource is Native American in origin) shall inspect the findings within 24 hours of discovery. If the City determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) and that the project has potential to damage or destroy the resource, construction shall cease in an area determined by the archaeologist until a mitigation plan has been prepared and implemented to the satisfaction of the archaeologist (and Native American representatives, if applicable). Any TCRs discovered during project work shall be inspected within 24 hours by the Native American Monitor and shall be treated in consultation with Native American Tribal Representatives on site, with the goal of preserving in place with proper treatment.

Consistent with PRC 21083.2 and CEQA Guidelines Section 15126.4(b)(3), a mitigation plan shall be developed and implemented and shall recommend preservation in place or, if preservation in place is not feasible, data recovery through excavation. If preservation in place is feasible, this may be accomplished through one of the following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before building appropriate facilities on the resource site; or (4) deeding resource site into a permanent conservation easement. If preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to recover the scientifically consequential information from and about the resource, which shall be reviewed and approved by the City prior to any excavation at the resource site. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources, not tribal cultural resources, would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the Project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

In the event of discovery or recognition of any human remains during project implementation, project construction activities within 100 feet of the find shall cease and the City shall be contacted by onsite construction crews. The City will contact the Sacramento County Coroner in accordance with PRC Section 5097.98 and California Health Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the NAHC. As provided in PRC Section 5097.98, the NAHC will identify the person or persons believed most likely to be descended from the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.

c) **Less than Significant**. A significant impact would occur if the project would destroy a unique paleontological resource or site, or a unique geologic feature. Paleontological resources are the fossilized evidence of past life found in the geologic record. Despite the tremendous volume of sedimentary rock deposits preserved worldwide, and the enormous number of organisms that have lived through time, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils—particularly vertebrate fossils—are considered to be nonrenewable resources. Because of their rarity, and the scientific information they can provide, fossils are highly significant records of ancient life.

Rock formations that are considered of paleontological sensitivity are those units that have yielded significant vertebrate or invertebrate fossil remains. This includes, but is not limited to, sedimentary rock units that contain significant paleontological resources anywhere within its geographic extent. As stated in the City of Sacramento 2035 General Plan Master EIR, the City of Sacramento is not highly sensitive for paleontological resources due to the absence of fossil-bearing soils and rock formations. In addition, the proposed project would occur in developed portions of the City that have been disturbed over time with depth of excavation being 6 feet or less; therefore, there is little potential for the underlying materials to contain fossils and this impact would be less than significant. However, although not required because there is a low potential to uncover paleontological resources during installation of proposed project infrastructure, implementation of Mitigation Measure CUL-3 would further reduce the potential that previously unknown resources could be damaged or destroyed.

Mitigation Measure CUL-3: Unanticipated Discovery Protocol for Paleontological Resources

If discovery is made of items of paleontological interest, the contractor shall immediately cease all work activities in the vicinity (within approximately 100 feet) of the discovery. After cessation of excavation, the contractor shall immediately contact the City. The contractor shall not resume work until authorization is received from the City. Any inadvertent discovery of paleontological resources during construction shall be evaluated by a qualified paleontologist. If it is determined that the project could damage a unique paleontological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines. If avoidance is not feasible, the paleontologist shall develop a treatment plan in consultation with the City.

d) **Less than Significant with Mitigation.** Human remains were recorded in association with one of the previously recorded archaeological resources in the project area, P-34-000248, and could be present at the other three previously recorded archaeological resources in the project area. If construction activities associated with the proposed project were to disturb any such human remains, it could be potentially significant under CEQA.

Any such potential significant impacts to human remains would be reduced to a less than significant level by implementing Mitigation Measures CUL-1 and CUL-2.

Tribal Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
TRIBAL CULTURAL RESOURCES — Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined PRC § 5020.1(k), or	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Environmental Setting

The areas of project activity are within developed areas of the City. The characteristics of the development were described and explained in the cultural resources section, above. The proposed work includes the installation of water meters at a location along the existing pipeline connection from the existing water main to the residential or commercial structure. The areas where the meters will be installed are within areas that have had previous excavation and disturbance as the water line connections from the main to the structures has already occurred and been in place since the development of the subject neighborhoods.

California law, specifically PRC Sections 21074 and 21083.09, requires the City of Sacramento, as lead agency, to notify tribes that have requested such notice regarding projects for which the City will prepare a Mitigated Negative Declaration. The City has received two such requests and notified the tribes of this project. The United Auburn Indian Community (UAIC) responded with a request for consultation. City Staff and Native American Tribal Representatives are in continuing consultation for the project and have discussed the potential for TCRs within the project area. Discussions of the areas of importance and sensitivity within the project area include the history of the areas and the role they played in the lives of Native Americans. The nature of the areas of concern, including the types of materials that may be present, was discussed along with the importance of preserving in place, treating with the proper dignity and respect. Work within the portions of the project area identified as sensitive areas will be coordinated with Native American Tribal Representatives so that any discovery of resources will be treated appropriately.

As described in the cultural resources section, above, ESA corresponded with the NAHC in September 2016, requesting a review of the NAHC's SLF for the project area. The correspondence revealed that SLF has record of archaeological sites in the project area and also indicated that local Native American Tribal Representatives should be contacted regarding the proposed project. On February 13 and March 30, 2017, representatives from the City and the

UAIC met in-person to discuss the proposed project and its potential to impact cultural resources and TCRs, and approaches to avoiding potential impacts from the proposed project on such resources. In addition to meetings, a number of emails have been exchanged between the City and UAIC representatives regarding the proposed project and ways to avoid impacts to cultural resources and TCRs.

Mitigation Measures CUL-1 and CUL-2 were, in part, developed during project consultation with the UAIC, as was the project Archaeological Monitoring and Unanticipated Discovery Plan, which will guide implementation of Mitigation Measures CUL-1 and CUL-2.

Discussion

a, b) **Less than Significant with Mitigation.** This section discusses TCRs as historical resources, as defined in PRC Section 21084.1. A significant impact would occur if the project would cause a substantial adverse change to a TCR through physical demolition, destruction, relocation, or alteration of the resource.

Through discussions with Native American Tribal Representatives, four areas of sensitivity were identified. These areas coincided and were in general similarity with the four previously recorded archaeological resources identified in the project area through the records search, discussed in the section above: P-34-000064, P-34-000104, P-34-000235, P-34-000248. None of these resources have been evaluated for eligibility to qualify as an historical resource, per CEQA Guidelines Section 15064.5, or unique archaeological resource, per PRC Section 21083.2.

Though the potential for buried TCRs could be considered high for portions of the project area not disturbed by modern development, the work proposed by the proposed project would occur in previously disturbed areas, along an existing water pipeline connections from the water main to adjacent buildings, in back and front yards, alleys, sidewalks and within existing roads ROW in developed urban and suburban areas. Therefore, the actual likelihood of encountering portions of any previously undisturbed TCRs is low.

Because four areas of sensitivity for TCRs have been identified that generally coincides with previously recorded archaeological resources in the project area, any impacts to the resources resulting from installation of proposed project facilities could be potentially significant if any of the four resources were found to qualify as an historical resource per CEQA Guidelines Section 15064.5 and the impact was found to cause a substantial adverse change in the significance of the resource, as defined in CEQA Guidelines Section 15064.5.If any previously undisturbed TCR is present in the project area and qualifies as a historical resource, per CEQA Guidelines Section 15064.5 any impacts to the resource resulting from the proposed project could be potentially significant.

During construction, observation would be employed by the Contractor and the Engineer to ensure that any TCRs identified are treated with respect and dignity as overseen by Native American Tribal representatives and accordance with the guidelines set forth in CEQA in accordance with DOU's standard contract specifications. Construction

activities will be monitored nearing depths of native soil, and trenches will be monitored for any cultural indicators such as changes in soil color, composition, or texture; human bone; artifacts; and structural remains and features.

Mitigation measures CUL-1 and CUL-2 would be employed to reduce potential significant impacts to TCRs to a less-than-significant level.

2.6 Geology, Soils, and Seismicity

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY and Soils — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Environmental Setting

The City of Sacramento is located within an area of relatively low seismicity, and there are no designated Alquist-Priolo Fault Zones. According to the City of Sacramento General Plan, there are no known faults within the City or the greater Sacramento region (City of Sacramento, 2015). However, significant earthquakes have occurred on previously undetected faults. Known faults located nearest to the proposed project are the Foothills fault system approximately 30 miles to the northeast, the Midland Fault over 20 miles to the southwest, and the Dunnigan Hills Fault approximately 25 miles to the northwest. Other faults in the region include the Concord-Green Valley fault and Hunting Creek-Berryessa fault. Both are located approximately 40 miles from the proposed project and are capable of producing 6.9 Mw earthquakes. The Greenville fault is located approximately 45 miles from the proposed project and is capable of producing a 6.8 Mw earthquake. The West Napa fault is also located approximately 45 miles from the proposed project and could produce a 6.5 Mw earthquake (City of Sacramento, 2015).

The peak horizontal ground acceleration values depicted on the California Geological Survey (CGS) probabilistic seismic hazards assessment map represent estimates of the ground-shaking

intensity likely to occur in a given area as a result of earthquake events on nearby faults, and can be used to assess the relative seismic ground-shaking hazard for a given region. According to the City's General Plan, the California Department of Conservation and United States Geologic Service (USGS) map (DOC and USGS, 1996) shows that Sacramento and the surrounding area have an estimated 10 to 20 percent peak ground acceleration. The probabilistic peak horizontal ground acceleration value, and thus the seismic ground-shaking hazard for the project area, is relatively low, ranking among the lowest in the State (City of Sacramento, 2015).

Soil resources in the Richmond Grove area of the project consist of the Cosumnes-Urban land complex, partially drained, 0 to 2 percent slopes. This soil complex is very deep and artificially drained, has slow permeability, high shrink-swell potential, and low erosion potential.

Soil resources in the South Land Park area of the project consist of the Egbert-Urban land complex, 0 to 1 percent slopes. This soil complex is very deep and artificially drained, has slow permeability, high shrink-swell, and slight erosion potential. Galt-Urban land complex, 0 to 1 percent slopes. This soil complex is moderately deep and moderately well-drained, has slow permeability, high shrink-swell potential, and slight erosion potential. Lang-Urban land complex, drained, 0 to 2 percent slopes. This soil complex is very deep and artificially drained, has high permeability, low shrink-swell potential, and slight erosion potential, and San Joaquin-Urban land complex, 0 to 2 percent slopes. This soil complex is moderately well drained, has moderately high permeability, low shrink-swell potential, and moderate erosion potential. Tinnin-Urban land complex, 0 to 8 percent slopes. This soil complex is well drained, has high permeability, has a low shrink-swell potential, and moderate to high erosion potential.

Discussion

a) **No Impact.** The proposed project area is not located in an Alquist-Priolo Earthquake Fault Zone, as defined by the California State Department of Conservation, Geological Survey (CGS, formerly the Division of Mines and Geology), and no active or potentially active faults exist on or in the immediate vicinity of the proposed project area. Additionally, the project area is located in an area of flat topography that is not subject to landslides. The proposed project involves the installation of water meters and associated infrastructure and would not expose people or structures to potential adverse effects as a result of seismic activity or unstable soil conditions. Installation of the replacement water services, if necessary, would involve trenching and excavating on primarily level terrain and would incorporate the use of trench shoring measures consistent with the California Building Standards Code (CBC) requirements and the National Earthquake Hazards Reduction Program (NEHRP), which includes improved building codes. As a result, there would be minimal risk of trenches collapsing due to unstable soil conditions due to seismic events and no impact would occur.

b, c, d) **Less than Significant.** The U.S. Department of Agriculture, Natural Resources Soil Conservation Service classifies soils in the vicinity of the proposed project area as unlikely to erode (NRCS, 2016). As a result, the potential for soil erosion during construction of the proposed project would be minimal. As described in the

Environmental Setting discussion above, the project site contains some soils with a high shrink-swell potential (NRCS, 2016). Compliance with California Building Code (CBC) standards and guidelines established by the American Water Works Association would ensure that the proposed project would be designed consistent with design standards that would reduce the risks associated with expansive or unstable soils. This impact is considered less than significant. Impacts associated with construction air emissions and water quality are discussed in Environmental Checklist Items 3 and 9, respectively.

e) **No Impact.** The proposed project does not include the installation of any septic systems of alternative wastewater disposal systems and no impact would occur.

2.7 Greenhouse Gas Emissions

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Setting

CEQA requires lead agencies to consider the reasonably foreseeable adverse environmental effects of projects they are considering for approval. Greenhouse Gas (GHG) emissions have the potential to adversely affect the environment because they contribute to global climate change. In turn, global climate change has the potential to: raise sea levels, affect rainfall and snowfall, and affect habitat.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

In 2012, City of Sacramento adopted a community wide Climate Action Plan (CAP). The CAP outlines multiple initiatives intended to help the City achieve its overall goals of reducing community-wide emissions by 15% below 2005 levels by 2020, 38% below 2005 levels by 2030, and 83% below 2005 levels by 2050. Included in the CAP are a comprehensive set of strategies, measures and implementing actions to achieve the 2020 GHG reduction target. These GHG reduction measures and actions apply to both existing sources within the City as of the 2005 baseline and projected emissions from new growth and development anticipated in the 2035 General Plan. The CAP also includes targets for reducing GHG emissions from internal operations (IO CAP) by 22 percent below 2005 levels by 2020 along with a long-term objective of achieving IO GHG reductions of 83 percent below 2005 levels by 2050. Reduction targets are established in General Plan Policy ER 6.1.6, which also calls for maintenance and implementation of the 2016 IO CAP. The 2016 IO CAP includes specific strategies including improvements in water management efficiencies and reduction in community-water water demand through use of advanced metering infrastructure. In addition, the CAP identifies potentially adverse physical effects related to climate change on the community and includes specific adaptation measures to address and mitigate such effects.

Discussion

a, b) **Less than Significant.** The City's CAP establishes requirements for projects to reduce a portion of their estimated GHG emissions to assist the City in reducing GHG emissions to comply with AB 32. The City has created a checklist to assist in demonstrating the consistency of proposed land use development projects with the CAP. The proposed project is not a development project per se, but rather, is part of the City's infrastructure. Construction-related GHG emissions would be primarily from the use of on-road worker trips and haul trips. The construction activities would only require minimal use of off-road vehicles such as excavators, backhoes, or graders known to generate large amounts of GHG emissions. Since the proposed project would not result in an increase in worker trips during operations over existing conditions, there would be no net increase in operational GHG emissions.

The CAP Consistency Review Checklist does not apply to the proposed project because the project is not a land use development. The proposed project is, however, consistent with the strategies included in the 2016 IO CAP that identifies advanced water meter infrastructure as a way to promote water conservation; thereby, reducing energy use and associated GHG emissions attributed to the construction and operation of new water diversion and treatment facilities. For these reasons, the proposed project would have a less-than-significant impact.

2.8 Hazards and Hazardous Materials

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
8.	**HAZARDS AND HAZARDOUS MATERIALS — Would the project:**				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Environmental Setting

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term “hazardous material” is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment. In some cases, past uses can result in spills or leaks of hazardous materials to the ground, resulting in soil and groundwater contamination. The use, storage, transportation and disposal of hazardous materials are subject to numerous federal, State and local laws and regulations.

Information about hazardous materials sites in the project area was collected by conducting a review of the California Environmental Protection Agency’s (CalEPA) Cortese List Data Resources (Cortese List) and the State Water Resources Control Board’s GeoTracker list. The

Cortese List includes data resources that provide information regarding the facilities or sites identified as meeting the Cortese List requirements. The Cortese List is updated at least annually, in compliance with California regulations (California Code Section 65964.6(a)(4)) and includes federal superfund sites, state response sites, non-operating hazardous waste sites, voluntary cleanup sites, and school cleanup sites. The GeoTracker list shows Underground Storage Tanks (UST). Based on a review of the Cortese List conducted in November 2016, 11 listed sites are located within 0.25 miles of the project area (DTSC, 2016). However, none are located directly within the project area. Five sites are leaking underground storage tank (LUST) cleanup sites, four of which have gasoline as the listed potential contaminant of concern. The fifth LUST site has gasoline and benzene as the listed potential contaminant of concern. Three sites are Cleanup program sites. The first site has 1,1,1-trichloroethane (TCA), other chlorinated hydrocarbons, tetrachloroethylene (PCE) as the listed potential contaminants of concern. The second has pesticides/herbicides as the listed potential contaminants of concern. The third has tetrachloroethylene (PCE), trichloroethylene (TCE) as the listed potential contaminants of concern. One site is a voluntary cleanup site with potential contaminants of concern including polynuclear aromatic hydrocarbons (PAHS), TPH-diesel, and TPH-motor oil. One site is a state response or National Priorities List (NPL) with potential contaminants of concern including dichlorodiphenyldichloroethylene (DDE), dichlorodiphenyltrichloroethane (DDT), toxaphene, malathion, and parathion. One site is a formerly used defense site (FUDS) with no specified potential contaminants of concern.

Seven schools are within one-quarter (1/4) mile of the project area. This includes: The Met Sacramento at 810 V Street, William Land Elementary School at 2120 12th Street, Sol Aureus College Prepatory at 6620 Gloria Drive, Caroline Wenzel Elementary School at 6870 Greenhaven Drive, New Technology High School at 1400 Dickson Street, Alice Birney Elementary School at 6251 13th Street, and Pony Express Elementary School at 1250 56th Avenue. However, only Alice Birney Elementary School and Pony Express Elementary School are within the project area.

Discussion

a, b) **Less than Significant.** Construction activities would require the use of limited amounts of commonly used materials such as diesel, gasoline, solvents, hydraulic fluid, and grease and other compounds not considered acutely hazardous or hazardous when used in small quantities. However, because federal, State, and local laws and regulations govern the transport, use, storage, handling and disposal of hazardous materials, use of hazardous materials associated with proposed project construction would be minimized and/or avoided and this impact would be less than significant. There would be no change in the use of hazardous materials with operation of the proposed project over current conditions.

c) **Less than Significant.** As discussed previously, the proposed project is located within a ¼-mile of seven schools. Two of the seven schools are located within the project area. As described under Environmental Checklist Item 8a and b, construction of the proposed project would require the use of limited amounts of commonly used materials such as diesel, gasoline, solvents, hydraulic fluid, and grease and other compounds not considered acutely hazardous or hazardous when used in small quantities. Transport, use,

storage, handling and disposal of hazardous materials would be conducted in accordance with applicable laws and regulations potential risk of upset and associated exposure would be minimized and/or avoided and this impact would be less than significant. There would be no change in the use of hazardous materials with operation of the proposed project over current conditions.

d) **No Impact.** The proposed project is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List) and therefore would not create a significant hazard to the public or the environment from identified hazardous materials sites. No known hazardous materials exist within the project area. Therefore, no impact would occur.

e, f) **No Impact.** The Sacramento Executive Airport is located approximately 0.16 miles east of the project area. However, the proposed project does not include the installation of any above ground structures or include any activities that would impair operations of the Sacramento Executive Airport or any other airport use and, therefore, would not affect airport safety and no impact would occur.

g) **Less than Significant.** Installation of water services, if necessary, are typically by directional drilling, but some open trench techniques could be required within paved roadways. During installation, any trenches left open overnight would be covered. After installation is complete, all trenches would be backfilled and roadways would be resurfaced and returned to preconstruction conditions. Therefore, the proposed project would not interfere with an adopted emergency response plan or emergency evacuation plan. In addition, given the urban nature of the area, alternative routes are anticipated to be readily available. Therefore, this impact would be less than significant.

h) **No Impact.** The proposed project includes installation of water meters and associated infrastructure in urban areas of Sacramento that would not increase a risk of exposure of structures or persons to wild fires. As a result, no impact would occur.

2.9 Hydrology and Water Quality

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
9.	**HYDROLOGY AND WATER QUALITY — Would the project:**				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☒
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☐	☒
e)	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Environmental Setting

The City of Sacramento is located at the confluence of the Sacramento and American Rivers in the Sacramento River Basin. The Sacramento River Basin encompasses about 27,000 square miles and is bound by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Sacramento–San Joaquin Delta to the southeast. The Sacramento River Basin is the largest river basin in California, capturing, on average, approximately 22 million acre-feet of annual precipitation (City of Sacramento, 2015).

The Federal Emergency Management Agency (FEMA) is responsible for delineating flood zones within the project area. According to the City of Sacramento's General Plan, the proposed project

is located in areas designated as both a 100-500 year flood zone (moderate hazard) and 500-year flood zone (minimal hazard).

The proposed project is located in the Sacramento Valley Groundwater Basin, within the larger South American Subbasin (DWR, 2004). The subbasin is bounded to the north by the American River, the east by the Sierra Nevada, the west by the Sacramento River, and the south by the Cosumnes and Mokelumne Rivers. Groundwater levels in the basin have fluctuated since the 1960s with levels recovering during the 1995 to 2000 time period (DWR, 2004). According to the Groundwater Information Center Interactive Map Application, groundwater levels in the project area are approximately 25 feet from ground surface (DWR, 2016). Groundwater quality is generally good and suitable for potable or agricultural uses.

Discussion

a, f) **Less than Significant.** Construction activities, such as trenching and excavating, would result in disturbance of soils and sediments that could be carried into the City's drainage system during storm events. Additionally, accidental discharges of construction fuels, oils, hydraulic fluid, grease, and other hazardous substances could contaminate stormwater flows, resulting in a reduction in stormwater quality onsite or downstream of the project area. The State Water Resources Control Board (State Water Board) adopted a statewide general National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges associated with construction activity. Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.

The City's Stormwater Quality Improvement Program (SQIP) contains a Construction Element that guides in implementation of the NPDES Permit for Storm Water Discharges Associated with Construction Activity. This Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain, as appropriate, a site map(s) which shows the construction site perimeter and features, including stormwater collection and discharge points, general topography both before and after construction, and drainage patterns. The SWPPP must list BMPs that will be used to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Compliance with City requirements to protect stormwater inlets would protect receiving waters and require the implementation of BMPs such as the use of straw bales, sandbags, gravel traps, and filters; erosion control measures such as vegetation and physical stabilization; and sediment control measure such as fences, dams, barriers, berms, traps, and basins. City

staff also inspects and enforces the erosion, sediment and pollution control requirements in accordance with City codes (Grading, Erosion and Sediment Control ordinance). Therefore, this impact would be less than significant.

b) **No Impact.** Conversion of natural and other non-paved surfaces to pavement, buildings, roadways, and other impervious surfaces can result in a decrease in the amount of rainwater that can replenish groundwater in those areas. Accordingly, increasing the cover of impervious surfaces can, in some cases, cause a significant reduction in groundwater recharge, resulting in significant impacts to groundwater quantity or quality. The proposed project would involve the installation of water meters and associated infrastructure and would not increase impervious surface over existing conditions. The proposed project should not involve significant pumping of groundwater. Therefore, there would be no change in the rate or amount of groundwater recharge and no change in groundwater levels and no impact would occur.

c-e) **No Impact.** As described in Checklist Item 9b, the proposed project would involve the installation of water meters and associated infrastructure and would not increase impervious surface over existing conditions. Therefore, there would be no change in the amount or rate of surface runoff or change in drainage patterns. As a result, there would be no impacts to drainage system capacity or increased risk of flooding in the project area. See Environmental Checklist Item 9a for a discussion of water quality.

g-j) **No Impact.** The proposed project would not result in the placement of housing within a 100-year flood hazard area or result in any structures that would impede or redirect flood flows. The proposed project would not result in the placement of aboveground facilities within areas subject to 100-year flood hazards. The proposed pipelines would be buried underground. Underground pipelines would not impede or redirect flood flows or otherwise increase the potential for flooding. The project area is not subject to seiche, tsunami, or mudflow. Therefore, no impacts would occur.

2.10 Land Use and Land Use Planning

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
10.	**LAND USE AND LAND USE PLANNING — Would the project:**				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Environmental Setting

The proposed project area is located in the city of Sacramento and is characterized primarily by residential neighborhoods and associated uses, including neighborhood serving commercial uses. (City of Sacramento, 2015).

Discussion

a, b) **No Impact.** The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads ROW in developed urban and suburban areas of Sacramento. It would not physically divide an established community or conflict with land use plans or policies. Therefore, no impact would occur.

c) **No Impact.** As discussed in Environmental Checklist Item 4f, the project area is not within a Habitat Conservation and Natural Community Conservation Plan. Therefore, the proposed project would not conflict with any Habitat Conservation Plan or Natural Community Conservation Plan.

2.11 Mineral Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
11. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Environmental Setting

The proposed project areas have not been identified as areas containing known mineral resources that would be of value to the region.

Discussion

a, b) **No Impact.** The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads in developed urban and suburban areas of Sacramento. There are no known mineral resources in the project area that would be of value to the region and the residents of the area, and there are no locally important mineral resource recovery sites and therefore, no impact would occur.

2.12 Noise

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
12.	**NOISE — Would the project result in:**				
a)	Exposure of persons to or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f)	For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Setting

Sound is mechanical energy transmitted by pressure waves through a medium such as air, while noise is defined as unwanted sound. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hertz[2] (Hz) and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA).[3]

Effects of Noise on People

The effects of noise on people can be placed into three categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning; and
- physiological effects such as hearing loss or sudden startling.

[2] Hertz is a unit of frequency equivalent to one cycle per second
[3] All noise levels reported herein reflect A-weighted decibels unless otherwise stated.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants generally experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation exists in the individual thresholds of annoyance, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so called "ambient noise" level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- In carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- outside of the laboratory, a 3-dBA change is considered a just-perceivable difference when the change in noise is perceived but does not cause a human response;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause adverse response.

The human ear perceives sound in a non-linear fashion; hence the decibel scale was developed. Because the decibel scale is non-linear, two noise sources do not combine in a simple additive fashion, rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Stationary "point" sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 dBA to 7.5 dBA per doubling of distance from the source, depending upon environmental conditions (i.e., atmospheric conditions and noise barriers, either vegetative or manufactured, etc.). Widely distributed noises, such as a large industrial facility spread over many acres or a street with moving vehicles (a "line" source), would typically attenuate at a lower rate, approximately 3 to 4.5 dBA per doubling distance from the source (also dependent upon environmental conditions) (Caltrans, 2013). Noise from large construction sites would have characteristics of both "point" and "line" sources, so attenuation would generally range between 4.5 and 7.5 dBA per doubling of distance.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe

the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (Vdb) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration (FTA, 2006). Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration.

Existing Ambient Noise Environment

The primary contributors to the proposed project area's noise environment include vehicle traffic on adjacent roadways; sounds emanating from residences, including voices, noises from household appliances, and radio and television broadcasts; and naturally occurring sounds such as wind and wind-generated rustling. Generally, intermittent short-term noises do not significantly contribute to longer-term noise averages. Existing noise levels within the project area range from 60 to 70 dB, influenced heavily by existing traffic.

Sensitive Receptors

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication; physiological and psychological stress; and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. Commercial and industrial uses are considered the least noise-sensitive. Sensitive receptor land uses within the Project area include residences and a school (William Land Elementary School). Since water main replacement activities would occur predominately along City streets ROW, it is assumed that off-road equipment used for excavating and installing water meters would operate within 50 feet from single-family homes and the William Land Elementary School.

Discussion

a, d) **Less than Significant.** The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads in developed urban and suburban areas of Sacramento. Since the operational activities associated with the proposed project would only consist of maintenance of the water meters and would not result in any new stationary or transportation-related sources of noise in the project vicinity, operational impacts are not evaluated further.

For assessment of temporary construction noise impacts, construction activities that could occur outside of the City of Sacramento's construction exempt hours (Chapter 8.68.080) (between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday and between the hours of 9:00 a.m. and 6:00 p.m. on Sunday) would constitute a significant impact.

Since trenching activities associated with the installation of water service lines could occur along City streets ROW, it is expected that off-road equipment (e.g., excavators, bobcats) could operate within 50 feet from sensitive land use. The noisiest construction

equipment likely to be used during trenching activities would be from an excavator. According to Caltrans' Road Construction Noise Model, pneumatic tools can generate noise levels of approximately 85 dBA L_{max}/82 dBA L_{eq} from a distance of 50 feet (FHWA, 2006). Construction activities would only occur within City of Sacramento's construction exempt hours (Chapter 8.68.080) between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday and between the hours of 9:00 a.m. and 6:00 p.m. on Sunday (if necessary) and; therefore, would not result in a violation of the City's noise standards. In addition, construction activities would only occur during the daytime hours, when the existing ambient is at its highest (e.g., traffic noise noise); no nighttime hours as defined by the City's Municipal Code would occur and the activities would be limited in duration. This would result in a less than significant impact.

b) **Less than Significant.** The project site is surrounded by single-family residential uses and single institutions use (William Land Elementary School). These sensitive receptors could be located within 50 feet from where construction is proposed to occur. Construction of the proposed project would not require the use of impact pile driving or blasting known to cause excessive vibration. Although construction-related groundborne vibration may be slightly perceptible to people adjacent to onsite construction areas, this effect would be temporary in nature and is expected to diminish as construction activities move from one site to the next. Therefore, the impact would be less than significant.

c) **No Impact.** As discussed in Environmental Checklist Item 12a, there would be no change in noise levels associated with the operation of the proposed project (operation of the water meters) over that which currently exists; therefore, no impact would occur.

e - f) **No Impact.** The proposed project does not involve the development of noise sensitive land uses, and thus, implementation of the project would not expose people to excessive aircraft noise.

2.13 Population and Housing

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
13. POPULATION AND HOUSING — Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a, b, c) The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads ROW in developed urban and suburban areas of Sacramento. It would not induce population growth in the area, either directly or indirectly, and would not displace existing housing or people. Therefore, no impact would occur.

2.14 Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Discussion

a.i-v) **No Impact.** The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads in developed urban and suburban areas of Sacramento. Therefore, there would be no increase in population over that which currently exists and no change in levels of service requiring the need for new or physically altered public services. Therefore, no impacts would occur.

2.15 Recreation

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
15. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a, b) **No Impact.** The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads in developed urban and suburban areas of Sacramento. Therefore, there would be no increase in population over that which currently exists and no need for new or the maintenance of existing recreational facilities and no impact would occur.

2.16 Transportation and Traffic

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION/TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Environmental Setting

Highways

The Richmond Grove area of the proposed project is located adjacent to Interstate 80 Business and is approximately 0.5 miles east of Interstate 5 (I-5). The South Land Park portion of the proposed project is located adjacent to I-5.

City Roadways/Traffic Types

As described previously, the proposed project is located in residential neighborhoods, while some components would occur in commercial and multi-family properties. The majority of the roadways within the project are classified as local streets with two lanes.

10th Street is within the Richmond Grove area of the proposed project site on the west and is classified as an arterial. W Street is located immediately to the south of the Richmond Grove area and is classified as an arterial. 15th Street is located 2 blocks to the east of the Richmond Grove area and is classified as an arterial. T Street is located one block to the north of the Richmond Grove area and is classified as a minor collector. These streets do not have a level of service analysis.

The South Land Park area of the proposed project is bound by Fruitridge Avenue to the north and Freeport Boulevard to the east. Both are classified as arterial. South Land Park Drive crosses through the South Land Park area and is classified as a major collector. 43rd Avenue also crosses through the South Land Park area and is classified as both an arterial and a major collector. Florin Road to the south of the South Land Park area is classified as an arterial. All of the roads are operating at a level of service A-D. Florin road is operating at level E.

The City of Sacramento's General Plan states the level of service (LOS) goal is operate the roadway network at LOS D or better. The segment of Power Inn Road adjacent to the proposed project site is classified in the LOS A-D range and is operating at an acceptable level.

Airports

The nearest airport is the Sacramento Executive, a public airport, located immediately to the east of the proposed project.

Discussion

a, b) **Less than Significant.** Construction activities would involve a minor increase in vehicle trips associated with project construction (construction workers and vehicles to and from work sites) and there would be no permanent change in vehicle trips once construction activities are done.

Construction-related truck traffic would occur between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday and could occur between 9:00 a.m. and 6:00 p.m. on Sundays, if needed. Trips that occur during the week (Monday through Friday) around 7:00 a.m. and 6:00 p.m. would coincide with typical peak-period traffic volumes on area roadways and therefore, would have the greatest potential to effect LOS. The percent increase in traffic volumes related to project construction vehicle trips on the roadways in the project area would not be substantial (falling within the daily fluctuations of traffic volumes). Similarly, the number of construction truck trips would also not be anticipated to be substantial, would take different routes depending on the location of each day's work site, and would be dispersed throughout the work day lessening the effect on traffic conditions in any one hour. LOS standards for roadways indicated in local planning documents are intended to regulate long-term traffic increases from operation of new development, and do not apply to temporary construction projects. As such, the proposed project would not exceed LOS standards established by the City of Sacramento for specific roadways.

Installation of water services, if necessary, are typically by directional drilling, but some open trench techniques could be required within paved roadways. These actions could temporarily disrupt existing transportation and circulation patterns in the vicinity of work sites, with direct disruption of traffic flows and street operations. Lane blockages or street closures during construction would result in a reduction in travel lanes. Once the new pipeline is installed the trenches would be backfilled and the streets would be compacted and paved and returned to existing grade.

In order to manage potential road closures, the City of Sacramento includes a contract specification that requires the preparation of a Construction Traffic Control Plan. This plan would be subject to review and approval by the City Department of Public Works, in consultation with affected transit providers and local emergency service providers including the City of Sacramento Fire and Police departments. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained. At a minimum, the plan would include:

- The time, and day of street closures
- Time of day of arrival and departure of trucks and work hours
- Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting
- Provision of a truck circulation pattern
- Identification of detour routes and signing plan for street closures
- Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas)
- Maintain safe and efficient access routes for emergency vehicles and transit
- Manual traffic control when necessary
- Proper advance warning and posted signage concerning street closures
- Provisions for pedestrian and bicycle safety

A copy of each construction traffic control plan would be submitted to local emergency response agencies and transit providers, and these agencies would be notified at least 30 days before the commencement of construction that would partially or fully obstruct roadways.

Because the proposed project would not exceed LOS standards established by the City of Sacramento for specific roadways, and the City of Sacramento includes a contract specification that requires the preparation of a Construction Traffic Control Plan, this impact is less than significant.

c) **No Impact.** The proposed project would not involve aircraft, nor would the proposed project structures intrude into aircraft flight paths or air traffic spaces. Therefore, no impact would occur.

d) **Less than Significant.** The proposed project would not permanently change the existing or planned transportation network in the vicinity of the project area and would not include the implementation of any new design features that could increase the potential for traffic safety hazards. Because construction trucks carrying construction equipment and materials would share the area roadways with other vehicles, the potential exists for

an increase in traffic safety hazards during construction of the proposed project. However, because the City of Sacramento includes a contract specification that requires the preparation of a Construction Traffic Control Plan, this impact is less than significant.

e) **Less than Significant.** Construction activities would affect access for emergency vehicles traveling past the water main replacement construction zones. Construction within or across streets, and temporary reduction in travel lanes, could result in delays for emergency vehicle access in the vicinity of the worksites. In addition, access to driveways and to cross streets along the construction route could be temporarily blocked due to trenching and paving. This could be an inconvenience to some and a significant problem for others, particularly emergency service providers (e.g., police and fire). However, because the City of Sacramento includes a contract specification that requires the preparation of a Construction Traffic Control Plan, travel through the construction zone by emergency vehicles would be maintained at all times and this impact is less than significant.

f) **No Impact**. The proposed project does not include the development of alternative forms of transportation, or result in an increase in population that would create conditions that conflict with adopted policies supporting alternative transportation. No impact would occur.

2.17 Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
17. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Environmental Setting

The City supplies domestic water from a combination of surface water and groundwater sources. Two water treatment plants supply domestic water by diverting water from the American River and Sacramento River. In addition to the surface water diverted from the two rivers, the City operates groundwater supply wells.

In the South Land Park area of the proposed project, wastewater treatment, collection and disposal in the project area is provided by the Sacramento Area Sewer District (SASD). Wastewater generated in this area is collected by trunk facilities in the Sacramento Area Sewer District and then conveyed via interceptors to the Sacramento Regional Wastewater Treatment Plant (SRWTP).

The Richmond Grove area of the proposed project is within the older Central City area that is served by a system in which sanitary sewage and storm drainage are collected and conveyed in the same system of pipelines, referred to as the Combined Sewer System (CSS).

The South Land Park area is outside of the Central City area and not served by the CSS. The City is divided into approximately 120 drainage basins. Drainage from most of these basins flows to local rivers or creeks or drainage channels through pumping. The City owns and operates 105

storm drainage pumping stations throughout the city. The drainage canals and local creeks eventually drain into the Sacramento and American Rivers

The City collects all residential solid waste for customers within the City. Refuse from the project area is transported to the Sacramento Recycling and Transfer Station (SRTS) at 8491 Fruitridge Road Refuse is then hauled to the Sacramento County Kiefer Landfill. The Kiefer Landfill has a permitted capacity of 117,400,000 cubic yard with only 1.03-percent of the capacity used as of September, 2005. The estimated closure date of the landfill is 2064 (CalRecycle, 2016).

Discussion

a-e) **No Impact.** The proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads in developed urban and suburban areas of Sacramento. Therefore, there would be no increase in population over that which currently exists and no change in water supply or wastewater treatment demand. Furthermore, the proposed project involves installing water meters as a result of AB 2572, which requires installation of water meters on all residential and commercial uses in the City by 2025 which would aid in water conservation. Therefore, implementation of the proposed project would not increase the demand for water or wastewater service or utilities over current conditions and no impact would occur.

c) **No Impact.** As described in Checklist Item 9b, the proposed project would involve the installation of water meters and associated infrastructure and would not increase impervious surface over existing conditions. Therefore, there would be no change in the amount or rate of surface runoff and no impacts to drainage system capacity.

f, g) **Less than Significant.** Proposed project construction activities would generate small amounts of solid waste and is not anticipated to affect the capacity of the local landfill. Operation of the proposed project would not be anticipated to generate solid waste over existing conditions. The project area is served by the Kiefer Landfill. The Kiefer Landfill has a future operation life of approximately 48 years with an expected closure date of 2064. Capacity within the landfill is therefore sufficient to meet project waste disposal needs, and no significant impact to landfill capacity is anticipated. Solid waste would be managed consistent with the requirements of AB 939 and the City's recycling ordinance; therefore, the proposed project would not exceed landfill capacity or violate any applicable solid waste statutes or regulations and this is considered a less-than-significant impact.

2.18 Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
18. MANDATORY FINDINGS OF SIGNIFICANCE —				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

a) **Less than Significant with Mitigation.** Implementation of the proposed project does not have the potential to degrade the quality of the environment or substantially reduce the habitat for fish or wildlife species or impact endangered plants or animal species. As described in Checklist Item 4. Biological Resources, the proposed project involves installation of water meters and associated infrastructure in previously disturbed areas adjacent to buildings, in back and front yards, alleys, sidewalks and within existing roads ROW in developed urban and suburban areas of Sacramento. This work would include the use of small construction equipment and utility trucks by work crews. None of the special-status species with potential to occur in the project area are likely to be directly or indirectly impacted by installation of the proposed project. All project activities would occur in and directly around residential, commercial, and office buildings within disturbed, urban habitat (mostly within roads) and would not extend into any of the species' suitable habitat.

As discussed in Checklist Item 5. Cultural Resources, the records search and background research, identified four previously recorded archaeological resources in the project area. None of these resources have been evaluated for eligibility to qualify as an historical resource, per CEQA Guidelines Section 15064.5, or unique archaeological resource, per PRC Section 21083.2. Though the potential for buried archaeological resources is high for portions of the project area not disturbed by modern development, the work proposed by the proposed project would occur primarily in previously disturbed areas; and, therefore, the actual likelihood of encountering intact portions of any previously unrecorded archaeological resources is low. However, because four previously recorded archaeological resources are in the project area, any impacts to the resources resulting

from installation of proposed project facilities could be potentially significant if any of the four resources were found to qualify as an historical resource per CEQA Guidelines Section 15064.5 or a unique archaeological resource as defined in Section 21083.2(g), and the impact was found to cause a substantial adverse change in the significance of the resource, as defined in CEQA Guidelines Section 15064.5. Also, if any previously unrecorded archaeological resource is present in the project area and qualifies as a historical resource, per CEQA Guidelines Section 15064.5 or as well as unique archaeological resource as defined in Section 21083.2(g), any impacts to the resource resulting from the proposed project could be potentially significant. During construction, observation would be employed by the Contractor and the Engineer to ensure that any cultural resources identified are treated in accordance with the guidelines set forth in CEQA in accordance with DOU's standard contract specifications. Specifically, construction activities will be monitored nearing depths of native soil, and trenches will be monitored for any cultural indicators such as changes in soil color, composition, or texture; human bone; artifacts; and structural remains and features. If prehistoric or historic-era archeological resources are encountered mitigation measures CUL-1 and CUL-2 would be employed to reduce potential significant impacts to previously recorded or previously unrecorded archaeological resources to a less-than-significant level.

b) **Less than Significant with Mitigation.** As discussed in the Checklist, implementation of the proposed project would result in less than considerable contributions to cumulative construction air emissions, vehicle trips, water quality, and solid waste. Less than significant impacts associated with construction activities related to visual character, noise, and use of hazardous materials would not contribute to cumulative impacts due to the localized nature of the effect. As described in Checklist Item 4. Biological Resources, construction of the proposed project work would include the use of small construction equipment and utility trucks by work crews in existing disturbed areas of the City. None of the special-status species with potential to occur in the project area are likely to be directly or indirectly impacted by installation of the proposed project. Therefore, the contribution of cumulative biological impacts would be less than considerable. As discussed in Checklist Item 5. Cultural Resources, the records search and background research, identified four previously recorded archaeological resources in the project area. Potential disturbance or destruction of previously unidentified archaeological resources could contribute to a cumulatively significant impact. However, construction activities will be monitored nearing depths of native soil, and trenches will be monitored for any cultural indicators such as changes in soil color, composition, or texture; human bone; artifacts; and structural remains and features. Furthermore, if prehistoric or historic-era archeological resources are encountered mitigation measures CUL-1 and CUL-2 would be employed to reduce potential contribution to cumulative impacts to less than considerable.

c) **Less than Significant.** As discussed in the Checklist, implementation of the proposed project would result in less than significant impacts associated with construction air emissions, vehicle trips, water quality, noise, use of hazardous materials and solid waste. Therefore, implementation of the proposed project would not have environmental effects which could cause substantial adverse effects on human beings, either directly or indirectly.

2.19 References

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Appendix A

South Land Park and Richmond Grove Water Meter Retrofits Project – Biological Resources Document

Appendix B

South Land Park and Richmond Grove Water Meter Retrofits Project – Cultural Resources Inventory Report

Appendix C
Response to Comments