# FINAL INITIAL STUDY/
# WITH MITIGATED NEGATIVE DECLARATION

## ARCADE-CRIPPLE CREEK TRAIL (SLYVAN ROAD TO STOCK RANCH) EXTENSION PROJECT

**CITY OF CITRUS HEIGHTS, CALIFORNIA**



**JULY 2026**

CITRUS HEIGHTS
CALIFORNIA

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## ARCADE-CRIPPLE CREEK TRAIL (SLYVAN ROAD TO STOCK RANCH) EXTENSION PROJECT

City of Citrus Heights, California

Submitted to:

City of Citrus Heights
6360 Fountain Square Drive
Citrus Heights, CA 95621

Prepared by:

Dokken Engineering
110 Blue Ravine Road, Suite 200
Folsom, California 95630

July 2026

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## General Information About This Document

The Draft Initial Study/Mitigated Negative Declaration (IS/MND) was circulated for public review for a 30-day period from May 15, 2026, through June 15, 2026, in accordance with the requirements of the California Environmental Quality Act (CEQA). This Final IS/MND incorporates revisions made in response to comments received during the public review period. All changes to the Draft IS/MND are identified using track changes for ease of reference.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to City of Citrus Heights, Planning Division, Attn: Daniel Kehrer, Principal Civil Engineer, 6360 Fountain Square Drive, Citrus Heights, CA 95621, (916) 727-4904.

# Table of Contents

General Information About This Document ..... i
INTRODUCTION ..... 1
PROJECT BACKGROUND ..... 1
INITIAL STUDY CHECKLIST ..... 5
SECTION 1.0 - BACKGROUND ..... 5
SECTION 2.0 – ADDITIONAL ENVIRONMENTAL FACTORS AFFECTED ..... 11
SECTION 3.0 - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED ..... 18
SECTION 4.0 - ENVIRONMENTAL CHECKLIST ..... 19
I. AESTHETICS ..... 19
II. AGRICULTURE / FORESTRY RESOURCES ..... 21
III. AIR QUALITY ..... 24
IV. BIOLOGICAL ..... 32
V. CULTURAL RESOURCES ..... 49
VI. ENERGY ..... 52
VII. GEOLOGY AND SOILS ..... 53
VIII. GREENHOUSE GAS EMISSIONS ..... 57
IX. HAZARDS AND HAZARDOUS MATERIALS ..... 61
X. HYDROLOGY AND WATER QUALITY ..... 65
XI. LAND USE AND PLANNING ..... 72
XII. MINERAL RESOURCES ..... 74
XIII. NOISE ..... 76
XIV. POPULATION AND HOUSING ..... 80
XV. PUBLIC SERVICES ..... 82
XVI. RECREATION ..... 84
XVII. TRANSPORTATION/TRAFFIC ..... 85
XVIII. TRIBAL CULTURAL RESOURCES ..... 87
XIX. UTILITIES AND SERVICE SYSTEMS ..... 92
XX. WILDFIRE ..... 94
SECTION 5.0 - AGENCY COORDINATION ..... 98
SECTION 6.0 - REFERENCES ..... 99

**List of Tables**

Table 1. Required Permits, Reviews and Approvals ..... 7
Table 2. SMAQMD Thresholds of Significance ..... 25
Table 3. Attainment at Project Location ..... 28
Table 4. Maximum Daily Average Construction Emissions and Local Thresholds of Significance ..... 29

Table 5. Impacts to Sensitive Natural Habitats ..... 43
Table 6. Soils Types in the Project area ..... 55
Table 7. Right-of-Way Needs within the Project Area ..... 72
Table 8. Noise Area 1 Exterior Noise Standards ..... 76
Table 9. Population Density and Associated Ambient Noise Levels ..... 77
Table 10. Typical Construction Equipment Noise Levels ..... 78
Table 11. Demographics ..... 80

**List of Figures**

Figure 1. Project Vicinity ..... 2
Figure 2. Project Location ..... 3
Figure 3. Project Features ..... 4
Figure 4: Zoning Districts ..... 9
Figure 5. Land Use Designations ..... 10
Figure 6. Waters and Vegetation Communities ..... 36
Figure 7. Project Impacts ..... 40
Figure 8. Citrus Heights Community-wide Greenhouse Gas Emissions Baseline (2005) ..... 58
Figure 9. FEMA Flood Zones ..... 70

**List of Appendices**

Appendix A: Visual Impact Assessment Memorandum
Appendix B: Air Quality Technical Memorandum
Appendix C: Natural Environment Study
Appendix D: Native American Consultation
Appendix E: Hazardous Waste Initial Site Assessment
Appendix F: Water Quality Technical Memorandum
Appendix G: Community Impact Assessment Memorandum
Appendix H: Noise Technical Memorandum
Appendix I: Mitigation Monitoring and Reporting Plan
Appendix J: Public Comments Received

## INTRODUCTION

This Initial Study with Proposed Mitigated Negative Declaration (IS/MND) was prepared for the Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project (Project). The Project proposes to construct a 0.5-mile addition to the planned 16-mile Creek Corridor Trail Project (CCTP).

The Project is located west of Sylvan Road within the City of Citrus Heights in Sacramento County, California, within the Citrus Heights U.S. 7.5-minute Geological Survey (USGS) quadrangle, in Sacramento County, specifically in Sections 17, 18, 19, and 20, Township 10 North, Range 7 East. The Project will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road (**Figure 1. Project Vicinity** and **Figure 2. Project Location**).

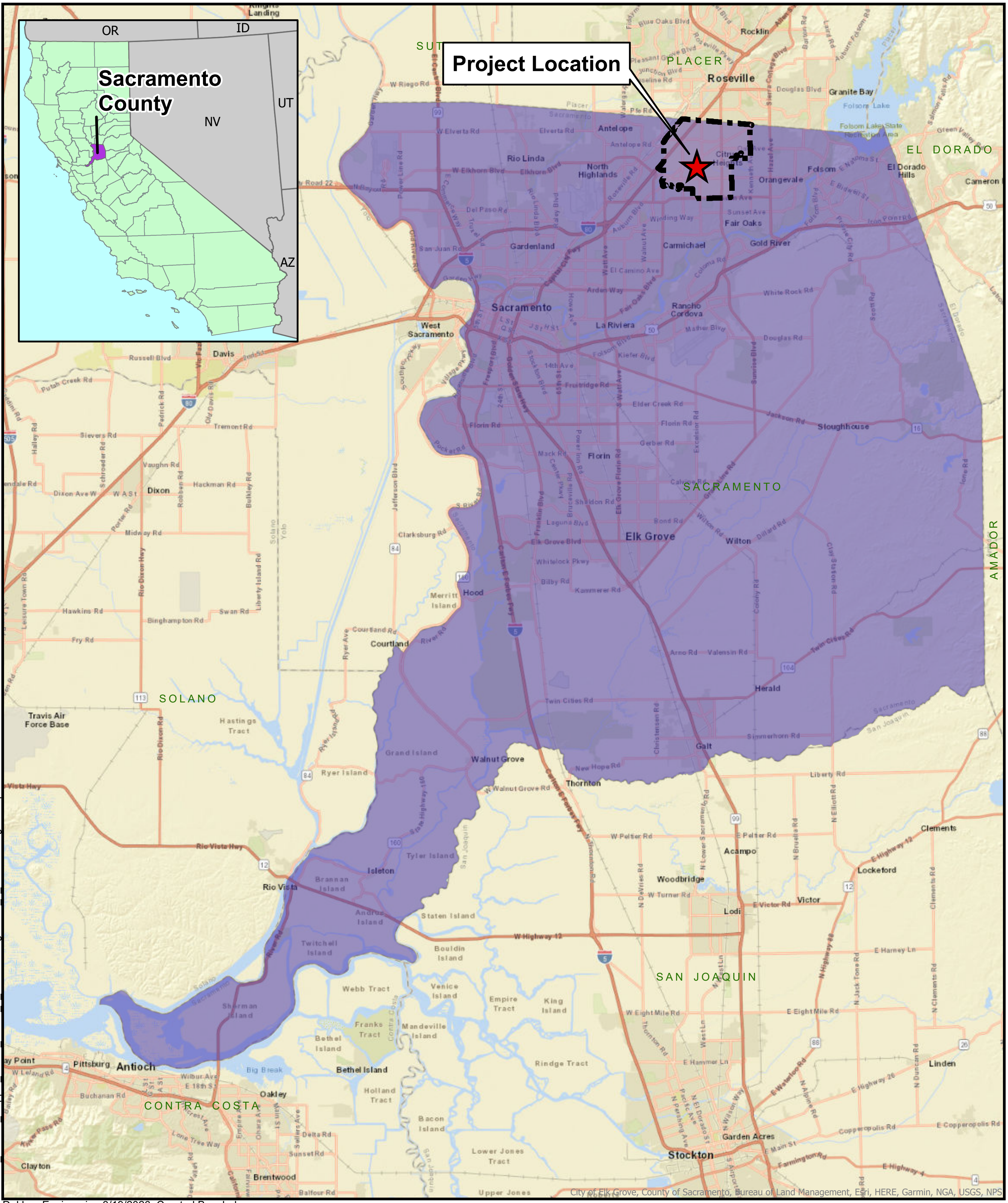
Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, bank protection along a segment of Arcade Creek, and an at-grade signalized pedestrian crossing at Sylvan Road (**Figure 3. Project Features**). Construction activities will involve grading to achieve Americans with Disabilities Act (ADA)-compliant slopes, installing the creek crossing, paving the trail, erecting the solar lighting, constructing bank protection, and adding pedestrian signal infrastructure with minor utility adjustments as needed.

The City of Citrus Heights (City) is the California Environmental Quality Act (CEQA) lead for this Project. This IS/MND relies on CEQA Guidelines Section 15064 in its determination of the significance of environmental effects. According to Section 15064, the finding as to whether a project may have one or more significant effects shall be based on substantial evidence in the record, and that controversy alone, without substantial evidence of a significant effect, does not trigger the need for an Environmental Impact Report (EIR).

## PROJECT BACKGROUND

### Purpose and Need

The purpose of this Project is to construct one of the several planned segments of the CCTP by replacing dirt and narrow concrete paths with an ADA-compliant Class I multi-use trail. This trail extension is needed to enhance pedestrian and bicycle connectivity, provide a safe recreational facility, and improve access through the Arcade Creek greenbelt.

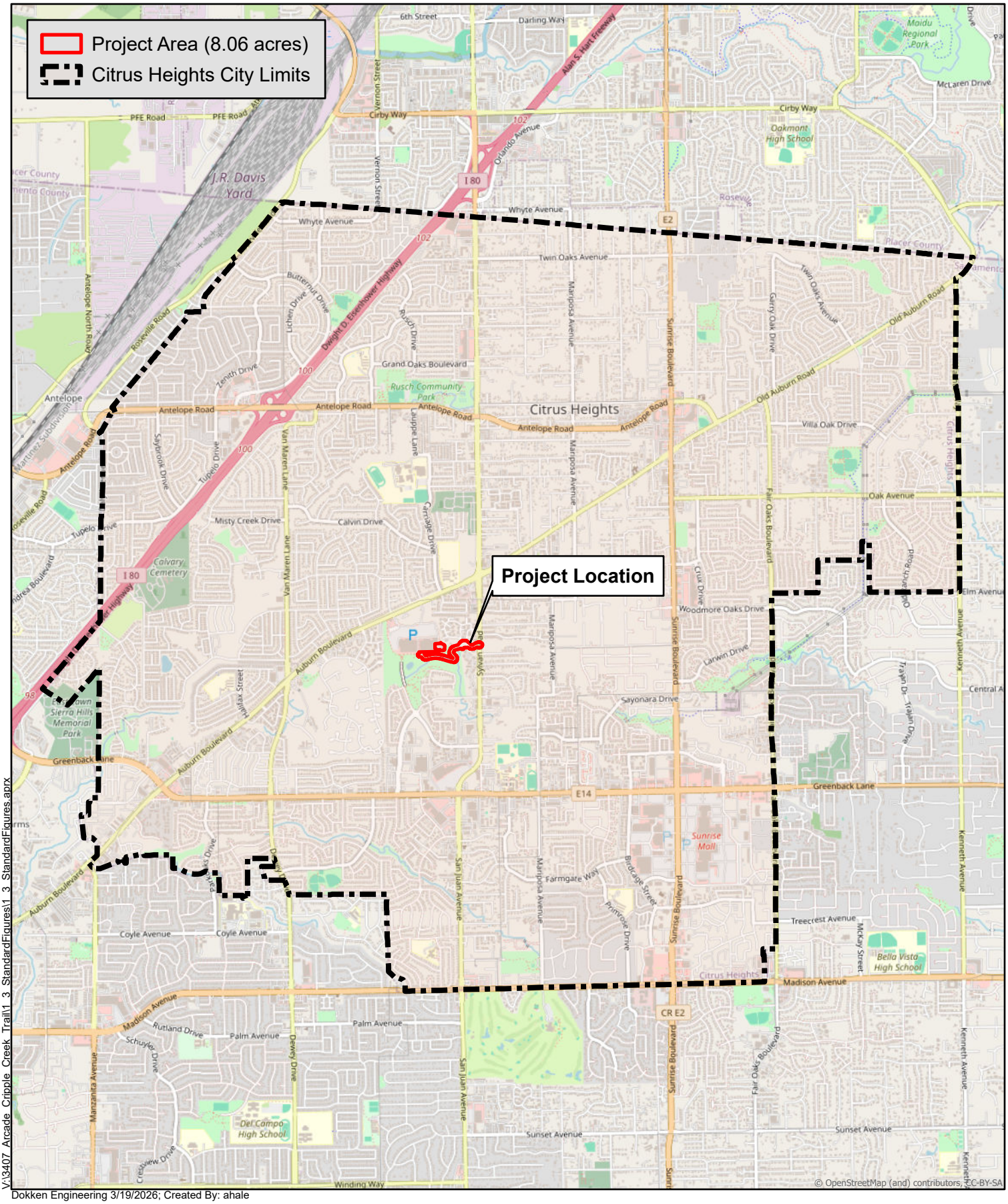



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Dokken Engineering 3/19/2026; Created By: ahale

0 3.5 7 Miles

**Figure 1**
**Project Vicinity**
CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Dokken Engineering 3/19/2026; Created By: ahale

0 1,750 3,500 Feet

**Figure 2**
**Project Location**

CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Source: Dokken Engineering 6/16/2026; Created By: ahale

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**Figure 3**
**Project Features**
CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

# CITY OF CITRUS HEIGHTS

## INITIAL STUDY CHECKLIST

CEQA requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed Project and applicable general plans and regional plans.

An inconsistency between a proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing a proposed project are discussed in the appropriate technical sections.

This section of the initial study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses agricultural resources and the effect of the proposed project on these resources.

For the purposes of this document, the City of Citrus Heights General Plan EIR (CCHGP EIR) (Citrus Heights 2011b) was referenced.

## SECTION 1.0 - BACKGROUND

| | | |
|---|---|---|
| 1. | Project Title: | Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project |
| 2. | Lead Agency: | City of Citrus Heights<br>General Services Department<br>6360 Fountain Square Drive<br>Citrus Heights, CA 95621 |
| 3. | Contact Person: | Daniel Kehrer, Principal Civil Engineer<br>General Services Department<br>6360 Fountain Square Drive<br>Citrus Heights, CA 95621<br>Phone: (916) 727-4904<br>E-mail: dkehrer@citrusheights.net |
| 4. | Project Location: | The Project is located in the City and will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road. The Project lies within the Citrus Heights USGS 7.5-minute quadrangle, in Sacramento County, specifically in Section 26, Township 10 North, Range 6 East. |
| 5. | Applicant: | City of Citrus Heights |
| 6. | General Plan: | CCHGP EIR (Citrus Heights 2011b). |

7. Zoning:

The Project area occurs within several different zoning districts including "RD-5" Low Density Residential, "RD-20" Medium Density Residential, "SPA" Special Planning Area (**Figure 4**. **Zoning Districts**).

8. Description of Project:

The City proposes to construct a 0.5-mile addition to the planned 16-mile CCTP as part of the Project. The Project is funded through the federal Carbon Reduction Program and therefore requires compliance with both the National Environmental Policy Act (NEPA) and CEQA. The lead agency for CEQA compliance is the City of Citrus Heights and the federal lead agency for NEPA compliance is the California Department of Transportation (Caltrans) under delegation from the Federal Highway Administration (FHWA).

The Project is located in the City and will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road. The proposed alignment begins south of the Walmart property boundary and proceeds east through the Stock Ranch Nature Preserve, curving south around Walmart's water quality detention basin. The alignment continues north, crossing a tributary of Arcade Creek, and traverses along the south side of the Huntington Square Apartments complex prior to connecting to Sylvan Road. The alignment terminates east of Sylvan Road at the location of a planned future trail extension segment from Sylvan Road to Mariposa Avenue. The Project has independent utility and would function as a stand-alone improvement.

Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, bank protection along a segment of Arcade Creek, and an at-grade signalized pedestrian crossing at Sylvan Road. Construction activities will involve grading to achieve ADA-compliant slopes, installing the creek crossing, paving the trail, erecting the solar lighting, constructing bank protection, and adding pedestrian signal infrastructure with minor utility adjustments as needed.

To accommodate construction, right-of-way (ROW) acquisitions will be required from several parcels. These include a permanent easement and permit to enter (PTE) from the Sunrise Recreation & Park District and a temporary construction easement (TCE) from Walmart. An existing trail easement exists across the Huntington Square Apartments property and there is potential for this permanent easement to be modified to best incorporate the trail alignment with the physical site features.

Construction access will be provided primarily through the Walmart parking lot under a TCE, as well as a PTE for access from the Huntington Square Apartments parcel. These provisions will allow safe and efficient construction of the trail and its associated improvements.

<u>Purpose and Need</u>

The purpose of this Project is to construct one of the several planned segments of the CCTP by replacing dirt and narrow concrete paths with an ADA-compliant Class I multi-use trail. This trail extension is needed to enhance pedestrian and bicycle connectivity, provide a safe recreational facility, and improve access through the Arcade Creek greenbelt.

**Anticipated Construction Equipment**

Typical construction equipment would include the following:

- Crane
- Earthmover
- Dump truck
- Concrete mixer
- Generator
- Paver
- Jackhammer
- Pile driver

The highest construction-related noise levels would be for pile driving (up to 90 A-weighted decibels (dBA) at a distance of 50 feet) involved in installation of the bridge supports for the creek overcrossing structure and for jackhammering (90 dBA at a distance of 50 feet) involved in removing the existing concrete pathways on the apartment complex property. All construction work for the Project will comply with the City Municipal Code and Caltrans Standard Specifications for noise control.

**Utilities**

The following utilities are present within the Project area:

- AT&T
- Citrus Heights Water District
- Cogent Communications
- Comcast
- Sacramento Area Sewer District
- Level 3/Lumen
- PG&E
- SMUD

Utility coordination may be required for a few utilities; however, services will not be disrupted.

**Permits**

The permits, reviews and approvals listed below in **Table 1. Required Permits, Reviews and Approvals** are required for Project construction.

**Table 1. Required Permits, Reviews and Approvals**

| Responsible Agency | Permit/Approval | Status |
|---|---|---|
| Regional Water Quality Control Board (RWQCB) | National Pollutant Discharge Elimination System (NPDES) General Permit 2022-0057-DWQ for Storm Water Discharges Associated with | Will be Obtained Prior to Construction. |

| | Construction Activity | |
|---|---|---|
| State Water Quality Control Board (SWQCB) | Section 401 Certification | Will be Obtained Prior to Construction. |
| California Department of Fish and Wildlife (CDFW) | 1602 Streambed Alteration Agreement | Will be Obtained Prior to Construction. |
| U.S. Army Corps of Engineers (USACE) | Section 404 Permit | Will be Obtained Prior to Construction. |
| City of Citrus Heights | Tree Removal Permit | Will be Obtained Prior to Construction. |

**Coordination Efforts:**

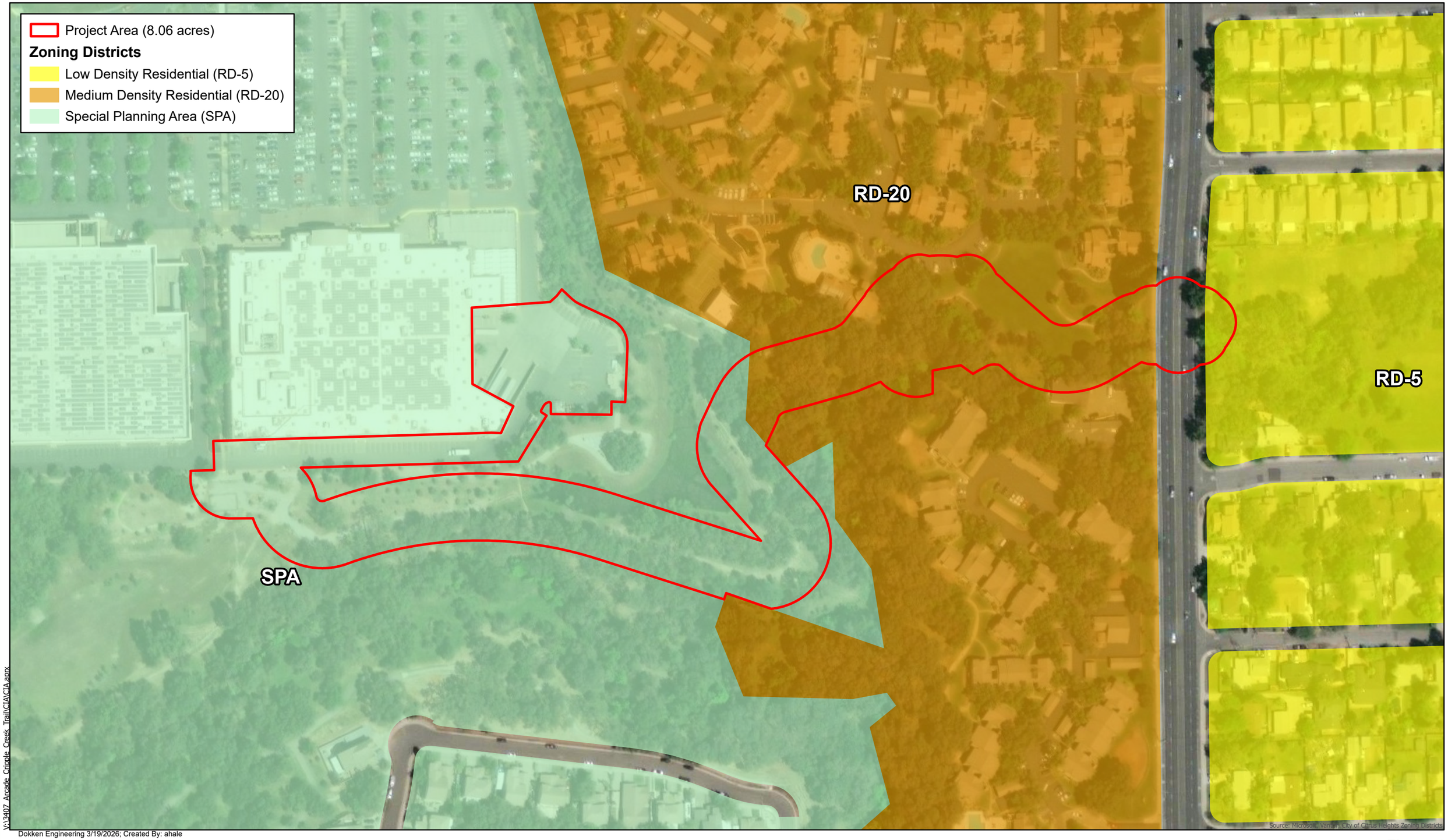
The proposed Project area exceeds one acre, therefore a NPDES 402 General Permit for Storm Water Discharges Associated with construction activity will be obtained prior to construction.

The Project will result in temporary impacts to a total of 0.10 acre of waters of the U.S. and state (Arcade Creek and its tributary), as well as approximately 0.01 acre of permanent impacts. Prior to construction, the City will obtain a Section 401 Certification, a Section 1602 Streambed Alteration Agreement, and a non-notifying Section 404 Nationwide Permit.

Lastly, prior to construction, a tree permit will be obtained for all protected trees that will be removed by the Project.

9. Surrounding Land Uses and Setting:

Existing land use designations within and in the vicinity of the Project area include General Commercial (Costco and Walmart), Open Space (Arcade Creek and Stock Ranch Nature Preserve), low density residential, and medium density residential (**Figure 5. Land Use Designations**).




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Dokken Engineering 3/19/2026; Created By: ahale

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**Figure 4**
**Zoning Districts**
CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Dokken Engineering 6/18/2026; Created By: ahale

0 75 150 Feet

**Figure 5**
**Land Use Designations**
CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

## SECTION 2.0 – ADDITIONAL ENVIRONMENTAL FACTORS AFFECTED

The Initial Study is also intended to assess whether any environmental effects of the Project are susceptible to substantial reduction or avoidance by the choice of specific revisions in the Project, by the imposition of conditions, or by other means [15152(b)(2)] of CEQA Guidelines. If such revisions, conditions, or other means are identified, they will be identified as mitigation measures.

This Initial Study relies on State CEQA Guidelines 15064 and 15604.4 in its determination of the significance of environmental effects. According to 15064, the findings as to whether a project may have one or more significant effects shall be based on substantial evidence in the record, and that controversy alone, without substantial evidence of a significant effect, does not trigger the need for an EIR.

This proposed Mitigated Negative Declaration (MND) is a subsequent environmental document that tiers off the General Plan Program EIR, therefore impacts that were adequately addressed in the CCHGP EIR do not need to be repeated in this proposed MND.

The Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project Proposed Mitigated Negative Declaration is a subsequent environmental document to the General Plan EIR. As such, this MND incorporates all applicable mitigation measures adopted with the Final EIR for the General Plan. The following is a summary of additional mitigation measures that were not included in the General Plan EIR. These measures, along with applicable measures from the General Plan EIR that are listed in Section 4.0, will be adopted in a Mitigation, Monitoring, and Reporting Plan for the Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project Proposed MND.

### CCHGP EIR MITIGATION MEASURES INCORPORATED WITHIN THE PROPOSED PROJECT

The following are additional mitigation measures applicable to the proposed Project that were not included within the CCHGP EIR:

**Mitigation Measure 4.7-7: Discovery of Potential Paleontological Resources**

If potential paleontological resources are detected by construction workers or City staff during construction of future land uses, work shall stop immediately, and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include, but are not limited to, construction worker personnel education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures considered appropriate after further consultation.

### ADDITIONAL MITIGATION MEASURES INCORPORATED WITHIN THE PROPOSED PROJECT

The following are additional mitigation measures applicable to the proposed Project that were not included within the CCHGP EIR:

***Aesthetics***

**VIS-1:** Aesthetic treatments on the new paved trail and prefabricated bridge over Arcade Creek will be consistent with other trails and bridges along the CCTP.

**VIS-2:** Lighting along the trail will be downcast to minimize glare. The Project's lighting design must be consistent with the City Citrus Heights lighting guidelines and standards.

***Air Quality***

**AQ-1:** Implement Sacramento Metropolitan Air Quality Management District (SMAQMD) Basic and Enhanced Construction Emission Control Practices to Reduce Fugitive Dust.

The implementing agency will require, as a standard or specification of their contract, the construction contractor(s) to implement basic and enhanced control measures to reduce construction-

related fugitive dust. Although the following measures are outlined in the SMAQMD's CEQA guidelines, they are required for the entirety of the construction area. The implementing agency will ensure through contract provisions and specifications that the contractor adheres to the mitigation measures before and during construction and documents compliance with the adopted mitigation measures.

- Water 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 2 feet of freeboard space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that will be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout 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.
- All trail, and curb/sidewalk paving should be completed as soon as possible.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board (CARB) enforces idling limitations and compliance with diesel fleet regulations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 3 minutes. Provide clear signate that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, Sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.

***Biological Resources***

**BIO-1:** Every individual working on the Project must attend a biological awareness training session conducted by the Project biologist. This training program will include information regarding the sensitive habitats and an overview of special status wildlife species that may be encountered within the work area. During biological awareness training, construction personnel will be briefed on topics including, but not limited to, the protected status of valley elderberry longhorn beetle (VELB) and northwestern pond turtle (NWPT), as well as the need to protect elderberry shrubs, the host plant of VELB.

**BIO-2:** Prior to the start of construction activities, the Project limits adjacent to the Arcade Creek, the Arcade Creek tributary and the riparian woodland habitat will be marked with flagging, staking, or high visibility fencing to ensure construction will not further encroach into adjacent sensitive resources.

**BIO-3:** Best Management Practices (BMPs) will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):

- Exposed soils and material stockpiles will be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction.
- Implementation of the Project shall require approval of a site-specific Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program that will implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques.

- All construction areas will be properly protected to prevent excess erosion, sedimentation, and water pollution.
- All vehicle and equipment fueling/maintenance will be conducted outside of any surface waters and/or sensitive habitat.
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants.
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters.
- All erosion control measures, and storm water control measures will be properly maintained until the site has returned to a pre-construction state.
- All construction materials will be hauled off-site after completion of construction.

**BIO-4:** Permanent effects to stream channel and riparian woodland habitat will be provided compensatory mitigation to result in no net loss of habitat, at an agency-approved mitigation ratio via one of the following compensatory mitigation options:

- payment of an in-lieu fee to an agency-approved mitigation site,
- compensatory off-site mitigation at an agency-approved mitigation site,
- compensatory on-site mitigation, or
- a combination of the above compensatory mitigation options.

**BIO-5:** Native vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with American National Standards Institute (ANSI) A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes

**BIO-6:** Following the completion of construction, all temporary effects to riparian woodland, annual grassland and oak woodland habitat will be recontoured and re-seeded at a 1:1 ratio, to allow for the habitat to return to its previous function. Tree removal will follow final plans and specifications, and any deviation must be approved by a Project biologist. All temporarily disturbed areas will be seeded with a Project biologist-approved native seed mix. Any trees removed from the riparian woodland and oak woodland habitat will be appropriately mitigated for through replanting or other methods in coordination with CDFW and the City of Citrus Heights.

**BIO-7:** A focused rare plant survey will be conducted within the Project area prior to the start of construction. If rare plants are discovered during pre-construction surveys but can be reasonably avoided, an

Environmentally Sensitive Area (ESA) fence will be installed to protect the specimens in place.

If a special status plant specimen is present within the Project area and cannot be fully avoided, the Project biologist will relocate individual(s) and/or collect seeds to ensure the continued existence of the local population. Area of relocation or re-seeding will be at the discretion of the Project biologist but will be located within suitable habitat and within the same watershed of the Project, preferably at a location that is protected in perpetuity.

**BIO-8:** Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1–September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 1 week of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

An initial 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project Biologist and in coordination with wildlife agencies) in the buffer area until a Project Biologist determines the young have fledged. A reduced no-work buffer can be established if determined appropriate by the Project Biologist, and will consider various factors including species of bird, location of nest, stage of nest, existing environment, and type of active work.

**BIO-9:** During the spring/summer season prior to construction the Project biologist must conduct pre-construction Swainson's hawk protocol-level surveys within the Project area plus a 0.25-mile buffer in accordance with CDFW's guide for Swainson's Hawk Technical Advisory Committee. Pre-construction surveys will determine if active nests are present within the Project area or within 0.25 mile of Project activities. If an active nest is discovered within the survey area the Project biologist will determine the appropriate avoidance strategies (e.g., monitoring, no-work buffers, work windows, temporary sound/noise barriers, etc.) to avoid take of the nest and will coordinate with CDFW as needed.

**BIO-10:** To avoid impacts to western pond turtles, the Project biologist will conduct a pre-construction survey of the aquatic and upland habitats within the Project area. Surveys will be conducted no more than 24 hours prior to onset of construction. If a western pond turtle is spotted within an active work area the Project Biologist will be contacted, and work activities will immediately cease within 100 feet of the turtle. Work will not recommence until the turtle has left the Project site on its own volition. In addition, if western pond turtle nests are detected within or adjacent to the Project area, the Project biologist will mark the nests with high-visibility flagging or fencing and establish a 25-foot no-disturbance buffer around each nest to prevent disturbance until hatching occurs or the biologist determines the nest is no longer at risk.

**BIO-11:** To prevent the inadvertent entrapment of NWPT, all excavated, steep-walled holes or trenches more than 3 inches wide and 1 foot deep will be inspected for NWPT then covered at the close of each working day by plywood or similar materials. If it is not feasible to cover an excavation, one or more escape ramps constructed of earthen fill or wood ≥ 6 inches wide shall be installed. Before such holes or trenches are filled, they must be thoroughly inspected by the biologist for trapped NWPT.

**BIO-12:** Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

**BIO-13:** All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

**BIO-14:** The contractor must not apply rodenticide or herbicide within the Project area during construction.

**BIO-15:** If any wildlife is encountered during the course of construction, said wildlife will be allowed to leave

the construction area unharmed.

***Cultural Resources***

**CR-1:** If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey would be needed if project limits are extended beyond the present survey limits.

**CR-2:** Section 5097.94 of the Public Resources Code (PRC) and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, all ground disturbance within a 100-ft radius must stop and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation and Caltrans Professionally Qualified Staff (PQS) should be contacted. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.

***Greenhouse Gases***

**CC-1:** The implementing agency will require through construction contract terms and specifications that the contractor adheres to the mitigation measures and implements all applicable SMAQMD best management practices for reducing construction-related Greenhouse Gas (GHG) emissions. Documentation will be provided to the implementing agency on a weekly basis. The contract provisions and specifications will authorize the implementing agency to sanction contractors for non-compliance. The implementing agency will consult SMAQMD prior to construction about the most current recommended construction best management practices and will adopt those practices. Practices include the following:

- Improve fuel efficiency from construction equipment:
    - Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes. 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 determined to be running in proper condition before it is operated.
    - Train equipment operators in proper use of equipment, including limiting idling time, minimizing warm-up time, performing routine maintenance, and optimizing equipment use.
    - Avoid using equipment that is larger than the job requires.
    - Use equipment with new technologies (e.g., repowered engines, electric drivetrains).
- Perform on-site material hauling with trucks equipped with on-road engines (if the air districts or CARB determine them to emit less than the off-road engines).
- Use alternative fuels for generators at construction sites, rather than gasoline or diesel (e.g., propane or solar), or use electrical power.
- Use a CARB-approved low-carbon fuel for construction equipment. (NOx emissions from the use of low-carbon fuel must be reviewed and increases mitigated.)
- Encourage and provide carpools, shuttle vans, and transit passes for construction worker commutes.

- Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and using the most efficient heating and cooling units available.
- Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75% by weight) to avoid landfill disposal.
- Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials, and based on volume for trail, sidewalk and curb materials). Wood products utilized should be certified through a sustainable forestry program.
- Minimize the amount of concrete for paved surfaces or utilize a low carbon concrete option.
- Produce concrete on-site if determined to be less emissive than transporting ready mix.
- Use Smartway certified trucks for deliveries and equipment transport.
- Develop a plan to efficiently use water for adequate dust control.

***Hazards and Hazardous Material***

**HM-1:** To avoid impacts from pavement striping during construction it is recommended that removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provision 14-11.07 REMOVE YELLOW TRAFFIC STRIPE AND PAVEMENT MARKING WITH HAZARDOUS WASTE RESIDUE.

**HM-2:** Should any previously unknown hazardous waste/material be encountered during construction, the procedures outlined in Caltrans Hazards Procedures for Construction shall be followed.

***Hydrology/Water Quality***

**WQ-1:** The proposed project will require a NPDES General Construction Permit for Discharges of storm water associated with construction activities (Construction General Permit 2022-0057-DWQ). As part of this Permit requirement, a SWPPP shall be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

**WQ-2:** To conform with water quality requirements, the SWPPP must include the following:

- Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 50 feet from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters.
- The project specifications will require the contractor to operate under an approved spill prevention and clean-up plan;
- Construction equipment will not be operated in flowing water;
- Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life must be prevented from contaminating the soil or entering surface waters;
- Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and,
- Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site.

**WQ-3:** Prior to the start of construction activities, the project limits in proximity to jurisdictional waters must

be marked with high visibility ESA fencing or staking to ensure construction will not further encroach into jurisdictional waters.

**WQ-4:** Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction:

- Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control;
- As a permanent BMP, slope roughening by equipment tracking will be implemented to create unevenness on bare soil. Surface roughening reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing water infiltration.

***Noise***

**NOI-1:** To minimize the construction-generated noise, the contractor shall follow the Caltrans Standard Specifications for noise control and Chapter 34, Article III, Sec. 34-88(5) of the City of Citrus Heights Municipal Code, which requires the following:

- Only operate construction equipment or run the equipment engines between the hours of 7:00 a.m. and 8:00 p.m.
- When an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in progress be continued until a specific phase is completed, the contractor shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor.

***Public Services***

**LU-1:** An outreach and engagement plan will be developed to ensure potential security concerns from residents of the Huntington Square Apartments are identified and addressed prior to construction.

***Traffic***

**LU-2:** A Traffic Management Plan will be prepared to identify ways to minimize impacts to the public during partial road closures anticipated during construction.

***Tribal Cultural Resources***

**TCR-1 Unanticipated Discoveries of TCRs**

If any suspected TCRs or resources of cultural significance to UAIC, including but not limited to features, anthropogenic/cultural soils, cultural belongings or objects (artifacts), shell, bone, shaped stones or bone, or ash/charcoal deposits are discovered by any person during construction activities including ground disturbing activities, all work shall pause immediately within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. Work shall cease in and within the immediate vicinity of the find regardless of whether the construction is being actively monitored by a Tribal Monitor, cultural resources specialist, or professional archaeologist.

A Tribal Representative and the Lead Agency shall be immediately notified, and the Tribal Representative in coordination with the Lead Agency shall determine if the find is a TCR (PRC Section 21074) and the Tribal Representative shall make recommendations for further evaluation and treatment as necessary.

**TCR-2: Cultural Awareness and Sensitivity Training**

Cultural Awareness Training will be developed and provided to all personnel working in the Project area.

## SECTION 3.0 - 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 / Forestry Resources | ☒ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☒ Energy |
| ☒ Geology /Soils | ☒ Greenhouse Gas Emissions | ☒ Hazards & Hazardous Materials |
| ☒ Hydrology / Water Quality | ☐ Land Use / Planning | ☐ Mineral Resources |
| ☒ Noise | ☐ Population / Housing | ☒ Public Services |
| ☐ Recreation | ☒ Transportation | ☒ Tribal Cultural Resources |
| ☐ Utilities / Service Systems | ☐ Wildfire | ☒ Mandatory Findings of Significance |

Based on the analysis presented in this Initial Study, it has been determined that for resource areas not checked above, the proposed Project would not result in any significant impacts that cannot be mitigated to a less-than-significant level or are not sufficiently addressed by the CCHGP EIR. This Initial Study has concluded that the Project would incrementally contribute to, but not exceed, certain significant impacts previously identified in the CCHGP EIR, and that for such impacts, no new mitigation measures, other than those previously identified in the CCHGP EIR, are required.

On the basis of this initial evaluation:

☐ 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 Proposed Project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ 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 |
| Name | City of Citrus Heights<br>Organization |

## SECTION 4.0 - ENVIRONMENTAL CHECKLIST

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **I. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:** | | | | |
| a. Have a substantial adverse effect on a scenic vista? | | | | X |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway? | | | | X |
| c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | X | | |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | X | | |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Visual Impact Assessment Memorandum (Dokken 2026a, **Appendix A**), and the resources cited in this analysis.

***Regulatory Setting***

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities (CA PRC Section 21001[b])."

Chapter 106.39 of the Citrus Heights Zoning Code provides regulations for the protection, preservation, and maintenance of protected trees. The ordinance protects native oak trees, oak woodlands, trees of historic or cultural significance, groves and stands of mature trees, and mature trees associated with development proposals.

***Environmental Setting***

The Project area is not located immediately adjacent to any state eligible scenic highways. Urban areas include Sylvan Road and commercial/residential development surrounding the Project area. The Project is partially within the Stock Ranch Preserve and crosses through undeveloped, natural habitat associated with Arcade Creek.

***Discussion***

**a.** **No Impact.** The CCHGP EIR states that there are limited areas in Citrus Heights that provide scenic vistas—they are long-range views of the Sierra Nevada range, which are generally blocked by

development and vegetation (Citrus Heights 2011b). As such, the proposed Project would not cause adverse effects on a scenic vista. No impact would occur.

**b.** **No Impact.** There are no state or locally designated scenic highways in the vicinity of the proposed Project. Sylvan Road is not a designated or eligible scenic highway. Therefore, the proposed Project would not substantially damage scenic resources within a state scenic highway, and no impact would occur.

**c.** **Less than Significant with Mitigation Incorporated.** The Project is located in the City of Citrus Heights, which is an urbanized area. The Project area occurs within several different zoning districts including "RD-5" Low Density Residential, "RD-20" Medium Density Residential, "SPA" Special Planning Area (Citrus Heights 2026). The Project would construct a 0.5-mile addition to the planned 16-mile CCTP. As such, the proposed Project would be consistent with the existing zoning. Additionally, per **VIS-4**, aesthetic treatments would be applied to all Project features to minimize visual impacts, ensuring that the Project would not conflict with regulations governing scenic quality, including the City of Citrus Heights Design Guidelines. With implementation of **VIS-1**, impacts would be less than significant with mitigation incorporated.

**d.** **Less than Significant with Mitigation Incorporated.** The Project would install solar lighting along the trail. This lighting would be consistent with other segments of the trail system and is not anticipated to result in substantial new light and glare impacts as the lights will be downcast, per measure **VIS-2**. Additionally, surrounding light from adjacent developed areas would still dominate the area. Impacts would be less than significant with mitigation incorporated.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**VIS-1:** Aesthetic treatments on the new paved trail and prefabricated bridge over Arcade Creek will be consistent with other trails and bridges along the CCTP.

**VIS-2:** Lighting along the trail will be downcast to minimize glare. The Project's lighting design must be consistent with the City Citrus Heights lighting guidelines and standards.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **II. AGRICULTURE / FORESTRY 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 Dept. 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? | | | | X |
| b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X |
| 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))? | | | | X |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | | | | X |
| 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? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, and the resources cited in this analysis.

***Regulatory Setting***

**State**

Williamson Act/Land Conservation Act Contracts

The California Land Conservation Act of 1965, commonly known as the Williamson Act, was established based on numerous state legislative findings regarding the importance of agricultural lands in an urbanizing society. Policies emanating from those findings include those that discourage premature and unnecessary conversion of agricultural land to urban uses and discourage discontinuous urban development patterns, which unnecessarily increase the costs of community services to community residents. The Williamson Act authorizes each county to establish an agricultural preserve. Land that is within the agricultural preserve is eligible to be placed under a contract between the property owner and county that would restrict the use of the land to agriculture in exchange for a tax assessment that is based on the yearly production yield. The contracts have a 9-year term that is automatically renewed each year, unless the property owner or county requests a non-renewal or the contract is cancelled.

***Environmental Setting***

Agricultural uses in Citrus Heights are limited to hobby farming and the keeping of animals in the more rural residential areas of the City, as long as these uses are in harmony with the character of these rural neighborhoods (Citrus Heights 2011b).

According to the California Important Farmland Finder, the Project site is designated as Urban and Built-Up Land (DOC 2026a). Additionally, there are no parcels currently under a Williamson Act contract within the City (Citrus Heights 2011b).

***Discussion***

**a.** **No Impact.** According to the California Important Farmland Finder, the Project site is designated as Urban and Built-Up Land (DOC 2026a). The Project site is not planned for or used for any agricultural purposes. Therefore, the Project would not convert farmland to non-agricultural use. No impact would occur.

**b.** **No Impact.** The Project area occurs within several different zoning districts including "RD-5" Low Density Residential, "RD-20" Medium Density Residential, "SPA" Special Planning Area (Citrus Heights 2026). Additionally, there are no parcels currently under a Williamson Act contract within the City (Citrus Heights 2011b). Therefore, the Project would not conflict with the existing zoning for agricultural use, or a Williamson Act contract. No impact would occur.

**c.** **No Impact.** There are no parcels zoned for or as forest lands or timberland in the Project limits. No impact would occur.

**d.** **No Impact.** There is no forest land in the Project limits. The Project will not convert forest land to non-forest use. No impact would occur.

**e.** **No Impact.** As outlined in questions a) through d), implementation of the Project would not result in conversion of farmland or forest land to a non-agricultural or non-forest use. Therefore, no impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

None required.

***Significance Determination with Mitigation Measures***

Not applicable.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **III. 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? | | | X | |
| b. 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? | | X | | |
| c. Expose sensitive receptors to substantial pollutant concentrations? | | | X | |
| d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | X | |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Air Quality Technical Memorandum (Dokken 2026b, **Appendix B**), and the resources cited in this analysis.

***Regulatory Setting***

**Federal and State**

Clean Air Act

The U.S. Environmental Protection Agency (EPA) is responsible for addressing national and interstate air pollution issues and setting policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards (NAAQS), also known as federal standards. There are federal standards for the following criteria air pollutants, which were identified from provisions of the Clean Air Act (CAA) of 1970:

- Ozone;
- Particulate matter ($PM_{10}$ and $PM_{2.5}$);
- Nitrogen dioxide;
- Carbon monoxide (CO); and
- Lead; and
- Sulfur dioxide.

Federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect

the public health, per 40 Code of Federal Regulations (CFR) 50.2.

State Implementation Plan

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that would be followed to attain and maintain Federal standards. The State Implementation Plan for the State of California is administered by CARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual Federal attainment plans for regional air districts—air districts prepare their federal attainment plans, which are sent to the CARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Federal and State Ambient Air Quality Standards

California and the federal government have established standards for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions).

**Local**

Sacramento Metropolitan Air Quality Management District

SMAQMD is the primary agency responsible for planning to meet federal and state ambient air quality standards in Sacramento County and the larger Sacramento Ozone Nonattainment Area.

The SMAQMD operates monitoring stations in Sacramento County, develops rules, regulations, and CEQA thresholds for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. **Table 2. SMAQMD Thresholds of Significance** depicts the SMAQMD's Thresholds of Significance for Projects subject to CEQA (SMAQMD 2020). All projects are subject to the adopted SMAQMD rules and regulations.

**Table 2. SMAQMD Thresholds of Significance**

| | Construction Phase | Operational Phase |
|---|---|---|
| **Mass Emission Thresholds** | | |
| Nitrogen Oxide (NOx) (Ozone precursor) | 85 pounds/day | 65 pounds/day |
| Reactive Organic Gases (ROG) (VOC) (Ozone precursor) | None. | 65 pounds/day |
| Particulate Matter ($PM_{10}$) | Zero (0). If all feasible best available control technology (BACT) and BMPs are applied, then 80 pounds/day and 14.6 tons/year. | Zero (0). If all feasible BACT and BMPs are applied, then 80 pounds/day and 14.6 tons/year. |
| Particulate Matter ($PM_{2.5}$) | Zero (0). If all feasible BACT and BMPs are applied, then 82 pounds/day and 15 tons/year. | Zero (0). If all feasible BACT and BMPs are applied, then 82 pounds/day and 15 tons/year. |
| **Concentration Thresholds (Based on the California Ambient Air Quality Standard, identical threshold for both phases of development)** | | |
| Carbon Monoxide (CO) | 20 ppm 1-hour standard (23 $mg/m^3$); 9 ppm 8-hour (10 $mg/m^3$) | |

| | | |
|---|---|---|
| Nitrogen Dioxide ($NO_2$) | 0.18 ppm 1-hour standard (339 (339 µg/$m^3$); 0.03 ppm Annual Arithmetic Mean (57 µg/$m^3$) | |
| Sulphur Dioxide ($SO_2$) | 0.25 ppm 1-hour standard (665 µg/$m^3$); 0.04 ppm 24-hour standard (105 µg/$m^3$) | |
| Lead | 1.5 µg/$m^3$ 30-day average | |
| Visibility Reducing Particles | Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent | |
| Sulfates | 25 µg/$m^3$ 24-hour standard | |
| Hydrogen Sulfide ($H_2S$) | 0.03 ppm (42 µg/$m^3$) 1-hour standard | |
| Vinyl Chloride | 0.01 ppm (26 µg/$m^3$) 24-hour standard | |
| | **Construction Phase** | **Operational Phase** |
| **Greenhouse Gas Emissions (GHG) Thresholds** | | |
| GHG as Carbon dioxide equivalent ($CO_2e$) | 1,100 metric tons/year | Demonstrate consistency with the Climate Change Scoping Plan by implementing applicable Best Management Practices (BMP), or equivalent on-site or off-site mitigation. |

The SMAQMD's air quality management plans include control measures and strategies to be implemented to attain State and Federal ambient air quality standards in Sacramento County. The SMAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. Applicable SMAQMD attainment plans include:

- An 8-Hour Ozone Attainment and Reasonable Further Progress Plan; and
- Revised 8-Hour Ozone Attainment and Reasonable Further Progress Plan.

The 8-Hour Ozone Attainment and Reasonable Further Program Plan (CARB 2023) describes measures to be implemented by the air districts in the Sacramento Federal Nonattainment Area. This plan includes the information and analyses to fulfill the Federal Clean Air Act requirements for demonstrating reasonable further progress and attainment of the 8-hour ozone NAAQS for the Sacramento region. In addition, this plan establishes an updated emissions inventory projected for a 2032 attainment date, provides photochemical modeling results, proposes the implementation of reasonably available control measures, and sets new motor vehicle emission budgets for transportation conformity purposes for the reasonable further progress milestone years and the 2032 attainment year. The emission reduction strategy is based on reductions in both ROG and $NO_x$ emissions.

2nd 10-Year PM10 Implementation/Maintenance Plan for Sacramento County

On September 23, 2021, the SMAQMD Governing Board approved the $PM_{10}$ maintenance plan (SMAQMD 2023). This plan includes updated emission inventories, demonstrates maintenance of the $PM_{10}$ standard, provides an updated control measure evaluation, and establishes new motor vehicle emissions budgets. The plan was submitted to the U.S. EPA for approval and the Final Rule was published on March 14, 2024, effective April 15, 2024.

2015 Triennial Report and Air Quality Plan Update

This plan is intended to comply with the requirements of the California Clean Air Act (CCAA) as related to bringing the region into compliance with the CAAQS for ozone. The SMAQMD has prepared several triennial progress reports that build upon the 1994 Sacramento Area Regional Ozone Attainment Plan. The 2015

Triennial Report and Air Quality Plan Update is the most recent report. The triennial progress report includes a current emission inventory and projected future inventories of ROG and $NO_x$ emissions in Sacramento County. The future inventories reflect population growth rates, travel, employment, industrial/commercial activities, and energy use, as well as controls imposed through local, State, and Federal emission reduction measures. The triennial report discusses rules that the SMAQMD has adopted during the previous three years, incentive programs that have been implemented, and other measures that would supplement those in the Ozone Attainment Plan to achieve the required five percent per year reduction required by the CCAA.

The SMAQMD also has several rules that relate to the proposed Project, which are summarized below.

Rule 201 – General Permit Requirements: Requires any Project that includes the use of certain equipment capable of releasing emissions to the atmosphere as part of Project operation to obtain a permit from the SMAQMD prior to operation of the equipment. The applicant, developer, or operator of a Project that includes an emergency generator, boiler, or heater should contact the SMAQMD to determine if a permit is required. Portable construction equipment with an internal combustion engine with over 50 horsepower are required to have a SMAQMD permit or a CARB portable equipment registration.

Rule 401 – Ringelmann Chart: Prohibits individuals from discharging into the atmosphere from any single source of emissions whatsoever any air contaminant whose opacity exceeds certain specified limits.

Rule 402 – Nuisance: To protect the public health, Rule 402 prohibits any person from discharging such quantities of air contaminants that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public.

Rule 403 – Fugitive Dust: Requires a person to take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation.

Rule 453 – Cutback and Emulsified Asphalt Paving Materials: Asphalt paving operations that may be associated with implementation of a Project would be subject to Rule 453. This rule applies to the manufacture and use of cutback asphalt and emulsified asphalt for paving and maintenance operations.

Rule 902 – Asbestos: To protect the public health and the environment, Rule 902 sets specific procedures to follow regarding handling, transport, and disposal of asbestos containing materials.

The SMAQMD's *Guide to Air Quality Assessment in Sacramento County* also provides methods to analyze air quality impacts from plans and projects, including screening criteria, thresholds of significance, calculation methods, as well as mitigation measures that help assist lead agencies in complying with the CEQA. These guidelines require that basic construction emission control practices be implemented for emissions regardless of the significance determination.

Toxic Air Contaminants

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality (CARB 2013) present the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. These TACs are as follows: acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program (CARB 2024) demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes,

nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The CARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the CARB emissions inventory's $PM_{10}$ database, ambient $PM_{10}$ monitoring data, and the results from several studies to estimate concentrations of DPM.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., emotional reaction) to physiological (e.g., nausea).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors is subjective and varies considerably among the population. Some individuals have the ability to smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another.

### *Environmental Setting*

The Project is located in Citrus Heights, which falls within the Sacramento Valley Air Basin (SVAB). Air quality regulation in SVAB is administered by the SMAQMD. **Table 3. Attainment at Project Location** lists the state and federal attainment status for all regulated pollutants within the Project area.

**Table 3. Attainment at Project Location**

| **Criteria Pollutant** | **Attainment Status** | |
|---|---|---|
| | **State** | **Federal** |
| Ozone | Non-attainment | Non-attainment |
| $PM_{10}$ | Non-attainment | Attainment |
| $PM_{2.5}$ | Attainment | Non-attainment |
| CO | Attainment | Unclassified/Attainment |
| $NO_2$ | Attainment | Unclassified/Attainment |
| $SO_2$ | Attainment | Unclassified/Attainment |
| Lead | Attainment | Unclassified/Attainment |
| Visibility Reducing Particles | Unclassified | No Federal Standard |
| Sulfates | Attainment | No Federal Standard |
| $H_2S$ | Unclassified | No Federal Standard |
| *Source: Dokken 2026b* | | |

***Discussion***

**a.** **Less Than Significant**. In accordance with SMAQMD's *CEQA Guide*, construction-generated $NO_X$, $PM_{10}$, and $PM_{2.5}$, and operation-generated ROG and $NO_X$ (all ozone precursors) are used to determine consistency with the Ozone Attainment Plan. The Guide states (SMAQMD 2020):

> "By exceeding the District's mass emission thresholds for operational emissions of ROG, $NO_X$, $PM_{10}$, or $PM_{2.5}$, the project would be considered to conflict with or obstruct implementation of the District's air quality planning efforts."

As shown in the discussion for question b) below, the Project's construction-generated emissions of $NO_X$, $PM_{10}$, and $PM_{2.5}$ is below thresholds set by SMAQMD. Additionally, since the Project would construct a trail, it would not result in long-term operational emissions; thus, operation-generated emissions ROG and $NO_X$ would not exceed SMAQMD thresholds. The Project would not conflict with or obstruct implementation of the applicable air quality plan and the impact would be less than significant.

**b.** **Less than Significant with Mitigation Incorporated.** Sacramento County is currently designated as in "attainment" for all state and federal ambient air quality standards, except ozone (non-attainment status under state and federal), $PM_{10}$ (non-attainment status under State), and $PM_{2.5}$ (non-attainment status under federal). The current "non-attainment" status for ozone, $PM_{10}$, and $PM_{2.5}$ signifies that these pollutant concentrations have exceeded the established standards.

The SMAQMD's *CEQA Guide* has established significance thresholds for emissions of $PM_{2.5}$ and $PM_{10}$, and ozone precursors—ROG and $NO_x$. The significance thresholds, expressed in pounds per day (lbs./day), listed in **Table 4. Maximum Daily Average Construction Emissions and Local Thresholds of Significance** below represent the SMAQMD's current established thresholds of significance for use in the evaluation of air quality impacts associated with proposed land development projects. Thus, if the proposed Project's emissions exceed the pollutant thresholds presented in **Table 4**, the Project would have the potential to result in significant effects to air quality and affect the attainment of federal and state Ambient Air Quality Standards.

Short-term increases in emissions would occur during construction. The construction period would be limited and temporary. According to SMAQMD's *CEQA Guide*, construction-generated $NO_X$ and PM emissions shall be evaluated for significance under CEQA on a daily mass emission basis because they are pollutants of regional concern (SMAQMD 2020).

Construction emissions were estimated using the Caltrans 2021 Construction Emissions Tool (CAL-CET v1.0.2) (**Appendix B**). The emissions presented are based on the best information available at the time of calculations. The emissions represent the peak daily construction emissions that will be generated by construction of the proposed Project.

**Table 4. Maximum Daily Average Construction Emissions and Local Thresholds of Significance**

| Emissions | Caltrans Construction Emissions Tool Estimates | SMAQMD Construction Phase Mass Emissions Thresholds |
|---|---|---|
| $NO_x$ | 19.13 lbs/day | 85 lbs/day |
| ROG (VOC) | 2.82 lbs/day | NONE |
| $PM_{10}$ | 9.9 lbs/day | **Zero (0)**. If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year |
| $PM_{2.5}$ | 1.8 lbs/day | **Zero (0)**. If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year |
| $CO_2e$ | 195 tons/year (annual average) | 1,100 metric tons/year |
| *Source: SMAQMD 2020* | | |

**Table 4** provides the results of the Caltrans Construction Emissions Tool for the Project construction phase compared to SMAQMD thresholds of significance.

The Project would be well below emissions levels for $NO_X$. The Project would generate minimal amounts of $PM_{10}$ and $PM_{2.5}$ based on the construction emissions model. With the implementation of measure **AQ-1**, impacts to air quality would be reduced further. Lastly, there will be no long-term operational air quality emissions associated with the proposed Project. With implementation of **AQ-1**, impacts would be less than significant with mitigation incorporated.

**c.** **Less than Significant.** SMAQMD defines sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants or may experience adverse effects from unhealthful concentrations of air pollutants. Hospitals, clinics, schools, convalescent facilities, and residential areas are examples of sensitive receptors (SMAQMD 2020). The nearest sensitive receptors in the vicinity of the Project site include the apartment complexes and residential homes directly adjacent to the Project.

Construction activities are anticipated to involve the operation of diesel-powered equipment. In 1998, the CARB identified diesel exhaust as a TAC. Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 70-year exposure period often is assumed. Although elevated cancer rates can result from exposure periods of less than 70 years, acute exposure (i.e., exposure periods of 2 to 3 years) to diesel exhaust typically are not anticipated to result in an increased health risk because acute exposure typically does not result in exposure concentrations that would represent a health risk. Construction of the Project is anticipated to last approximately 6 months, with an estimated 131 working days assuming there will be 22 working days a month. Since construction activities are expected to occur well below the 70-year exposure period used in health risk assessments (i.e., 6 months/ 131 working days) health impacts associated with exposure to diesel exhaust from Project construction are anticipated to be less than significant. Additionally, emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, construction of the proposed Project is not anticipated to result in an elevated cancer risk to exposed persons. Overall exposure of sensitive receptors to substantial pollutant concentrations from the proposed Project would be less than significant.

**d.** **Less than Significant.** While offensive odors rarely cause physical harm, they can be unpleasant, leading to annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Project-related odor emissions would be limited to times when equipment would be utilized for construction and emission from equipment may be evident in the immediate surrounding area. Construction activities would be short-term and would not result in the creation of long-term objectionable odor because they would be quickly dispersed after equipment utilization. Therefore, due to the short-term nature of the construction activities, combined with limited exposure to sensitive receptors, impacts associated with development of the Project are considered less than significant.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**AQ-1:** Implement SMAQMD Basic and Enhanced Construction Emission Control Practices to Reduce Fugitive Dust.

The implementing agency will require, as a standard or specification of their contract, the construction contractor(s) to implement basic and enhanced control measures to reduce construction-related fugitive dust. Although the following measures are outlined in the SMAQMD's CEQA guidelines, they are required for the entirety of the construction area. The implementing agency will

ensure through contract provisions and specifications that the contractor adheres to the mitigation measures before and during construction and documents compliance with the adopted mitigation measures.

- Water 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 2 feet of freeboard space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that will be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout 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.
- All trail, and curb/sidewalk paving should be completed as soon as possible.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. CARB enforces idling limitations and compliance with diesel fleet regulations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 3 minutes. Provide clear signate that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, Sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL - 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 Wildlife or U.S. Fish and Wildlife Service? | | X | | |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | | X | | |
| c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X |
| 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? | | X | | |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | X | | |
| 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? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Natural Environment Study (Dokken 2026c, **Appendix C**), and the resources cited in this analysis.

***Regulatory Setting***

**Federal**

National Environmental Policy Act

NEPA provides an interdisciplinary framework for environmental planning by federal agencies and contains action-forcing procedures to ensure that federal agency decisions take environmental factors into account. NEPA is applicable when a federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans is the designated NEPA lead agency for this Project acting under delegation from the FHWA.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS). One federally threatened species, valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*; VELB), along with one federally proposed threatened species, northwestern pond turtle (*Actinemys marmorata*; NWPT), has potential to occur within the Project area.

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the U.S. The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. EPA to set national water quality standards and effluent limitations and includes programs addressing both point source and nonpoint source pollution. Point source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Nonpoint source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is the CWA's primary regulatory tool.

Section 401

The RWQCB has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with waters of the U.S. including any wetlands. The RWQCB also asserts authority over "waters of the state" under wastewater discharge requirements (WDRs) pursuant to the Porter-Cologne Water Quality Control Act. The Project is located within the jurisdiction of the Central Valley RWQCB and would require a Water Quality Certification (WQC) prior to construction. WQCs are issued to applicants for a federal license or permit for activities that may result in a discharge into waters of the U.S., including but not limited to the discharge or dredged or fill material.

Section 402

The California SWRCB regulates construction projects that involve ground disturbance of one acre or greater. These projects must obtain coverage under the SWRCB General Permit for Storm Water Discharges Associated with Construction Activity (General Construction Permit). Operators of regulated construction sites are required to develop a Stormwater Pollution Prevention Plan; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the General Construction Permit.

Section 404

USACE regulates discharges of dredged or fill material into waters of the U.S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations). Arcade Creek and the Arcade Creek tributary, within the Project area, are jurisdictional waters of the U.S. and will require Section 404 permitting through the USACE.

Executive Order 11990 – Protection of Wetlands

The Executive Order (EO) 11990 established a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. The U. S. Department of Transportation (DOT) promulgated

DOT Order 5660.1A in 1978 to comply with this direction. On federally funded projects, impacts on wetlands must be identified. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included. This must be documented in a specific Wetlands Only Practicable Alternative Finding.

An additional requirement is to provide early public involvement in projects affecting wetlands. FHWA provides technical assistance in the Guidance for Preparing and Processing Environmental and Section 4(f) Documents (Technical Advisory T 6640.8A) and reviews environmental documents for compliance.

Executive Order 13112 – Invasive Species

EO 13112 (signed February 3, 1999) directs all federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO and directives from the FHWA require consideration of invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act of 1976 was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

**State Regulations**

California Environmental Quality Act

CEQA is a California state law designed to inform government decision-makers and the public about the potential, significant environmental effects of proposed activities and to identify measures to reduce these negative environmental impacts. The City is the CEQA lead agency for this Project.

California Endangered Species Act

The California Fish and Game (CFG) Code Section 2050, henceforth referred to as the California Endangered Species Act (CESA), requires CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080–2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)]. Swainson's hawk (*Buteo swainsoni*) listed as threatened under CESA has a low potential to occur within the Project area.

Section 1602: Streambed Alteration Agreement

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed

Alteration Agreement that becomes part of the plans, specifications, and bid documents for the Project.

Section 3503 and 3503.5: Bird and Raptors

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests.

Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the Migratory Bird Treaty Act (MBTA) or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Section 3511: Fully Protected Birds

CFG Code Section 3511 designates certain bird species as fully protected and prohibits the take or possession of these species, or any part thereof, except as expressly authorized for scientific research, species recovery, or limited relocation purposes by CDFW. The white-tailed kite is a fully protected species and has low potential to occur within the Project area.

City of Citrus Heights Municipal Code – Tree Preservation and Protection Regulations

Native oak trees and other mature trees 19 inches or greater in diameter are protected and require a permit for removal.

The following trees are protected and require a tree permit:

- Native oaks 6 inches or more in diameter
- Mature trees 19 inches or more in diameter
- Trees planted as part of a condition of approval or mitigation requirement with a discretionary permit.

***Environmental Setting***

A general biological survey was conducted on October 17, 2025, by Dokken Engineering biologists Caroline Clarkson and Katie Jacobson. The general biological survey was conducted within the Biological Study Area (BSA) which encompasses the Project area at the proposed trail alignment with an approximate 165-foot buffer to assess adjacent sensitive vegetation communities.

During biological survey efforts, three vegetation communities were observed within the BSA: annual grassland, oak woodland, and riparian woodland (**Figure 6. Waters and Vegetation Communities**). The BSA also includes two aquatic features: Arcade Creek and Arcade Creek tributary and portions of two water quality/detention basins (**Figure 6**).

**Perennial Stream Channel**

Arcade Creek, a perennial stream channel, flows northeast to southwest through the BSA. Also included in this habitat is the Arcade Creek tributary, which flows southeast into Arcade Creek. The channel originates in Orangevale and flows into the Natomas East Main Drainage Canal, which ultimately discharges to the Sacramento River. The tributary is fed almost entirely by urban stormwater runoff carried through a series of stormwater inlets and culverts from the surrounding development. Within the BSA, the channel has highly incised banks and the width of the channel ranges from approximately 10 to 60 feet. As a perennial channel, water is present year-round. The larger creek watershed is frequently bisected by roadways and is lined by both residential and commercial developments. Local urbanization has resulted in the proliferation of non-native and invasive species, a degradation in water quality, and a decrease in bank stability as a result of the altered hydrologic flows (Dokken 2026c). Arcade Creek and its tributary comprise approximately 1.91 acres (6%) of the BSA.

Biological Study Area (28.85 acres)
Elderberry Shrubs

**Waters and Vegetation Communities**

Annual Grassland (2.36 acres)
Water Quality/Detention Basin (1.20 acres)
Oak Woodland (0.51 acre)
Perennial Stream Channel (1.91 acres)
Riparian Woodland (8.88 acres)
Urban (13.99 acres)

Huntington Square Lane
Community Drive
Sylvan Valley Way
Arcade Creek Tributary
Costco Wholesale
Walmart Supercenter
Arcade Creek
Arcade Creek Mainstem
Sylvan Road
Sylvan Creek Court
Park Drive
Hespera Way

Source: Microsoft, Vantor

V:\3407 Arcade_Cripple_Creek_Trail\Biology\Biology.aprx
Dokken Engineering 3/19/2026; Created By: ahale

0 75 150 Feet

**Figure 6**
**Waters and Vegetation Communities**
CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

**Ephemeral Tributary**

During the October 2025 biological survey, an ephemeral tributary to Arcade Creek was observed within the western portion of the BSA. The tributary has two parts, a main larger tributary measuring approximately 5 feet wide, and a sub-tributary measuring approximately 2 feet wide. The ephemeral tributaries collect rainwater and stormwater runoff from Auburn Boulevard and the shopping center north of the project and carry it toward Arcade Creek. The east main tributary splits off Arcade Creek from the west, outside of the BSA and flows southwest from two ponded areas which empty into Arcade Creek. The smaller sub-tributary splits off from the main tributary channel and flows south from a detention basin located northwest of the BSA, eventually merging with the main tributary. At the time of the survey, pooled water was present within the main tributary, but no flows were exhibited. No water was present within the sub-tributary. The boundaries of the ephemeral tributary were mapped in the field in accordance with the following OHWM indicators: change in vegetation species and density, break in bank slope, and presence of a bed, bank and channel. Dominant vegetation observed within the bed, banks, and surrounding area of the ephemeral tributary includes curly dock (Rumex crispus), spreading rush (*Juncus patens*), interior live oak, and Himalayan blackberry. The BSA contains approximately 0.10 acres (<1%) of ephemeral tributary.

**Water Quality/ Detention Basins**

The water quality/detention basins are gently sloping, engineered depressions designed to capture and temporarily detain stormwater runoff. The western basin was completely dry at the time of the survey. However, historic aerial imagery (from November 2023) indicates that the area becomes inundated with water during heavy rain events caused by stormwater runoff from the adjacent commercial and residential areas. The basin supports annual grassland habitat dominated by spikeweed (*Centromadia fitchii*) and wild oat (*Avena fatua*) which appeared to have been recently trimmed.

The eastern basin was full of water at the time of the survey. This basin is supplied by a small stream channel to the north, which collects stormwater runoff from adjacent residential homes to the east and the paved parking lot to the west. The connected stream channel originates at the homes along Gallant Circle and flows south and southeast before reaching the basin. According to historic aerial imagery, this basin tends to hold water longer than the western basin, allowing it to grow hydrophytic vegetation species such as broadleaf cattail (*Typha latifolia*), tule (*Schoenoplectus acutus* var. *occidentalis*), cottonwoods and willow trees (*Salix lasiolepis*, *Salix gooddingii*). At the time of the survey, the cattails and tules in the channel appeared to be in poor health and recently trimmed. The BSA contains approximately 1.20 acres (4%) of water quality/detention basins. Because the ephemeral tributary does not meet the "relatively permanent standard" under the current definition of waters of the U.S., it is considered a water of the state subject to Section 401 of the CWA.

**Annual Grassland**

Annual grasslands are open areas dominated primarily by annual plant species. In the BSA, this vegetation community is found along the edges of the two water quality/detention basins, bordering the oak woodland vegetation community. Common species observed in this vegetation community include wild oat, dogtail grass (*Cynosurus echinatus*), spikeweed, and common vetch (*Vicia sativa*). Annual grasslands cover approximately 2.36 acres (8%) within the BSA.

**Riparian Woodland**

The BSA includes a dense, mature, riparian woodland that borders the length of Arcade Creek and the Arcade Creek tributary. This vegetation community is dominated by a variety of native tree species including valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), box elder (*Acer negundo*), Oregon ash (*Fraxinus latifolia*), Fremont cottonwood (*Populus fremontii*), and northern California black walnut (*Juglans hindsii*). The understory is comprised of Himalayan blackberry, periwinkle (*Vinca minor*), Harding grass (*Phalaris aquatica*) and tall flat sedge (*Cyperus eragrostis*). Within the riparian woodland, two clusters of elderberry shrubs were observed: one located on the southern bank of Arcade Creek mainstem north of Hesperia Way and the second located on the north bank of Arcade Creek mainstem, south of the Walmart. Riparian woodland provides

suitable habitat for a variety of wildlife species including birds, mammals and insects. Riparian woodland comprises approximately 8.84 acres (27%) of the BSA.

**Oak Woodland**

The BSA includes mature oak woodland that occupies the upland areas of the site. This community is dominated by native oak tree species such as valley oak, blue oak (*Quercus douglasii*), and interior live oak. The canopy is moderately dense, providing partial shade and contributing to a well-developed litter layer of decomposing oak leaves and twigs. The understory consists primarily of native and non-native grasses and forbs, including wild oat, Italian rye grass (*Festuca perennis*), and English plantain (*Plantago lanceolata*). Seasonal herbaceous growth is most abundant in spring, while the summer understory tends to dry and thin considerably. Shrub species such as poison oak (*Toxicodendron diversilobum*) is also common in this vegetation community. The oak woodland vegetation community provides important foraging, nesting, and cover opportunities for a variety of wildlife species. Oak woodlands comprise approximately 1.44 acre (4%) of the BSA.

**Wildlife**

As discussed above, the BSA contains a variety of waters and vegetation communities (riparian woodland, oak woodland, water quality/detention basin, perennial stream channel, and annual grassland) which support a diversity of native and non-native wildlife species, including birds, mammals and amphibians. During the biological survey conducted on October 17, 2025, a high level of bird activity was observed throughout the BSA, particularly within the riparian woodland and oak woodland vegetation communities. Dominant bird species detected included acorn woodpecker (*Melanerpes formicivorus*), California scrub jay (*Aphelocoma californica*), northern flicker (*Colaptes auratus*), oak titmouse (*Baeolophus inornatus*), and northern mockingbird (*Mimus polyglottos*). The water quality/detention basins also support waterfowl such as Canada geese (*Branta canadensis*) and mallards (*Anas platyrhynchos*). Locally common amphibian species, pacific chorus frog (*Pseudacris regilla*) and bullfrog (*Lithobates catesbeianus*) were also heard calling throughout the Arcade Creek corridor.

**Habitat Connectivity**

The CDFW Biogeographic Information & Observation System was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA was determined to be within an area of Terrestrial Connectivity Rank 1 – Limited Connectivity Opportunity (Dokken 2026c). This ranking indicates that either land-use conditions limit the potential for wildlife or ecological processes to move through that area (urban, agriculture), or that no significant connectivity importance has been identified in relevant models. Rank 1 areas are classified by CDFW as lower priority for connectivity conservation efforts compared to Ranks 2–5.

***Discussion***

**a.** **Less than Significant with Mitigation Incorporated.** Plant and wildlife species are considered to have special status if they have been listed as such by federal or state agencies or by one or more special interest groups, such as California Native Plant Society (CNPS). Prior to the field surveys, online databases from USFWS, California Natural Diversity Database (CNDDB), CNPS and NMFS were queried for presence of potential threatened, endangered, rare, or special status species (**Appendix C**). Database search results identified ten special status or sensitive wildlife species and seven special status or sensitive plant species with potential of occurring in the vicinity of the BSA. An analysis of habitat requirements, recorded observations, and field surveys determined that the following species have potential to occur within the BSA: Sanford's arrowhead (*Sagittaria sanfordii*), song sparrow ("Modesto" population) (*Melospiza melodia* pop. 1), Swainson's hawk, white-tailed kite (*Elanus leucurus*), VELB, and NWPT. With implementation of the various measures listed below, impacts would be less than significant with mitigation incorporated.

Sanford's arrowhead

Sanford's arrowhead is listed under CNPS as a 1B.2, meaning it is rare throughout its range and is moderately threatened in California. Sanford's arrowhead is a perennial rhizomatous herb found in

sluggish waterways, swamps, freshwater marshes, ponds, ditches, and margins of slow flowing streams or sloughs up to 2,132 feet elevation. Sanford's arrowhead individuals were not observed within the BSA during the October 2025 biological survey. However, the BSA contains suitable stream channel and water quality/detention basin habitat that could support individuals of this species. There are 15 documented CNDDB occurrences of the species within 10 miles of the BSA, with the nearest approximately 2.2 miles northeast of the BSA within Sunrise Creek in 1994 (Dokken 2026c). Based on the suitable habitat and nearby occurrences, this species has a low potential to occur within the BSA. Approximately 0.10 acre of temporary impacts and approximately 0.01 acre of permanent impacts to suitable aquatic habitat (perennial stream channel) are anticipated to occur as a result of the proposed Project (**Figure 7. Project Impacts**). To avoid direct impacts to this species during construction, avoidance and minimization measure **BIO-7** will be implemented to ensure that no Sanford's arrowhead individuals are present within the Project area prior to construction.

Song Sparrow ("Modesto" Population)

The song sparrow ("Modesto" Population) is not a state of federally listed species but is a CDFW species of special concern (SSC). Individuals of this species were not observed during the October 2025 biological survey. However, the BSA contains suitable nesting and foraging habitat for this species, including the easterly water quality/detention basin, which supports tules and cattails, as well as areas of low, dense vegetation such as Himalayan blackberry and periwinkle within the riparian woodland habitat. The oak woodland and riparian woodland habitats also provide potential nesting cover and include open grassland understory with leaf litter suitable for foraging. Arcade Creek and the water quality/detention basins provide a source of standing water, making the area suitable for the song sparrow. There is one CNDDB occurrence within 10 miles of the BSA in 1990, located approximately 9.2 miles southwest in which a specimen was collected (Dokken 2026c). Based on the potentially suitable habitat present onsite, this species has a low potential to occur within the BSA.

Permanent and temporary impacts to riparian woodland habitat and oak woodland habitat are anticipated to occur as a result of the proposed Project (**Figure 7**). Paving of the trail will result in approximately 0.20 acre of permanent impacts to riparian woodland habitat, with approximately 0.89 acre of temporary impacts anticipated due to construction access. Paving of the trail will also result in approximately 0.02 acre of permanent impacts to oak woodland habitat, and approximately 0.17 acre of temporary impacts due to construction access. In addition, tree removal within the oak woodland and riparian woodland habitats will be required. However, the specific trees to be removed have not yet been identified, and major tree removal is not anticipated. A tree survey will be conducted within the BSA to document and mark all trees proposed for removal. To avoid direct impacts to this species during construction, avoidance and minimization measure **BIO-8** will be implemented to ensure that no nesting song sparrows are present within the Project area prior to construction.

Swainson's Hawk

Swainson's hawk is a raptor species listed as threatened under CESA. Individuals of this species were not observed during the October 2025 biological survey. The BSA contains suitable nesting habitat for Swainson's hawk within the riparian woodland and oak woodland areas, which include tall, mature oak trees capable of supporting nests. However, the BSA is surrounded by urban development and lacks the open, undeveloped areas typically required for foraging. Although some annual grassland habitat occurs within the BSA, it does not provide the extensive, open foraging areas preferred by the species. The nearest suitable foraging habitat is located approximately 0.5 miles north of the proposed trail alignment within an open grassland area, north of Auburn Boulevard. The nearest CNDDB occurrence was documented in 2004 and was located approximately 4.8 miles south of the BSA in which a nest was observed in a eucalyptus tree near Ancil Hoffman Park. There is also a nearby iNaturalist occurrence of the species located approximately 2.2 miles southwest of the BSA along Wendal Lane, recorded in August 2025. Based on the potentially suitable nesting habitat present onsite, this species has a low potential to occur within the BSA.

Biological Study Area (28.85 acres)
Elderberry Shrubs

**Project Features**
Bridge
Trail Improvements
Gabion Basket
Curb Ramp
Pavement Marking
Pedestrian Refuge

**Waters and Vegetation Communities**
Annual Grassland (2.36 acres)
Water Quality/Detention Basin (1.20 acres)
Oak Woodland (0.51 acre)
Perennial Stream Channel (1.91 acres)
Riparian Woodland (8.88 acres)
Urban (13.99 acres)

**Permanent Impacts**
Annual Grassland (0.20 acre)
Oak Woodland (0.02 acre)
Perennial Stream Channel (0.01 acre)
Riparian Woodland (0.20 acre)

**Temporary Impacts**
Annual Grassland (0.28 acre)
Oak Woodland (0.17 acre)
Perennial Stream Channel (0.10 acre)
Riparian Woodland (0.89 acre)

Costco Wholesale
Walmart Supercenter
Arcade Creek Tributary
Community Drive
Sylvan Valley Way
Sylvan Creek Court
Sylvan Road
Park Drive
Arcade Creek
Arcade Creek Mainstream
Hespera Way

Source: Microsoft, Vantor, ... OpenStreetMap contributors

V:\3407_Arcade_Cripple_Creek_Trail\Env_Doc\Env_Docs.aprx

Dokken Engineering 6/16/2026; Created By: ahale

0 75 150 Feet

**Figure 7**
**Project Impacts**
CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

Permanent and temporary impacts to riparian woodland habitat and oak woodland habitat are anticipated to occur as a result of the proposed Project (**Figure 7**). Paving of the trail will result in approximately 0.20 acre of permanent impacts to riparian woodland habitat, with approximately 0.89 acre of temporary impacts anticipated due to construction access. Paving of the trail will also result in approximately 0.02 acre of permanent impacts to oak woodland habitat, and approximately 0.17 acre of temporary impacts due to construction access. In addition, tree removal within the oak woodland and riparian woodland habitats will be required. However, the specific trees to be removed have not yet been identified, and major tree removal is not anticipated. A tree survey will be conducted within the BSA to document and mark all trees proposed for removal. All trees removed from the riparian woodland and oak woodland habitat will be appropriately mitigated for in coordination with CDFW and the City. To avoid direct impacts to this species during construction, avoidance and minimization measure **BIO-9** will be implemented to ensure that no nesting Swainson's hawks are present within the Project area prior to construction.

White-tailed Kite

The white-tailed kite is not listed as threatened or endangered at the state or federal level but is a fully protected species under CFG Code Section 3511. Individuals of this species were not observed during the October 2025 biological survey. The BSA contains suitable nesting habitat for white-tailed kite within the riparian woodland and oak woodland areas, which include tall, mature oak trees capable of supporting nests. However, the BSA is surrounded by urban development and lacks the open, undeveloped areas typically required for foraging including grasslands, meadows, farmlands and emergent wetlands. Although some annual grassland habitat occurs within the BSA, it does not provide the extensive, open foraging areas preferred by the species. The nearest suitable foraging habitat is located approximately 0.5 miles north of the proposed trail alignment within an open grassland area, north of Auburn Boulevard. The nearest CNDDB occurrence is located approximately 3.5 miles northeast of the BSA at Woodbridge Park in Orangevale in which a pair nested in a large tree south of the pond, recorded in 1992 (Dokken 2026c). There is also a nearby eBird occurrence within the Stock Ranch Nature Preserve, southeast of the BSA recorded in 2012. Based on the potentially suitable nesting habitat present onsite, this species has a low potential to occur within the BSA.

Permanent and temporary impacts to riparian woodland habitat and oak woodland habitat are anticipated to occur as a result of the proposed Project (**Figure 7**). Paving of the trail will result in approximately 0.20 acre of permanent impacts to riparian woodland habitat, with approximately 0.89 acre of temporary impacts anticipated due to construction access. Paving of the trail will also result in approximately 0.02 acre of permanent impacts to oak woodland habitat, and approximately 0.17 acre of temporary impacts due to construction access. In addition, tree removal within the oak woodland and riparian woodland habitats will be required. However, the specific trees to be removed have not yet been identified, and major tree removal is not anticipated. A tree survey will be conducted within the BSA to document and mark all trees proposed for removal. All trees removed from the riparian woodland and oak woodland habitat will be appropriately mitigated for in coordination with CDFW and the City. To avoid direct impacts to this species during construction, avoidance and minimization measure **BIO-8** will be implemented to ensure that no nesting white-tailed kites are present within the Project area prior to construction.

Valley Elderberry Longhorn Beetle

VELB is a federal listed threatened species. Critical habitat for the species was designated by the USFWS on August 8, 1980 (45 Federal Register 52803). Elderberry shrubs are obligate hosts for VELB larvae. In accordance with the USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*, the Project area was buffered by 50 meters (≈ 165 feet) to identify elderberry shrubs occurring within the BSA (Dokken 2026c). During survey efforts, two elderberry clusters, both with stem diameters over one inch were observed within the riparian woodland habitat within the BSA (**Figure 6**). Exit holes were observed on multiple stems within one of the two clusters, located on the

southern bank of Arcade Creek (**Figure 6**). The elderberry cluster without exit holes is approximately 72 feet south of the proposed trail alignment while the cluster with exit holes is approximately 95 feet south of the proposed trail alignment. The presence of exit holes indicates current or historic occupation by VELB, and therefore they have high potential to occur within the BSA.

No direct or indirect impacts to the elderberry shrubs are anticipated as a result of trail construction. Two elderberry clusters were identified within the BSA, both of which are located within the USFWS framework guidance buffer. One of the clusters is located across Arcade Creek in an area that is unrelated to and physically separated from Project activities. The intervening creek channel provides substantial distance and buffer between the Project and this cluster such that it would not be subject to stressors such as noise, vibration, exhaust, or dust. The second elderberry cluster, while also located within the USFWS buffer, is situated outside the Project impact area and is not anticipated to be affected by Project activities. The Project would have no impact on VELB.

Northwest Pond Turtle

The NWPT is listed as proposed threatened under FESA and is considered a SSC by CDFW. Arcade Creek and the eastern water quality/detention basin within the BSA provide suitable aquatic habitat for the NWPT due to the presence of slow-moving or standing water and available basking sites, including logs, rocks, muddy banks, and emergent vegetation. There is also some adjacent annual grassland habitat that may provide suitable upland nesting habitat for the species. According to the City of Sacramento's *Existing Conditions and Assessment Report and Stream Corridor Management Plan for the Arcade Creek Watershed*, NWPTs have been observed in the Arcade Creek stream corridor during spring and summer 2007 field surveys. The nearest CNDDB occurrence is located approximately 6.4 miles northeast of the BSA within the Baldwin Reservoir Wetland and Wildlife Preserve in Granite Bay, recorded in 1997 (Dokken 2026c). Due to the potentially suitable aquatic and upland habitat, this species has a low potential to occur within the BSA.

The Project is anticipated to temporarily impact a total of approximately 0.10 acre of suitable aquatic habitat (perennial stream channel) and approximately 0.28 acre of suitable upland habitat (annual grassland) due to access during construction (**Figure 7**). Additionally, the Project is anticipated to permanently impact a total of approximately 0.01 acre of suitable aquatic habitat (Arcade Creek mainstem) and 0.21 acre of suitable upland habitat (annual grassland) due to paving of the trail.

USFWS is currently not providing conference opinions for NWPT. However, given that NWPT is proposed to be listed under the FESA, Section 7 consultation will be required with USFWS upon official listing of the species. Though no determination will be made for purposes of Section 7 at this time, once officially listed under FESA, the determination for NWPT is proposed to be *may affect, not likely to adversely affect*. Measures **BIO-10** and **BIO-11** are proposed for the species as a show of good faith, to further the protection and recovery of the species, and in anticipation of any future listings.

**b. Less than Significant with Mitigation Incorporated.** Habitats are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special status plants or animals occurring on site. Wetlands and waters of the U.S. are also considered sensitive by both federal and state agencies. Within the BSA, Arcade Creek has been identified as a natural community of special concern as it is a jurisdictional water of the U.S. and state. The water quality/detention basins within the BSA are also considered jurisdictional waters of the state; however, because no temporary or permanent impacts to these features are expected, further discussion is not necessary. Additionally, annual grassland, oak woodland, and riparian woodland occur within the BSA and are considered natural communities of special concern as they provide potentially suitable habitat for special status plant and wildlife species. These natural communities are shown in **Figure 6**. In addition, **Table 5**. **Impacts to Sensitive Natural Habitats** and **Figure 7** summarize the Project's impacts on these natural communities. With implementation of the various measures listed below, impacts would be less than significant with mitigation incorporated.

**Table 5. Impacts to Sensitive Natural Habitats**

| Impact Type | Sensitive Natural Habitat | | | |
|---|---|---|---|---|
| | **Annual Grassland** | **Oak Woodland** | **Perennial Stream Channel** | **Riparian Woodland** |
| **Temporary** | 0.28 acre | 0.17 acre | 0.10 acre | 0.89 acre |
| **Permanent** | 0.20 acre | 0.02 acre | 0.01 acre | 0.20 acre |
| **Total** | **0.48 acre** | **0.19 acre** | **0.11 acre** | **0.99 acre** |
| *Source: Dokken 2026c* | | | | |

Perennial Stream Channel

The perennial stream channel habitat includes Arcade Creek and its tributary. Arcade Creek, a perennial stream channel, flows northeast to southwest through the BSA. Also included in this habitat is the Arcade Creek tributary, which flows southeast into Arcade Creek.

Construction of the trail will result in approximately 0.10 acre of temporary impacts to Arcade Creek and the Arcade Creek tributary due to access during installation of the gabion basket wall and placement of the prefabricated bridge. The bridge crossing over the Arcade Creek tributary will not require dewatering or any in-channel work, as it will be a prefabricated bridge and set over the creek using a crane or other heavy equipment. The bridge abutments will also be constructed outside of the Ordinary High Water Mark (OHWM) of the Arcade Creek tributary so no excavation within the channel is anticipated. As a result, temporary impacts associated with prefabricated bridge placement would be limited to short-term increases in noise and vibration within the immediate work area. Approximately 0.01 acre of permanent impacts are also anticipated within Arcade Creek due to the installation of a gabion basket wall along an actively eroding section of the channel (**Figure 7**). RSP is currently not anticipated at the bridge abutments but may be required based on future refinements in design and hydraulic studies and, if required, would be minimal. Avoidance and minimization measures **BIO-1** through **BIO-3** will be implemented to avoid and minimize Project-related impacts to Arcade Creek and the Arcade Creek tributary. Mitigation measure **BIO-4** will be implemented to offset permanent impacts to this aquatic feature. Impacts would be less than significant with mitigation incorporated.

Riparian Woodland

Riparian woodland habitat borders Arcade Creek as it flows through the BSA. Dominant tree species observed within this vegetation community include valley oak, interior live oak, box elder, Oregon ash, Fremont cottonwood, and northern California black walnut. The understory is comprised of Himalayan blackberry, periwinkle, Harding grass, and tall flat sedge. Within the BSA, this habitat community comprises approximately 8.84 acres.

Paving of the trail will result in approximately 0.20 acre of permanent impacts to riparian woodland habitat. An additional 0.89 acre of temporary impacts are anticipated due to construction access. To estimate the area needed for equipment access, a 20-foot temporary impact buffer was applied along the trail alignment. Tree removal within the riparian woodland habitat will be required; however, the specific trees to be removed have not yet been identified. Field observations during a site visit conducted on December 18, 2025, indicate that most trees within the riparian woodland are likely to be avoided, and impacts would be largely limited to the area around the proposed bridge crossing at the Arcade Creek tributary. Much of the mapped area in **Figure 6** likely represents overstory canopy, and construction would occur within the understory, so major tree removal is not anticipated to be necessary. Some trees may only need to be trimmed to allow equipment access. The temporary and permanent impact estimates represent the maximum anticipated impacts, and final impacts will be further refined during the permitting process. Prior to construction, a tree survey will be conducted within the BSA to document and mark all trees proposed for removal (**Figure 7**). Avoidance and

minimization measures **BIO-1** through **BIO-3**, and **BIO-5** will be implemented as part of the Project to reduce impacts on riparian woodland habitat. Additionally, mitigation measures **BIO-4** and **BIO-6**, will be implemented to offset permanent impacts to this vegetation community. Impacts would be less than significant with mitigation incorporated.

Annual Grassland

Within the BSA, annual grassland habitat is found along the edges of the two water quality/detention basins, bordering the oak woodland habitat. During the biological survey conducted in October 2025, the westernmost water quality/detention basin was dry, and the grass appeared recently trimmed. Common species observed in this habitat include wild oat, dogtail grass, spikeweed, and common vetch. Annual grasslands cover approximately 2.70 acres within the BSA.

Paving of the trail will result in approximately 0.20 acre of permanent impacts to annual grassland habitat. An additional 0.28 acre of temporary impacts are anticipated due to construction access. To estimate the area needed for equipment access, a 20-foot temporary impact buffer was applied along the trail alignment (**Figure 7**). Avoidance and minimization measures **BIO-1** through **BIO-3** will be implemented as part of the Project to reduce impacts on annual grassland habitat. Additionally, mitigation measure **BIO-6**, will be implemented to offset permanent impacts to this vegetation community. Impacts would be less than significant with mitigation incorporated.

Oak Woodland

The BSA includes a mature oak woodland habitat that occupies the upland areas of the site. This community is dominated by native oak tree species such as valley oak, interior live oak, and blue oak. The canopy is moderately dense, providing partial shade and contributing to a well-developed litter layer of decomposing oak leaves and twigs. The understory consists primarily of native and non-native grasses and forbs, including wild oat, Italian rye grass, and English plantain. Seasonal herbaceous growth is most abundant in spring, while the summer understory tends to dry and thin considerably. Shrub species such as poison oak were also found in this habitat type. Oak woodland habitat provides important foraging, nesting, and cover opportunities for a variety of wildlife species. Oak woodlands comprise approximately 1.44 acre of the BSA.

Paving of the trail will result in approximately 0.02 acre of permanent impacts to oak woodland habitat. An additional 0.17 acre of temporary impacts are anticipated due to construction access. To estimate the area needed for equipment access, a 20-foot temporary impact buffer was applied along the trail alignment. Tree removal within the oak woodland habitat will be required; however, the specific trees to be removed have not yet been identified. Field observations during the site visit conducted on December 18, 2025, indicate that most trees within the oak woodland are likely to be avoided, and impacts would be largely limited to the area around the proposed bridge crossing at the Arcade Creek tributary. Much of the mapped area in **Figure 6** likely represents overstory canopy, and construction would occur within the understory, so major tree removal is not anticipated to be necessary. Some trees may only need to be trimmed to allow equipment access. The temporary and permanent impact estimates represent the maximum anticipated impacts, and final impacts will be further refined during the permitting process. A tree survey will be conducted within the BSA to document and mark all trees proposed for removal (**Figure 7**). Avoidance and minimization measures **BIO-1** through **BIO-3**, and **BIO-5** will be implemented as part of the Project to reduce impacts on oak woodland habitat. Additionally, mitigation measures **BIO-4** and **BIO-6**, will be implemented to offset permanent impacts to this vegetation community. Impacts would be less than significant with mitigation incorporated.

**c.** **No impact.** An aquatic resources delineation was conducted in accordance with technical methods outlined in *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States* to determine the boundaries of the OHWM of Arcade Creek and the Arcade Creek tributary (**Appendix C**). During survey efforts, no wetland features were identified. Thus, no impact would occur.

**d.** **Less than Significant with Mitigation Incorporated.** The CDFW *Biogeographic Information & Observation System* was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA was determined to be within an area of Terrestrial Connectivity Rank 1 – Limited Connectivity Opportunity (Dokken 2026c). This ranking indicates that either land-use conditions limit the potential for wildlife or ecological processes to move through that area (urban, agriculture), or that no significant connectivity importance has been identified in relevant models. Rank 1 areas are classified by CDFW as lower priority for connectivity conservation efforts compared to Ranks 2–5.

The Arcade Creek Trail extension will follow an existing informal dirt path that passes through the open space area north of Arcade Creek. The Project will not introduce new barriers or cause additional habitat fragmentation. Upon completion, the Project will allow for the continued movement of terrestrial wildlife across the trail and throughout the surrounding oak woodland, riparian woodland, and annual grassland habitats (**BIO-6**). Existing habitat connectivity will be maintained throughout Project implementation.

Additionally, oak woodland and riparian woodland habitats support migratory birds species protected under the MBTA. The implementation of measure **BIO-8** and **BIO-9** would avoid all potential impacts to migratory birds. Impacts would be less than significant with mitigation incorporated.

**e.** **Less than Significant with Mitigation Incorporated.** The proposed Project is subject to the City of Citrus Heights Tree Ordinance. Tree removal within the riparian woodland and oak woodland habitats will be required; however, the specific trees to be removed have not yet been identified. Field observations during a site visit conducted on December 18, 2025, indicate that most trees within both habitats are likely to be avoided, and impacts would be largely limited to the area around the proposed bridge crossing at the Arcade Creek tributary. Much of the mapped area in **Figure 6** likely represents overstory canopy, and construction would occur within the understory, so major tree removal is not anticipated to be necessary. Some trees may only need to be trimmed to allow equipment access. A tree survey will be conducted within the BSA to document and mark all trees proposed for removal. With the implementation of mitigation measure **BIO-6**, Project impacts regarding local policies or codes protecting biological resources would be less than significant with mitigation incoroprated.

**f.** **No Impact.** No adopted Habitat Conservation Plans or other similar plan cover the Project area. No impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**BIO-1:** Every individual working on the Project must attend a biological awareness training session conducted by the Project biologist. This training program will include information regarding the sensitive habitats and an overview of special status wildlife species that may be encountered within the work area. During biological awareness training, construction personnel will be briefed on topics including, but not limited to, the protected status of VELB and NWPT, as well as the need to protect elderberry shrubs, the host plant of VELB.

**BIO-2:** Prior to the start of construction activities, the Project limits adjacent to the Arcade Creek, the Arcade Creek tributary and the riparian woodland habitat will be marked with flagging, staking, or high visibility fencing to ensure construction will not further encroach into adjacent sensitive resources.

**BIO-3:** BMPs will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):

- Exposed soils and material stockpiles will be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction.
- Implementation of the Project shall require approval of a site-specific SWPPP or Water Pollution

Control Program that will implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques.

- All construction areas will be properly protected to prevent excess erosion, sedimentation, and water pollution.
- All vehicle and equipment fueling/maintenance will be conducted outside of any surface waters and/or sensitive habitat.
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants.
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters.
- All erosion control measures, and storm water control measures will be properly maintained until the site has returned to a pre-construction state.
- All construction materials will be hauled off-site after completion of construction.

**BIO-4:** Permanent effects to stream channel and riparian woodland habitat will be provided compensatory mitigation to result in no net loss of habitat, at an agency-approved mitigation ratio via one of the following compensatory mitigation options:

- payment of an in-lieu fee to an agency-approved mitigation site,
- compensatory off-site mitigation at an agency-approved mitigation site,
- compensatory on-site mitigation, or
- a combination of the above compensatory mitigation options.

**BIO-5:** Native vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes

**BIO-6:** Following the completion of construction, all temporary effects to riparian woodland, annual grassland and oak woodland habitat will be recontoured and re-seeded at a 1:1 ratio, to allow for the habitat to return to its previous function. Tree removal will follow final plans and specifications, and any deviation must be approved by a Project biologist. All temporarily disturbed areas will be seeded with a Project biologist-approved native seed mix. Any trees removed from the riparian woodland and oak woodland habitat will be appropriately mitigated for through replanting or other methods in coordination with CDFW and the City of Citrus Heights.

**BIO-7:** A focused rare plant survey will be conducted within the Project area prior to the start of construction. If rare plants are discovered during pre-construction surveys but can be reasonably avoided, an ESA fence will be installed to protect the specimens in place.

If a special-status plant specimen is present within the Project area and cannot be fully avoided, the Project biologist will relocate individual(s) and/or collect seeds to ensure the continued existence of the local population. Area of relocation or re-seeding will be at the discretion of the Project biologist but will be located within suitable habitat and within the same watershed of the Project, preferably at a location that is protected in perpetuity.

**BIO-8:** Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1–September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 1 week of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

An initial 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project Biologist and in coordination with wildlife agencies) in the buffer area until a Project Biologist determines the young have fledged. A reduced no-work buffer can be established if determined appropriate by the Project Biologist, and will consider various factors including species of bird, location of nest, stage of nest, existing environment, and type of active work.

**BIO-9:** During the spring/summer season prior to construction the Project biologist must conduct pre-construction Swainson's hawk protocol-level surveys within the Project area plus a 0.25-mile buffer in accordance with CDFW's guide for Swainson's Hawk Technical Advisory Committee. Pre-construction surveys will determine if active nests are present within the Project area or within 0.25 mile of Project activities. If an active nest is discovered within the survey area the Project biologist will determine the appropriate avoidance strategies (e.g., monitoring, no-work buffers, work windows, temporary sound/noise barriers, etc.) to avoid take of the nest and will coordinate with CDFW as needed.

**BIO-10:** To avoid impacts to western pond turtles, the Project biologist will conduct a pre-construction survey of the aquatic and upland habitats within the Project area. Surveys will be conducted no more than 24 hours prior to onset of construction. If a western pond turtle is spotted within an active work area the Project Biologist will be contacted, and work activities will immediately cease within 100 feet of the turtle. Work will not recommence until the turtle has left the Project site on its own volition. In addition, if western pond turtle nests are detected within or adjacent to the Project area, the Project biologist will mark the nests with high-visibility flagging or fencing and establish a 25-foot no-disturbance buffer around each nest to prevent disturbance until hatching occurs or the biologist determines the nest is no longer at risk.

**BIO-11:** To prevent the inadvertent entrapment of NWPT, all excavated, steep-walled holes or trenches more than 3 inches wide and 1 foot deep will be inspected for NWPT then covered at the close of each working day by plywood or similar materials. If it is not feasible to cover an excavation, one or more escape ramps constructed of earthen fill or wood ≥ 6 inches wide shall be installed. Before such holes or trenches are filled, they must be thoroughly inspected by the biologist for trapped NWPT.

**BIO-12:** Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

**BIO-13:** All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

**BIO-14:** The contractor must not apply rodenticide or herbicide within the Project area during construction.

**BIO-15:** If any wildlife is encountered during the course of construction, said wildlife will be allowed to leave the construction area unharmed.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES - Would the project:** | | | | |
| a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | | | | X |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | | X | | |
| c. Disturb any human remains, including those interred outside of dedicated cemeteries? | | X | | |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Archaeological Survey Report (Dokken 2026d), and the resources cited in this analysis.

***Regulatory Setting***

CEQA established statutory requirements for establishing the significance of historical resources in PRC Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential effects on historical and archaeological resources are considered as part of a project's environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources (CRHR); 2) cultural resource included in a local register of historical resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a project may have a significant effect on the environment if the project could result in a substantial adverse change in the significance of a resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of an historic resource that conveys its historic significance and qualify it for inclusion in the CRHR or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect sate-owned resources that meet.

National Register of Historic Place (NRHP) listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) California Code of Regulations (CCR) Section 15064.5[d and f]).

***Environmental Setting***

Efforts to identify potential archaeological resources in the Area of Potential Effects (APE) include historical research, a search of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC), a search of site records and survey reports on file at the North Central Information Center (NCIC), efforts to coordinate with Native American representatives, and a pedestrian survey. Results from the NCIC identified no cultural resources within the APE and 15 cultural resources within a 0.5-mile radius of the APE, all consisting of historic built environment resources. The NCIC results also identified three reports within the APE and 12 reports within the 0.5-mile search radius.

The APE for the Project was configured to include the proposed paved trail, new prefabricated bridge, solar lighting, Arcade Creek bank protection, and pedestrian crossing at Sylvan Road (**Figure 3**). The horizontal APE encompasses the south and southeastern portions of the Walmart Parking lot as potential staging areas and 50-foot buffer of all other Project features for construction access.

A pedestrian survey of the APE was conducted by consultant archaeologist Michelle Campbell on February 23, 2026, for the purpose of identifying and recording archaeological resources. Wilton Rancheria representatives participated in the pedestrian survey. UAIC conducted an independent survey on February 3, 2026. No constraints to the survey were encountered as full access was obtained prior to completing the survey. No cultural resources were identified within the APE as a result of the identification efforts (Dokken 2026d).

On October 24, 2026, a request was sent to the NAHC requesting a CEQA Tribal Consultation List for the Project area and review of the SLF for any Native American cultural resources that might be affected by the Project. On October 27, 2026, Pricilla Torres-Fuentes, NAHC Cultural Resource Analyst, replied via email that the results of the review were negative. Ms. Torres-Fuentes also provided a list of Native American tribes and recommended contacting each for further review of potential known and recorded sites within the proposed Project area.

On January 7, 2026, CEQA consultation (AB52) initial notification letters were mailed or sent via online portal to the representatives on the NAHC list. These letters provided information on the Project and requested that the letter recipients respond with requests to consult or with any comments or concerns about the Project. If no response to the letter was received, a follow-up email was sent on March 3, 2026. A summary of outreach is included in the Tribal Cultural Resources section and **Appendix D**.

***Discussion***

**a.** **No Impact**. The records search, consultation with Native American organizations and governments, and the field survey did not identify any historical resources, as defined in Section 15064.5 (Dokken 2026d). No impact would occur.

**b.** **Less than Significant with Mitigation Incorporated**. In an effort to identify archaeological resources that might be affected by the undertaking, historical research, a search of the SLF by NAHC, a search of site records and survey reports on file at the NCIC, efforts to coordinate with Native American representatives, and a pedestrian survey were completed. The entire APE was surveyed, and no constraints were encountered as access had been obtained for the entire APE prior to the survey. Ground surface visibility within the APE was extremely low due to existing development. No archaeological resources were identified within or adjacent to the APE.

Additionally, the surface and subsurface sensitivity was assessed through background research, landform analysis, and opportunistic visual inspection of exposed subsurface soils within the APE during the pedestrian survey. The APE location is within an area of older Pleistocene aged soils with very low sensitivity for buried archaeological resources. Further, the majority of the APE will have disturbance of approximately 1–3 feet for proposed improvements, the majority of which has been previously disturbed by historical agricultural use and more modern urban development. Isolated locations for retaining walls and lighting will require up to 10 feet of disturbance. As Project activities will occur in older sediments and primarily within a shallow disturbance of previously construction

areas, the potential for the Project to impact intact cultural resource deposits in the APE is low. However, there is always the possibility that unknown cultural resources may be encountered during construction. With the implementation of measure **CR-1** potential impacts from the Project would be less than significant with mitigation incorporated.

**c. Less than Significant with Mitigation Incorporated.** With any Project requiring ground disturbance, there is the possibility that unmarked burials may be unearthed during construction. With implementation of **CR-2**, impacts would be less than significant with mitigation incorporated.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**CR-1:** If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey would be needed if Project limits are extended beyond the present survey limits.

**CR-2:** Section 5097.94 of the PRC and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, all ground disturbance within a 100-ft radius must stop and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation and Caltrans PQS should be contacted. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. ENERGY - Would the project:** | | | | |
| a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | X | | |
| b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Air Quality Technical Memorandum (Dokken 2026b, **Appendix B**), and the resources cited in this analysis.

***Environmental Setting***

Sacramento Municipal Utility District (SMUD) provides electrical service to the planning area. SMUD generates, transmits, and distributes electric power to a 900-square-mile service area that includes Sacramento County and a small portion of Placer County. SMUD receives its electricity from diverse and competitively priced resources, including hydro generation; cogeneration plants; advanced and renewable technologies such as wind, solar and biomass/landfill gas power; and power purchased on the wholesale market (Citrus Heights 2011b).

***Discussion***

**a.** **Less Than Significant Impact with Mitigation Incorporated**. As discussed in Section III. Air Quality, the on-site construction equipment for the proposed Project is anticipated to emit 195 metric tons of GHG annually, which is below threshold's established by SMAQMD (see **Table 4** and **Appendix B**). Construction activities will include minor earthwork and would require minimal electricity consumption. With implementation of **CC-1**, construction-related GHG emissions be minimized further. Impacts would be less than significant with mitigation incorporated.

Additionally, there will be solar lights installed along the length of the trail, which will ensure the Project's energy consumption during operation is minimal.

**b.** **No Impact.** The Project supports several General Plan goals and actions relevant to increasing opportunities for multi-modal transportation, creating bicycle accessibility, and closing gaps in the current bicycle network including Goal 29 and Goal 39. By constructing an addition to the planned 16-mile CCTP, the proposed Project would provide for more energy-efficient transportation options within the City, and the overall effect to energy efficiency would be beneficial. As a result, the Project would not conflict with or hinder any state or local renewable energy plans, and no impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

See Greenhouse Gases section for **CC-1**.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VII. GEOLOGY AND SOILS - Would the project:** | | | | |
| a. Directly or indirectly cause 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. | | | | X |
| ii. Strong seismic ground shaking? | | | | X |
| iii. Seismic-related ground failure, including liquefaction? | | | | X |
| iv. Landslides? | | | | X |
| b. Result in substantial soil erosion or the loss of topsoil? | | X | | |
| 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? | | | | X |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | | | X | |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | | | | X |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature. | | X | | |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, and the resources cited in this analysis.

***Regulatory Setting***

**Federal**

Historic Sites, Buildings and Antiquities Act

For geologic and topographic features, the key federal law is the Historic Sites, Buildings, and Antiquities Act (Historic Sites Act). Enacted into law August 21, 1935, the Historic Site Act establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." This is Act authorizes the Secretary of the Interior through the National Parks Service to protect topographic and geologic features by carrying out programs to survey, research, and acquire sites of national significance; collect photographs, objects, and document acquired sites; cooperate with stakeholders to preserve, restore, or operate sites; and develop ongoing public educational programs. Topographic and geologic features are also protected under the CEQA.

**State**

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The main purpose of the law is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The law only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Alquist-Priolo Act requires the State Geologist to establish regulatory zones known as "Earthquake Fault Zones" around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning efforts. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act addresses non surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. Passed by the State Legislature in 1990, this law was codified in the PRC as Division 2, Chapter 7.8A, and became operative in April 1991. The Seismic Hazards Mapping Act resulted in a mapping program that is intended to reflect areas that have the potential for liquefaction, landslides, strong earth ground shaking, or other earthquake and geologic hazards.

**Local**

Citrus Heights Municipal Code

Chapter 18 of the Municipal Code provides regulations for buildings and construction. Article 4 of the City's building code adopts by reference the California Building Code Part 2, 2007 Edition, which is based on the 2006 International Building Code. Article 12 includes land grading and erosion control requirements to minimize the degradation of water quality and water courses; disruption of drainage flows from land preparation and development activities; and sediment and pollutant runoff from construction activities.

***Environmental Setting***

**Seismicity**

The CCHGP EIR describes the following regarding seismicity in the City of Citrus Heights:

- The planning area is located within an area of California with relatively low seismic activity and is not located within a highly active fault zone.
- The Citrus Heights planning area was not identified as having liquefaction potential. The depth to the water table and the underlying geologic materials within the planning area do not support high liquefaction potential.

**Slope Stability and Landsliding**

The topography of the Citrus Heights area is characterized by flat terrain with small hills in some locations. Slopes within the planning area range from zero to 15% with the majority of the steeper slopes located in the southeastern portion of Citrus Heights. No landslides or landslide deposits have been mapped within the planning area. No evidence of slope instability such as landslide scars or mudflow features are observed in the planning area. Overall potential for slope instability in the planning area is considered low (Citrus Heights 2011b).

**Soils**

The Natural Resources Conservation Service (NRCS) Custom Soil Resource Report was queried for the Project, and the soil types within the Project area include Fiddyment-Orangevale complex, 2 to 8 percent slopes and Fiddyment-Orangevale-Urban land complex, 2 to 8 percent slopes (Dokken 2026c). Erosion hazard ad shrink/swell potential is shown in **Table 6. Soil Types in the Project Area** below:

**Table 6. Soils Types in the Project Area**

| Soil Type | Soil Slope | Erosion Hazard | Shrink/ Swell Potential |
|---|---|---|---|
| 147 Fiddyment-Orangevale complex | 2-8% | Slight to moderate | Moderate |
| 148 Fiddyment-Orangevale-Urban land complex | 2-8% | Moderate | Moderate |
| *Source: CCHGP EIR 2011b* | | | |

***Discussion***

**a.i-iv.** **No Impact.** The Project would not expose people or structures to potential substantial or adverse effects.

i. The Project is not located within a Alquist-Priolo Earthquake Fault Zone and there are no active faults are located within the Project area (Citrus Heights 2011b).

ii. The proposed Project would not expose people or structures to seismic ground shaking due to the lack of active faults within the City and the nature of the proposed Project activities (Citrus Heights 2011b).

iii. The Project is not located within a liquefaction zone (Citrus Heights 2011b).

iv. The Project is not located within a landslide zone (Citrus Heights 2011b).

**b.** **Less than Significant with Mitigation Incorporated.** Soils within the Project area have a slight to moderate erosion potential (Citrus Heights 2011b). The Project will require ground disturbance and tree/vegetation removal along the alignment of the proposed trail, which may cause soil erosion and loss of topsoil during construction. Potential impacts to soils would be minimized through soil stabilization measures covered within the required General Construction municipal separate stormwater system (MS4) Permit and implementation of the SWPPP (mitigation measures **WQ-1** and **WQ-2**). The Project would also comply with Article 12 "Land Grading and Erosion Control" of the City's Municipal Code. In addition, mitigation measure **WQ-4** and **BIO-3** would further reduce erosion during construction. Impacts would be less than significant with mitigation incorporated.

**c.** **No Impact.** Refer to response to question a) above. The Project is not 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. No impact would occur.

**d.** **Less Than Significant.** Two soil map units are mapped within the Project area: Fiddyment-Orangevale-Urban land complex, 2 to 8 percent slopes, and Urban land-Xerarents Fiddyment complex, 0 to 8 percent slopes (Dokken 2026c). These soil types have a low to high and moderate shrink swell potential as shown in **Table 6**. Geotechnical investigations will be conducted to address expansive soils in foundation design of the bridge and trail. Therefore, the Project would not create substantial direct or indirect risks to life or property and the impact would be less than significant.

**e.** **No Impact.** The proposed Projects would not use a septic tank system. In addition, sewage is not required for proposed Project; therefore, the Project will have no impacts related to septic systems. No impact would occur.

**f.** **Less than Significant with Mitigation Incorporated.** Proposed grading for trail construction will range from 1–1.5 feet deep. Solar lights will require 12 feet of excavation depth and installation of bank protection will require disturbances up to 5 feet below the current flow line. The pedestrian bridge may require up to 50 feet of ground disturbance if installed with piles. However, with any project requiring ground disturbance, there is always the possibility that unknown paleontological resources may be unearthed during construction. Implementation of CCHGP EIR Mitigation Measure 4.7-7 would reduce impacts related to potential damage to unique paleontological resources to a less than significant level by ensuring that earth disturbing activities cease if any possible resources are uncovered, minimizing potential adverse impacts on unique, scientifically important paleontological resources.

***Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project***

CCHGP EIR Mitigation Measure 4.7-7 is applicable to the proposed Project.

**Mitigation Measure 4.7-7: Discovery of Potential Paleontological Resources**

If potential paleontological resources are detected by construction workers or City staff during construction of future land uses, work shall stop immediately, and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include, but are not limited to, construction worker personnel education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures considered appropriate after further consultation.

***Additional Project-Level Mitigation Measures***

See Section IV. Biological Resources for **BIO-3** and Section X. Hydrology and Water Quality for **WQ-1**, **WQ-2** and **WQ-4**.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. GREENHOUSE GAS EMISSIONS - Would the project:** | | | | |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | X | | |
| b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Air Quality Technical Memorandum (Dokken 2026b, **Appendix B**), and the resources cited in this analysis.

***Regulatory Setting***

**Federal**

Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Federal Clean Air Act

On December 7, 2009, EPA adopted its Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CAA (Endangerment Finding). The Endangerment Finding is based on Section 202(a) of the CAA, which states that the EPA Administrator should regulate and develop standards for "emission[s] of air pollution from any class of classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." The rule addresses Section 202(a) in two distinct findings. The first addresses whether or not the concentrations of the six key GHGs (i.e., $CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, and $SF_6$) in the atmosphere threaten the health and welfare of current and future generations. The second addresses whether or not the combined emissions of GHGs from new motor vehicles and motor vehicle engines contribute to atmospheric concentrations of GHGs and thus to the threat of climate change. The Administrator found that atmospheric concentrations of GHGs endanger public health and welfare within the meaning of Section 202(a) of the CAA.

The Administrator also found that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare.

**State**

In 2005, EO S-3-05 proclaimed that California is vulnerable to the effects of climate change. To combat those concerns, the EO established a long-range GHG reduction target of 80% below 1990 levels by 2050. Subsequently, Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 was signed. AB 32 requires California to reduce statewide GHG emissions to 1990 levels by 2020. AB 32 directed CARB to develop and implement regulations that reduce statewide GHG emissions. The Climate Change Scoping Plan (Scoping Plan) approved by CARB in December 2008, outlines the State's plan to achieve the GHG reductions required in AB 32. Though the Scoping Plan does not define the specific role local governments will play in meeting the State's GHG reduction goals, it identifies cities and counties as "essential partners" within the overall statewide effort. Additionally, Senate Bill (SB) 375 (2008) established a process whereby regional targets for reduced vehicles miles traveled (VMT) and GHG emissions will be established by ARB, in collaboration with Metropolitan Planning Organizations throughout the state, including the Sacramento Area Council of Governments. Once determined, these targets will apply to the transportation emissions sector.

## Local

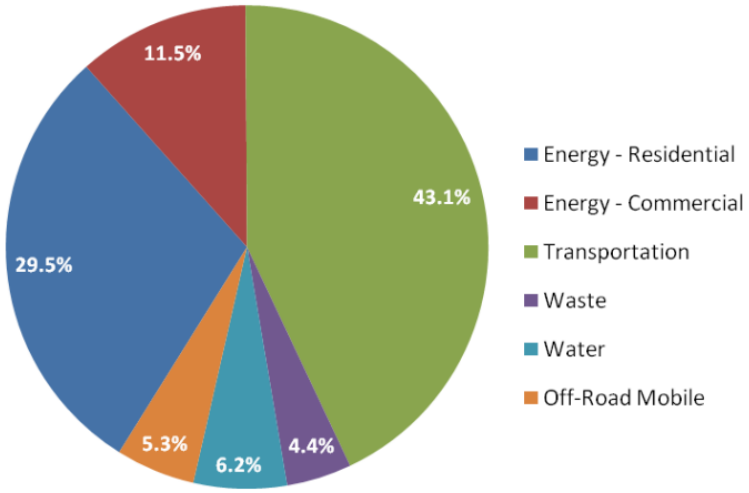
City of Citrus Heights Greenhouse Reduction Plan

The City of Citrus Heights Greenhouse Gas Reduction Plan (GGRP) addresses major sources of GHG emissions in the community that cumulatively contribute to global climate change. The City's approach to addressing GHG emission reductions includes:

- completing a baseline GHG emissions inventory and projecting future emissions;
- identifying a communitywide GHG reduction target;
- preparing a GHG reduction plan to identify strategies and measures to meet the reduction target;
- identifying targets and reduction strategies in the General Plan and evaluating the environmental impacts of the GGRP in the General Plan EIR; and monitoring effectiveness of reduction measures and adapting the plan to changing conditions.

In 2008, the City of Citrus Heights joined other Sacramento County communities in preparing a GHG emissions inventory. Following certain adjustments that better characterized Citrus Heights' local conditions and jurisdiction, the baseline inventory indicated that the community released 543,727 metric tons of $CO_2e$ emissions in 2005. The communitywide baseline inventory reported emissions under different source-sectors, including transportation, off-road mobile sources (e.g., lawnmowers, boats), residential and commercial energy use, solid waste disposal, water use, and wastewater treatment. **Figure 8. Citrus Heights Community-wide Greenhouse Gas Emissions Baseline (2005)** depicts the percent breakdown of emissions related to the various sectors:

**Figure 8. Citrus Heights Community-wide Greenhouse Gas Emissions Baseline (2005)**




*Source: CCHGP 2011b*

***Discussion***

**a.** **Less than Significant with Mitigation Incorporated.** GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. For the Project, construction GHG emissions would include emissions produced by on-site construction equipment. As discussed in **Table 4** in the Section III. Air Quality, construction GHG emissions would be below threshold's established by SMAQMD. Additionally, with implementation of **CC-1**,

construction-related GHG emissions be further reduced. Impacts would be less than significant with mitigation incorporated.

By design, the Project is intended to increase pedestrian and bicycle accessibility to existing communities, schools and other existing trails and further encourage non-motorized travel within the Project area. The Project would not increase the number of automobiles in the traffic system. No impact to greenhouse gas emissions or climate change would result from operations.

**b.** **No Impact.** The proposed Project would not conflict with the City of Citrus Heights GGRP. The proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**CC-1:** The implementing agency will require through construction contract terms and specifications that the contractor adheres to the mitigation measures and implements all applicable SMAQMD best management practices for reducing construction-related GHG emissions. Documentation will be provided to the implementing agency on a weekly basis. The contract provisions and specifications will authorize the implementing agency to sanction contractors for non-compliance. The implementing agency will consult SMAQMD prior to construction about the most current recommended construction best management practices and will adopt those practices. Practices include the following:

- Improve fuel efficiency from construction equipment:
    - Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes. 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 determined to be running in proper condition before it is operated.
    - Train equipment operators in proper use of equipment, including limiting idling time, minimizing warm-up time, performing routine maintenance, and optimizing equipment use.
    - Avoid using equipment that is larger than the job requires.
    - Use equipment with new technologies (e.g., repowered engines, electric drivetrains).
- Perform on-site material hauling with trucks equipped with on-road engines (if the air districts or CARB determine them to emit less than the off-road engines).
- Use alternative fuels for generators at construction sites, rather than gasoline or diesel (e.g., propane or solar), or use electrical power.
- Use a CARB-approved low-carbon fuel for construction equipment. (NOx emissions from the use of low-carbon fuel must be reviewed and increases mitigated.)
- Encourage and provide carpools, shuttle vans, and transit passes for construction worker commutes.
- Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and using the most efficient heating and cooling units available.
- Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75% by weight) to avoid landfill disposal.

- Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials, and based on volume for trail, sidewalk and curb materials). Wood products utilized should be certified through a sustainable forestry program.
- Minimize the amount of concrete for paved surfaces or utilize a low carbon concrete option.
- Produce concrete on-site if determined to be less emissive than transporting ready mix.
- Use Smartway certified trucks for deliveries and equipment transport.
- Develop a plan to efficiently use water for adequate dust control.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. 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? | | X | | |
| 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? | | X | | |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | X |
| 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? | | | | X |
| 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? | | | | X |
| f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | X | | |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Hazardous Waste Initial Site Assessment (Geocon 2026, **Appendix E**), and the resources cited in this analysis.

***Regulatory Setting***

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR Section 61.145). Federal regulations and regulations adopted by the SMAQMD apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to

comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the AQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

***Environmental Setting***

**Standard Environmental Record Sources**

A record search from Environmental Data Resources (EDR) was conducted in January 2026 which searched federal, state, and local environmental databases for potential Recognized Environmental Conditions (RECs) within the Project area and properties/facilities within one mile of the Project area (**Appendix E**). The Project area is listed on two non-release-related databases1 for a construction project that was terminated in 2024. These listings do not indicate the release or storage of hazardous materials and therefore, are unlikely to have caused an REC within the Project area. Three properties within 1/8 mile of the Project area are listed on various non-release-related databases. No properties within 1/4 mile of the Project area are listed on release-related databases, however two properties within approximately 300 feet of the Project area are listed as hazardous waste generators (Walmart #3712) and Costco (#771). The Underground Storage Tank (UST) Finder database indicates that four USTs are present (three 20,000-gallon tanks and one 1,500-gallon tank) at the Costco Gas Station upgradient of the Project area (**Appendix E**). Since no releases have been reported, these two properties are unlikely to have caused an REC within the Project area.

**GeoTracker and EnviroStor**

Information available on the California State Water Resources Control Board's GeoTracker (http://geotracker.waterboards.ca.gov) and the California Department of Toxic Substances Control's (DTSC) EnviroStor (http://www.envirostor.dtsc.ca.gov/public/) online data management systems were also reviewed for information regarding documented environmental assessment and cleanup at the Project area and/or properties/facilities within 1/8 mile of the Project area. No information pertaining to the Project area or properties/facilities within the vicinity of the Project area is available on GeoTracker or EnviroStor (**Appendix E**).

**Aerial Photographs**

Dry farmed fields were present across the western portion of the Project area from as early as 1937 until likely sometime in the 1950s. This type of crop cultivation suggests that pesticides were not likely applied and persistent pesticides and associated metals are not likely to be present in soil in this area. The DTSC's *Interim Guidance for Sampling Agricultural Properties (Third Revision)* dated August 7, 2008, states that "many dry-land farming fields are not treated with pesticides or infrequently treated, since the lack of water does not provide a desirable habitat for most agricultural pests. Properties that clearly qualify as dry-land farming do not need further investigation for pesticides or metals." (Geocon 2026). The aerial photographs do not show features or land uses that directly suggest the presence of conditions or features within the Project area or on adjoining and adjacent properties likely to have caused an REC within the Project area.

**Site Reconnaissance**

Site reconnaissance was completed on January 19, 2026 by Lauren Fordyce-Pitner, Staff Scientist with Geocon. The Project area includes the southern and eastern portions of the Stock Ranch Commercial Center (behind Walmart and Costco). Loading docks, packing materials such as pallets, paved parking areas with staining,

several shipping containers with unknown contents, a locked propane storage area, machinery, and various utilities such as irrigation, electric, and stormwater were observed. While hazardous materials may be present inside the shipping containers and were observed in the propane storage tank area, no evidence of spills or leaks were observed and the shipping containers were secured and located on pavement. Therefore, it is unlikely that hazardous materials would have contaminated the surrounding soil. Adjoining and nearby properties include residential homes, Stock Ranch Commercial Center, Stock Ranch Nature Preserve, Arcade Creek, and Sylvan Road. Traffic striping weas observed on Sylvan Road.

***Discussion***

**a-b.** **Less than Significant with Mitigation Incorporated.** Based on the site reconnaissance and database research, potential sources of hazardous materials on properties adjacent to the Project boundaries only include lead or chromium in yellow thermoplastic traffic striping (Geocon 2026).

Removal of yellow thermoplastic traffic striping from the existing roadway surface is required to construct the at-grade signalized pedestrian crossing at Sylvan Road. Yellow traffic stripes may contain heavy metals such as lead and chromium at concentrations in excess of hazardous waste thresholds established by the CCR and may produce toxic fumes when heated. **HM-1** will be implemented to reduce impacts.

Additionally, with any Project that involves excavation, there is a possibility of encountering unknown hazardous contamination during construction. With the implementation of measure **HM-2**, Project impacts from upset or accident conditions will be reduced less than significant with mitigation incorporated.

**c.** **No Impact.** No schools are located within one-quarter mile of the Project area. Thus, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of a school. There would be no impact.

**d.** **No Impact.** Government Code Section 65962.5 requires California EPA to maintain a list of hazardous waste and substance sites, called the Cortese List, which is consulted during land-use planning and development processes. A review of the California EPA databases indicate that there are no sites listed on the Cortese List located within the Project area. Therefore, the Project would not create a significant hazard to the public or environment and no impact would result from Project implementation.

**e.** **No Impact.** The Project is not located near an airport or airstrip. Since the Project site is not located within two miles of an airport or an area for which an Airport Land Use Plan has been prepared, and no public or private airfields are within two miles of the Project area, users of the proposed Project would not be exposed to hazards due to over flight aircraft. Thus, no impacts would occur.

**f.** **Less Than Significant with Mitigation Incorporated.** Partial road closures will be required during construction of the Project. As part of the Project, measure **LU-2** will be implemented prior to construction to minimize any disruption to local traffic. Operation of the Project would not impair or physically interfere with an adopted emergency response or evacuation plan. Impacts would be less than significant with mitigation incorporated.

**g.** **No Impact.** According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone Map, the Project site is located within a Local Responsibility Area (LRA) (CAL FIRE 2026). The surrounding land uses are also located within an LRA. The Project site and surrounding land uses are not within a Very High Fire Hazard Severity Zone (CAL FIRE 2026). Therefore, the proposed Project would not expose people or structures to significant risk of loss, injury, or death involving wildland fires, and no impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project Level Mitigation Measures***

See Transportation section for **LU-2**.

**HM-1:** To avoid impacts from pavement striping during construction it is recommended that removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provision 14-11.07 REMOVE YELLOW TRAFFIC STRIPE AND PAVEMENT MARKING WITH HAZARDOUS WASTE RESIDUE.

**HM-2:** Should any previously unknown hazardous waste/material be encountered during construction, the procedures outlined in Caltrans Hazards Procedures for Construction shall be followed.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **X. HYDROLOGY AND WATER QUALITY - Would the project:** | | | | |
| a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | | X | | |
| b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | | | X | |
| 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:<br>i) result in substantial erosion or siltation on- or off-site;<br>ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;<br>iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or<br>iv) impede or redirect flood flows? | | X | | |
| d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | X | | |
| e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Water Quality Technical Memorandum (Dokken 2026e, **Appendix F**), and the resources cited in this analysis.

***Regulatory Setting***

**Federal**

Federal Clean Water Act of 1972

The CWA establishes the basic structure for regulating discharges of pollutants into waters of the U.S. and setting water quality standards for all contaminants in surface waters. Water quality standards are designed to protect the public health or welfare, enhance the quality of water and serve the purposes of the CWA. Thus, water quality standards must contain:

- Designation of beneficial uses of water, and
- Establishment of water quality criteria to protect those designated uses.

EPA's Office of Water is responsible for implementing the CWA. The Office provides guidance, specifies scientific methods and data collection requirements, performs oversight, and facilitates communication among the federal, State, and local agencies that manage water quality. EPA has delegated the State of California as the authority to implement and oversee most of the programs authorized or adopted for CWA compliance through the Porter-Cologne Water Quality Control Act of 1969. The Porter-Cologne Act is described in the State regulatory setting below.

National Pollutant Discharge Elimination System

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the U.S from any point source is unlawful unless the discharge is in compliance with a NPDES permit. In California, the SWRCB and RWQCBs are authorized to implement this program. NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre of soil, mining operations, and animal feedlots and agricultural facilities above certain thresholds.

Stormwater discharges from both large and small construction sites are now subject to NPDES requirements. Large construction sites are those that involve one or more acres of soil disturbance. The SWRCB has issued an NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (General Construction Permit) under the CWA. The permit requires the preparation of a SWPPP for proposed construction activities of greater than one acre in size. A SWPPP is an operational plan that identifies and describes BMPs to be implemented at the construction site to control pollution of stormwater runoff. Since 2008, small construction sites (those involving disturbance of less than one acre of soil) have also required an NPDES permit as part of Phase II of EPA's NPDES Storm Water Program. Phase II is intended to further reduce adverse effects on water quality and aquatic habitat by instituting the use of BMPs on previously unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation (Citrus Heights 2011b).

The Phase II requirements also impose new obligations on MS4s. Small MS4s (i.e., those located in an incorporated city or a county of less than 100,000 people) that are located within urbanized areas as defined by the U.S. Census must now be covered by a NPDES permit. Details of the NPDES permit system as it pertains to the City of Citrus Heights are discussed in the State and local regulatory settings below.

Section 303(d) of the Clean Water Act

Section 303(d) of the CWA requires states to develop lists of water bodies (or segments of water bodies) that will not attain water quality standards after implementation of minimum required levels of treatment by point source dischargers (e.g., municipalities and industries). Section 303(d) requires states to develop a total maximum daily load (TMDL) for each of the listed pollutants and water bodies. A TMDL is the amount of loading that the water body can receive and still meet water quality standards. The TMDL must include an allocation of allowable loadings to point and nonpoint sources, with consideration of background loadings and a margin of safety. NPDES permit limitations for listed pollutants must be consistent with the load allocation prescribed in the TMDL. The TMDL must also include an analysis that shows links between loading reductions and the attainment of water quality objectives. The EPA must either approve a TMDL prepared by the state or, if it disapproves the state's TMDL, issue its own. NPDES permit limits for listed pollutants must be consistent with the waste load allocation prescribed in the TMDL. After implementation of the TMDL, it is anticipated that the problems that led to placement of a given pollutant on the Section 303(d) list would be remediated. On October 25, 2006, the SWRCB approved California's 2006 Section 303(d) List of Water Quality Limited Segments.

## State

### Porter Cologne Water Quality Control Act of 1969

The Porter Cologne Water Quality Control Act, otherwise known as the California Water Code, is California's statutory authority for the protection of water quality. Under the Porter Cologne Act, the state must adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. The Porter Cologne Act sets forth the obligations of the SWRCB and RWQCBs pertaining to the adoption of Basin Plans and establishment of water quality objectives. It also authorizes the SWRCB and RWQCBs to issue and enforce permits containing waste discharge requirements. Basin Plans establish beneficial uses, water quality objectives, and implementation programs for each of the nine regions in California. Unlike the federal CWA, which regulates only surface water, the Porter Cologne Act regulates both surface water and groundwater.

### State Water Resources Control Board

In 1967, the SWRCB was created to administer state water rights and water quality functions. The SWRCB and its nine RWQCBs administer water rights and enforce pollution control standards throughout the state. The SWRCB is responsible for granting of water right permits and licenses through an appropriation process following public hearings and appropriate environmental review by applicants and responsible agencies. In granting water right permits and licenses, the SWRCB must consider all beneficial uses, including water for downstream human and environmental needs. In addition to granting the water right permits needed to operate new water supply projects, the SWRCB also issues water quality–related certifications to developers of water projects under Section 401 of the federal CWA.

### Municipal Regional Stormwater Permit

In the City of Citrus Heights, storm water discharge through the City's municipal storm drain system is managed through a joint NPDES Permit with the County of Sacramento and the cities of Sacramento, Folsom, Rancho Cordova, Elk Grove and Galt (NPDES Permit No. CAS082597, WDR Order No. R5-2008-0142). The joint NPDES permit regulates all wet and dry weather runoff discharge in the County, including the City of Citrus Heights. The joint permit requires implementation of a storm water management program (the Sacramento Stormwater Quality Partnership described below addresses this requirement) which includes the use of BMPs. Wastewater discharges from wastewater treatment plants (WWTPs) are also required to have an NPDES permit. WWTPs are typically required to obtain individual permits from the RWQCB. The permits include findings, discharge prohibitions, effluent limitations, provisions and self-monitoring requirements. The findings of the NPDES permit process provide information about treatment plant design and operations, beneficial uses to be protected, and applicable standards.

### NPDES General Permit for Construction

The SWRCB's statewide stormwater general permit for construction activity (Order 2009-0009-DWQ) approved on September 2, 2009 and effective July 1, 2010 applies to all land-disturbing construction activities that would disturb more than one acre. Construction activities subject to the general construction activity permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-storm water discharges to storm sewer systems and other waters. The permit also requires dischargers to consider the use of post-construction permanent BMPs that will remain in service to protect water quality throughout the life of the project. Types of BMPs include source controls, treatment controls, and site planning measures. Activities subject to the NPDES general permit for construction activity must develop and implement a SWPPP. The SWPPP includes a site map and description of construction activities and identifies the BMPs that will be employed to prevent soil erosion and discharge of other construction related pollutants, such as petroleum products, solvents, paints, and cement, that could contaminate nearby water resources. A monitoring program is generally required to ensure that BMPs are implemented according to the SWPPP and are effective at controlling discharges of storm water related pollutants.

## Local

Sacramento County Stormwater and Grading Ordinances

Sacramento County Stormwater Ordinance (Sacramento County Code 15.12) prohibits unauthorized nonstormwater discharge to the County's stormwater conveyance system and local creeks. It applies to private and public projects located in the unincorporated County, including areas within the Citrus Heights planning area located outside the City limits, regardless of size or land use type. In addition, Sacramento County Code 16.44 (Land Grading and Erosion Control) requires private construction sites in the unincorporated County disturbing one or more acres or moving 350 cubic yards or more of earthen material to obtain a grading permit. To obtain a grading permit, project proponents must prepare and submit for approval an Erosion and Sediment Control Plan describing erosion and sediment control BMPs that will be implemented during construction to prevent sediment from leaving the site and entering the County's storm drain system or local receiving waters.

City of Citrus Heights Standards

City of Citrus Heights Municipal Code Chapter 106.30.040 "Creekside Development & Flood Hazard Mitigation" contains performance standards and requirements for development near creeks, setback areas to open spaces, and flood hazard mitigation.

### *Environmental Setting*

The Project is located within Sacramento County. The mainstem of Arcade Creek, which originates in Orangevale and flows into the Natomas East Main Drainage Canal, is approximately 16.2 miles long with a watershed area of about 29.7 square miles. It ultimately discharges to the Sacramento River. Within the Project area, the Arcade Creek channel also includes a perennial tributary which splits off from the mainstem south of Huntington Square Lane. Historic aerial imagery indicates that the tributary once flowed south from Auburn Boulevard, but over time residential development shortened the channel, leaving only a remnant of the original tributary. The Arcade Creek channel and its tributary are part of the Arcade Creek watershed, a small, urbanized watershed covering approximately 38 square miles. Surrounding land use in the Arcade Creek watershed is primarily residential and commercial with transportation infrastructure such as roads, trails and parking lots. Historically, Arcade Creek functioned as a seasonal stream that carried water predominantly during the winter and spring months. In some years, portions of the creek and its tributaries would completely dry out during the summer. With increasing urbanization, the creek transitioned to a perennial system, likely beginning around 60 years ago. Today, dry-weather flows are sustained by inputs such as landscape irrigation runoff, car washing, industrial discharges, and other non-stormwater sources, resulting in Arcade Creek maintaining continuous flow throughout the year. Most surface water within Arcade Creek is urban runoff (Dokken 2026e). Arcade Creek is the main surface hydrological feature in the City of Citrus Heights.

Arcade Creek within the Project area is 303(d) listed and considerations for TMDLs (Dokken 2026e) for the following:

- Bifenthrin
- Copper
- Fipronil Sulfone
- Malathion
- Permethrin
- Pyrethroids
- Toxicity

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map designates the Project area within three zones: Zone X, Zone AE, and Regulatory Floodway (Dokken 2026e). Zone X signifies a minimal

flood hazard area with a 0.2% annual chance of flooding. Zone AE designates areas that are within the 100-year base flood zone and have a 1% annual chance of flooding. The Regulatory Floodway is designated as a special flood hazard area within the 100-year base flood zone and a 1% annual chance of flooding.

***Discussion***

**a.** **Less than Significant with Mitigation Incorporated.** The Project will disturb greater than one acre of soil, therefore a Construction Storm Water General Permit is required, issued by the SWRCB to address storm water runoff (**WQ-1**). The permit will address clearing, grading, grubbing, and disturbances to the ground, such as stockpiling, or excavation. This permit will also require the Project's contractor to prepare and implement a SWPPP with the intent of keeping all products of erosion from moving off site into receiving waters (**WQ-2**). The SWPPP includes BMPs to prevent construction pollutants from entering storm water runoff. Measures **WQ-3** and **WQ-4** would also be implemented to avoid and minimize impacts to water quality. Additionally, prior to work within Arcade Creek, a 401 WQC will be obtained from the Central Valley RWQCB, which will contain measures to reduce impacts to water quality. Impacts would be less than significant with mitigation incorporated.

**b.** **Less Than Significant.** The Project would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. However, the Project is currently designed with an impervious surface for the trail (totaling approximately 0.47 acre of impervious surface), which will alter the rate of infiltration at the Project site. Proposed impervious surface impacts to groundwater resources would be minimal, as the proposed Project does not contain elements that would add to or draw from groundwater supplies. Additionally, the proposed Project would not be constructed immediately above a preexisting well, nor would areas known to contain wells be disturbed by construction of the proposed Project. Therefore, impacts to groundwater supplies would be less than significant.

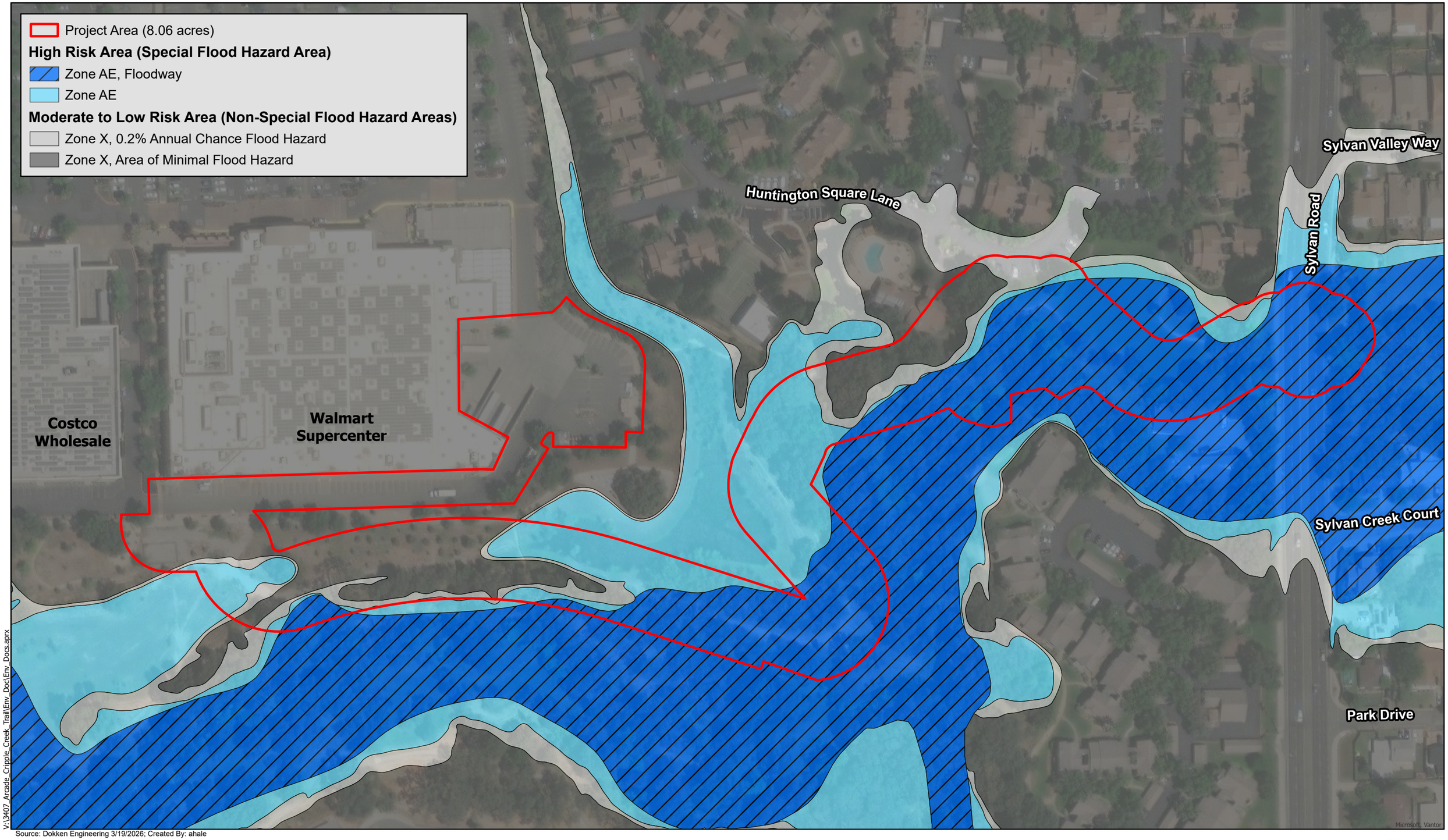
**c.** **Less than Significant with Mitigation Incorporated.** The Project would increase impervious surface by approximately 0.47 acre associated with the proposed trail improvements, resulting in an incremental increase in stormwater runoff from the trail surface. Runoff generated by the Project would be directed to existing drainage facilities and would not exceed the capacity of the existing stormwater drainage system. Proposed drainage features along the trail would convey stormwater in a controlled manner to prevent localized flooding during storm events.

Construction of the proposed Project will involve grading that has the potential to temporarily alter the existing topography of the Project site, potentially increasing erosion and sedimentation. However, these impacts would be short term and would be minimized with implementation of **WQ-1** through **WQ-4**. Following construction, the site would be stabilized and graded to maintain appropriate drainage.

With implementation of measures **WQ-1** through **WQ-4**, the potential for the Project to result in substantial erosion, siltation, or flooding on- or off-site during construction or operation would be less than significant with mitigation incorporated.

**d.** **Less Than Significant with Mitigation Incorporated.** The Project area is within three FEMA zones: Zone X, Zone AE, and Regulatory Floodway. Zone X signifies a minimal flood hazard area with a 0.2% annual chance of flooding (**Figure 9. FEMA Flood Zones**). Zone AE designates areas that are within the 100-year base flood zone and have a 1% annual chance of flooding. The Regulatory Floodway is designated as a special flood hazard area within the 100-year base flood zone and a 1% annual chance of flooding. Measures **WQ-1** and **WQ-2** will reduce the risk of pollutants being released during construction if inundation does occur. Impacts will be less than significant with mitigation.

**e.** **No Impact.** The Project would obtain the appropriate permits from the Central Valley RWQCB; therefore, the Project would not conflict with or obstruct the implementation of the Water Quality Control Plan for the Central Valley RWQCB. Furthermore, the Project would not have any effects to groundwater. There would be no impact on any applicable water quality control plan or sustainable groundwater management plan. No impact would occur.




V:\3407_Arcade_Cripple_Creek_Trail\Env_Doc\Env_Docs.aprx

Source: Dokken Engineering 3/19/2026; Created By: ahale

0 62.5 125 Feet

**Figure 9**
**FEMA Flood Zones**
CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**WQ-1:** The proposed project will require an NPDES General Construction Permit for Discharges of storm water associated with construction activities (Construction General Permit 2022-0057-DWQ). As part of this Permit requirement, a SWPPP shall be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

**WQ-2:** To conform with water quality requirements, the SWPPP must include the following:

- Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 50 feet from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters.
- The project specifications will require the contractor to operate under an approved spill prevention and clean-up plan;
- Construction equipment will not be operated in flowing water;
- Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life must be prevented from contaminating the soil or entering surface waters;
- Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and,
- Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site.

**WQ-3:** Prior to the start of construction activities, the project limits in proximity to jurisdictional waters must be marked with high visibility ESA fencing or staking to ensure construction will not further encroach into jurisdictional waters.

**WQ-4:** Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction:

- Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control;
- As a permanent BMP, slope roughening by equipment tracking will be implemented to create unevenness on bare soil. Surface roughening reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing water infiltration.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. LAND USE AND PLANNING - Would the project:** | | | | |
| a. Physically divide an established community? | | | | X |
| b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Community Impact Assessment Memorandum (Dokken 2026f, **Appendix G**), and the resources cited in this analysis.

***Environmental Setting***

Existing land use designations include General Commercial (Costco and Walmart), Open Space (Arcade Creek and Stock Ranch Nature Preserve), low density residential, and medium density residential (**Figure 5. Land Use Designations**).

***Discussion***

**a.** **No Impact.** There will be impacts to up to four parcels within / adjacent to the Project area. A permanent easement will be needed from Sunrise Recreation & Park District. The City of Citrus Heights currently has a permanent easement at the Huntington Square Apartments, which may need to be modified for construction of the proposed trail. A TCE will be needed from Walmart to allow for construction access through their property. See **Table 7. Right-of-Way Needs within the Project Area** below for more information.

**Table 7. Right-of-Way Needs within the Project Area**

| Assessor Parcel Number | Property Owner | Property Address | Property Needs |
|---|---|---|---|
| 211-0280-004 | Hunting Square Limited LP | 7311 Huntington Square Lane, Citrus Heights, CA 95621 | Modification to an existing Permanent Easement |
| 211-0870-002 | Wal Mart Real Estate BSNS Trust | 7010 Auburn Blvd. Citrus Heights, CA 95621 | TCE |
| 211-0870-013 | Sunrise Recreation & Park District | Auburn Blvd. Citrus Heights, CA 95621 | Permanent Easement |
| 211-0870-014 | Sunrise Recreation & Park District | Auburn Blvd. Citrus Heights, CA 95621 | Permanent Easement |
| *Source: Dokken 2026f* | | | |

Although there will be impacts to parcels within and adjacent to the Project area, the proposed Project would construct a segment of the planned CCTP. As such, the Project would not divide an established community. No impacts would occur.

**b.** **No Impact.** The proposed Project is consistent with the General Plan as the existing roadway classification for Sylvan Road will remain unchanged and the zoning and/or land use designations for

adjacent areas will not be changed. After the City of Citrus Heights' incorporation on January 1, 1997, the City of Citrus Heights Bikeway Master Plan includes this area as a proposed Class I bike lane, with the CCTP identifying 16 miles of feasible trail segments throughout the City of Citrus Heights including Arcade Creek, Brooktree Creek, Cripple Creek, and the SMUD utility Corridor (City of Citrus Heights 2015). The creek corridors are adjacent to residential and commercial areas which allow for increased connections and mobility options, including through natural areas. One of the goals of the General Plan is to "establish a system of creek side trails, passive open space and parks for public use." CCTP will allow for a framework to meet this goal and create multi-use trails within the creek and SMUD utility corridors (City of Citrus Heights 2025). The Project would not result in land use changes that conflict with the General Plan or other relevant City of Citrus Heights plans (such as the Pedestrian Master Plan, Bikeway Master Plan, Safe Routes to School Master Plan, or ADA Master Plan). No impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

None required.

***Significance Determination with Mitigation Measures***

Not applicable.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. 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? | | | | X |
| 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? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, and the resources cited in this analysis.

***Regulatory/Environmental Setting***

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the state geologist (California Geological Survey [CGS]) to inventory and classify selected mineral resources in California. The following is a description of SMARA mineral resource classifications:

- Mineral Resource Zone (MRZ)-1: Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2a: Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present.
- MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.
- MRZ-3a: Areas containing known mineral deposits that may qualify as mineral resources
- MRZ-3b: Areas containing inferred mineral deposits that may qualify as mineral resources.
- MRZ-4: Areas where geologic information does not rule out either the presence or absence of mineral resources.
- SZ Areas: Contain unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.
- IRA Areas: County- or state-identified areas where production and information indicates that significant minerals are present.

No mineral resources are currently being mined or produced in the planning area. The planning area has been evaluated for California SMARA Mineral Land Classification. The planning area is primarily designated as MRZ-1, which is defined as " areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence." A portion of the southwestern planning area is designated as MRZ-3 (Citrus Heights 2011b).

***Discussion***

**a.** **No Impact.** The proposed Project would not result in the use or extraction of any mineral or energy resources and would not restrict access to known mineral resource areas. Furthermore, the proposed Project would not result in the loss of availability of a known mineral resource. Therefore, no impact would occur.

**b.** **No Impact.** Refer to response to question a), above. The proposed Project would have no impact on mineral resources. No impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

None required.

***Significance Determination with Mitigation Measures***

Not applicable.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. 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? | | X | | |
| b. Generation of excessive groundborne vibration or groundborne noise levels? | | | X | |
| c. For a project located within the vicinity of a private airstrip or 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 to excessive noise levels? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Noise Technical Memorandum (Dokken 2026g, **Appendix H**), and the resources cited in this analysis.

***Regulatory Setting***

**City of Citrus Heights General Plan**

The General Plan identifies the City's intent to protect city residents from the harmful and annoying effects of exposure to excessive noise. Goal 51, Policy 51.6 is relevant for transportation projects. The Policy says: "Use techniques such as roadway design, traffic signalization and other traffic management techniques (such as limiting heavy truck traffic in residential areas and requiting alternative paving material) to reduce noise caused by speed or acceleration of vehicles."

**City of Citrus Heights Noise Ordinance**

The City of Citrus Heights Noise Ordinance (Citrus Heights Municipal Code, Chapter 34, Article III) contains performance standards for the purpose of prohibiting unnecessary, excessive, annoying sounds that, at certain levels and frequencies, are detrimental to the health and welfare of the City's residents. The following provisions of the City's Noise Ordinance are applicable.

The exterior noise standards applicable to the proposed Project for Noise Area 1 (shown in **Table 8. Noise Area 1 Exterior Noise Standards**), which covers the RD-5 and RD-20 land use zones abutting the proposed Project, are for exterior noise limits of 55 dBA between 7:00 a.m. to 10 p.m. and 50 dBA between 10:00 p.m. to 7:00 a.m. (**Figure 4. Zoning Districts**).

**Table 8. Noise Area 1 Exterior Noise Standards**

| Noise Area | City Zoning Districts | Time Period | Exterior Noise Standard |
|---|---|---|---|
| 1 | RD-1, RD-2, RD-3, RD-4, RD-5, R-7, RD-10, R15, RD-20, R-25, RD-30, MH | 7:00 a.m. to 10:00 p.m.<br>10:00 p.m. to 7:00 a.m | 55 dBA 50 dBA |
| *Source: Citrus Heights 2011b* | | | |

The Noise Ordinance provides exemptions from the above standards for outdoor school events; outdoor gatherings conducted pursuant to a City permit; activities in parks, playgrounds and school grounds; machinery used in connection with emergency activities; daytime construction noise; daytime agricultural noise; agricultural noise to salvage crops or perform pest control; daytime residential property maintenance; and airport operations and maintenance.

Specifically, the following exemption is provided for daytime construction noise.

> Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided the activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday, Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday, and on each Sunday after the hour of 8:00 p.m. However, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner.

***Environmental Setting***

There are existing sensitive receivers within the vicinity of the proposed construction activity, including existing residences north, south, and east of the existing trail.

Noise sources that contribute to ambient noise levels in and adjacent to the Project site include operational and traffic noise associated with the Walmart and Costco to the west of the existing trail. **Table 9** summarizes typical ambient noise levels based on population density.

**Table 9. Population Density and Associated Ambient Noise Levels**

| Population Density | dBA, $L_{dn}$ |
|---|---|
| Rural Suburban | 40–50 |
| Quiet suburban residential or small town | 45–50 |
| Normal suburban residential urban | 50–55 |
| Normal urban residential | 60 |
| Noisy urban residential | 65 |
| Very noisy urban residential | 70 |
| Downtown, major metropolis | 75–80 |
| Under flight path at major airport, 0.5 to 1 mile from runway | 78–85 |
| Adjoining freeway or near a major airport | 80–90 |
| *Source: Dokken 2026g* | |

The vicinity of the Project area is most similar to that of a "normal suburban residential urban" setting due the Project's surrounding uses of residential neighborhoods and local streets. Such areas have an expected typical noise level of 50–55 dBA (Dokken 2026g).

***Discussion***

**a.** **Less than Significant with Mitigation Incorporated.** Generally, noise levels at construction sites can vary from 55 dBA to a maximum of nearly 90 dBA when heavy equipment is used. During construction-related activities of the Project, noise from construction-related activities may intermittently (that is, short-term and temporarily) dominate the noise environment in the immediate area of construction. **Table 10. Typical Construction Equipment Noise Levels** summarizes noise levels produced by construction equipment that is commonly used on trail construction projects.

**Table 10. Typical Construction Equipment Noise Levels**

| Type of Equipment | Typical Noise Level (dBA) 50 feet from Source |
|---|---|
| Dozer | 85 |
| Excavator | 88 |
| Concrete Mixer | 85 |
| Compactor | 82 |
| Loader | 85 |
| Backhoe | 80 |
| Grader | 85 |
| Pile Driver | 90 |
| Crane | 83 |
| Generator | 81 |
| Truck | 88 |
| *Source: Federal Transit Administration 2006* | |

Construction activities would include cranes, earth movers, dump trucks, concrete mixers, generators, pavers, and possibly jackhammers or pile driving. Noise levels would vary depending on the type, duration, and occurrence of construction-related activity. The loudest construction-related activities may include engine noise from pile driving, jack hammering, and construction vehicles. For this Project, the lowest construction equipment-related noise levels would be 55 dBA at a distance of 50 feet for sound from a pick-up truck. The highest construction-related noise levels would be for pile driving (up to 90 dBA at a distance of 50 feet) involved in installation of the bridge supports for the creek overcrossing structure and for jackhammering (90 dBA at a distance of 50 feet) involved in removing the existing concrete pathways on the apartment complex property.

The nearest distance between nearby residences to bridge supports where pile driving would occur is approximately 300 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance. At a distance of 300 feet, noise from pile driving would attenuate to approximately 74 dBA.

Construction-related noise would be short-term, temporary, and intermittent. Construction is expected to be completed within a 6-month time period, with pile-driving anticipated to occur over a two-day period within the 6 months.

**NOI-1** has been incorporated into the Project, which will be in compliance with the Caltrans Standard Specifications for noise control and City of Citrus Heights Municipal Code to limit the acceptable hours of construction and demolition activity. Impacts would be less than significant with mitigation incorporated.

**b.** **Less than significant.** Residences are within the vicinity of the Project, which are considered sensitive noise receptors. The proposed Project is not anticipated to result in substantial ground borne vibration or noise levels. Construction related groundborne noise and ground vibration would be localized, resulting from use of jackhammer or pile driving. These disturbances would be temporary and intermittent and would occur only during construction. Therefore, impacts would be less than significant.

**c.** **No Impact.** The Project site is not located near an existing airport and is not within an area covered by an existing airport land use plan. Therefore, no impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**NOI-1:** To minimize the construction-generated noise, the contractor shall follow the Caltrans Standard Specifications for noise control and Chapter 34, Article III, Sec. 34-88(5) of the City of Citrus Heights Municipal Code, which requires the following:

- Only operate construction equipment or run the equipment engines between the hours of 7:00 a.m. and 8:00 p.m.
- When an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in progress be continued until a specific phase is completed, the contractor shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIV. POPULATION AND HOUSING - Would the project:** | | | | |
| a. Induce substantial unplanned 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)? | | | | X |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Community Impact Assessment Memorandum (Dokken 2026f, **Appendix G**), and the resources cited in this analysis.

***Environmental Setting***

The Project is located in Census Tract 81.36 (west of Sylvan Road) and 81.41 (east of Sylvan Road). **Table 11. Demographics** provides a comparison of key demographic data, including age, economic status, and race, between Census Tracts 81.6 and 81.41, City of Citrus Heights, and Sacramento County. The City of Citrus Heights and Sacramento County have a notably higher percentage of residents aged 65 and older compared to Census Tracts 81.36 and 81.41. The same trend can be seen in terms of income, both for the median and average household incomes. Additionally, there are no clear trends regarding the proportion of minority populations when comparing the demographic information in the two census tracts with the City of Citrus Heights and Sacramento County.

**Table 11. Demographics**

| Subject | Census Tract 81.36 | Census Tract 81.41 | City of Citrus Heights | Sacramento County |
|---|---|---|---|---|
| 65 years and over | 16.8% | 11.0% | 18.2% | 18.2% |
| Median Household Income | $70,648 | $63,537 | $91,036 | $94,087 |
| Mean Household Income | $77,291 | $75,279 | $104,046 | $119,881 |
| **Race** | | | | |
| White | 81.5% | 62.7% | 71.7% | 59.6% |
| Black or African American | 0.8% | 6.7% | 3.0% | 10.6% |
| American Indian and Alaska Native | 0.8% | 1.1% | 0.9% | 1.6% |
| Asian | 4.7% | 2.6% | 4.4% | 19.4% |
| Native Hawaiian or Other Pacific Islander | 1.1% | 0.0% | 0.4% | 1.4% |
| Some Other Race | 3.7% | 21.0% | 8.3% | 0.0% |
| Two or More Races | 7.5% | 5.9% | 11.3% | 7.4% |
| *Source: Dokken 2026f* | | | | |

***Discussion***

**a.** **No Impact.** The proposed Project does not include the construction of new homes or businesses, nor does it include extension or construction of new roadways which could potentially induce growth. Therefore, the Project would have no potential to induce substantial population growth in the area, either directly or indirectly. No impact would occur.

**b.** **No Impact.** Although the Project would require permanent easements, it would not occur on land where existing residential structures are located. Thus, the Project will not displace any existing housing or necessitate the construction of replacement housing. No impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

None required.

***Significance Determination with Mitigation Measures***

Not applicable.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XV. 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 governmental 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 public services: | | | | |
| i) Fire protection? | | X | | |
| ii) Police protection? | | X | | |
| iii) Schools? | | | | X |
| iv) Parks? | | | | X |
| v) Other public facilities? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Community Impact Assessment Memorandum (Dokken 2026f, **Appendix G**), and the resources cited in this analysis.

***Environmental Setting***

Below is a list of the nearest public facilities to the Project area:

- Fire Station: The Sacramento Metro Fire Station 21 at 7641 Greenback Ln, is approximately 0.8 miles southeast of the Project area.
- Police Station: The Citrus Heights Police Station at 6315 Fountain Square Drive, is located 0.5 mile south of the Project area.
- Parks:
    - The Stock Ranch Nature Preserve is located within and adjacent to the proposed Project area.
    - Van Maren Park is located approximately 400 feet south of the Project area.
- School: Sylvan Middle School at 7085 Auburn Boulevard is approximately 0.4 mile south of the Project area.

***Discussion***

**ai, ii** **Less than Significant with Mitigation Incorporated.** Development of the Project would not result in increased population and residential structures; however, fire and police services could be required for users of the new trail. As the Project is located within portions of the City already serviced by police and fire services and since the new path has a short distance of 0.5 mile in length, it is anticipated that the City would be able to provide police and fire protection services for the Project will continuing to maintain acceptable service ratios, response times, and performance objectives.

The proposed Project would construct a new public trail adjacent to the Huntington Square Apartments and other nearby residential uses. Residents may have concerns regarding safety, privacy, or security associated with the proximity of a publicly accessible trail to residential units. As such, measure **LU-1** would require development of an outreach and engagement plan to coordinate with residents and provide opportunities for input regarding potential security considerations related to the trail. Impacts would be less than significant with mitigation incorporated.

**aiii-v** **No Impact.** The proposed Project does not include new development for habitation, nor does it include development of new businesses. Therefore, the proposed Project would not induce population growth and furthermore, does not include any components that would result in any schools or parks. Establishment of additional facilities to maintain acceptable service ratios for the public would not be necessary. Therefore, no impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**LU-1:** An outreach and engagement plan will be developed to ensure potential security concerns from residents of the Huntington Square Apartments are identified and addressed prior to construction.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVI. 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? | | | X | |
| 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? | | | X | |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Community Impact Assessment Memorandum (Dokken 2026e), and the resources cited in this analysis.

***Environmental Setting***

The Public Services section above lists the recreational facilities in the vicinity of the Project area.

***Discussion***

**a-b. Less than significant.** The proposed Project will connect to the existing Stock Ranch Trail behind the Costco/Walmart shopping center south of Auburn Boulevard and west of Sylvan Road, as part of the planned CCTP. The Project addresses the current lack of accessible pedestrian and bicycle facilities, which limits multi-modal transportation and access to key recreational areas. However, residents already have access to parks in the area under existing conditions; thus substantial physical deterioration of local parks and other recreational facilities is not expected to result from the proposed Project. Although the proposed Project involves the extension of a multiuse trail for recreational purposes, it does not include a residential or commercial component that would increase human presence in the area which could result in increased use of existing parks or recreational facilities or require the construction or expansion of recreation facilities. Impacts are considered less than significant.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

None required.

***Significance Determination with Mitigation Measures***

Not applicable.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. TRANSPORTATION/TRAFFIC - Would the project:** | | | | |
| a. Conflict with a program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities? | | | | X |
| b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? | | | | X |
| c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | X |
| d. Result in inadequate emergency access? | | X | | |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Community Impact Assessment Memorandum (Dokken 2026e, **Appendix G**), and the resources cited in this analysis.

***Regulatory Setting***

**City of Citrus Heights Bikeway Master Plan**

The City's 2009 Bikeway Master Plan provides recommendations for implementing a comprehensive and coordinated bikeway system in the City to improve the bicycle travel for all residents and visitors (Citrus Heights 2015). The Bikeway Master Plan enables the City to construct bikeway improvements and be competitive for grant funding to construct bikeways throughout the community.

**Pedestrian Master Plan**

The Pedestrian Master Plan provides a broad vision, strategies, and actions for improving the pedestrian environment in the unique neighborhoods of Citrus Heights. The Pedestrian Master Plan is a blueprint for the City to improve the pedestrian environment, secure funds dedicated to pedestrian safety and livable communities, and increase the number of walking trips (Citrus Heights 2016).

***Discussion***

**a.** **No Impact.** The proposed Project will connect to the existing Stock Ranch Trail behind the Costco/Walmart shopping center south of Auburn Boulevard and west of Sylvan Road, as part of the planned CCTP. As such, the Project is consistent with, the City's General Plan and Bicycle and Pedestrian Master Plans. No impact would occur.

**b.** **No Impact.** The proposed Project does not involve construction of a new public roadway or significant physical alteration of an existing roadway and would have no impact on an established VMT threshold. The Project consists solely of activities which are considered exempt from VMT analysis, per the *SB 743 Implementation Guidelines for City of Citrus Heights*. Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and no impact would occur.

**c.** **No Impact.** The design features of the proposed Project would comply with City standards, or as appropriate, would be approved as non-standard features. The Project would not increase hazards due to design features or incompatible uses. The Project would not substantially increase hazards due to a design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). No impact would occur.

**d.** **Less than Significant with Mitigation Incorporated.** Partial road closures will be required during construction of the Project. As part of the Project, measure **LU-2** will be implemented, and a traffic management plan will be developed prior to construction to minimize any disruption to local traffic. Implementation of **LU-2** would minimize any potential impacts to emergency access during construction activities. Impacts would be less than significant with mitigation incorporated.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**LU-2:** A Traffic Management Plan will be prepared to identify ways to minimize impacts to the public during partial road closures anticipated during construction.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVIII. TRIBAL CULTURAL RESOURCES -** | | | | |
| a. 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:<br>i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | | X | | |
| ii. 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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | | X | | |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, 2026 Archaeological Survey Report (Dokken 2026d), and the resources cited in this analysis.

***Regulatory Setting***

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of TCRs. These changes were enacted through AB 52. By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to TCRs. CEQA now establishes that a "project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment" (PRC Section 21084.2).

To help determine whether a project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, MND, or EIR is required for a project (PRC Section 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification or proposed projects within their traditionally and culturally affiliated area. AB 52 stipulates that the NAHC shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the project area. If the tribe wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency

receives the tribe's request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure.

For purposes of this study, the term "tribal cultural resource" refers to either of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    b. Included or determined to be eligible for inclusion in the California Register of Historical Resources
    c. Included in a local register of historical resources as defined in subdivision (k) of California PRC Section 5020.1
2. A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

***Environmental Setting***

**Native American Consultation**

On October 24, 2026, a request was sent to the NAHC requesting a CEQA Tribal Consultation List for the Project area and review of the SLF for any Native American cultural resources that might be affected by the Project. On October 27, 2026, Pricilla Torres-Fuentes, NAHC Cultural Resource Analyst, replied via email that the results of the review were negative. Ms. Torres-Fuentes also provided a list of Native American tribes and recommended contacting each for further review of potential known and recorded sites within the proposed Project area.

On January 7, 2026, CEQA consultation (AB52) initial notification letters were mailed or sent via online portal to the representatives on the NAHC list. These letters provided information on the Project and requested that the letter recipients respond with requests to consult or with any comments or concerns about the Project. If no response to the letter was received, a follow-up email was sent on March 3, 2026. A summary of outreach is included below.

- Buena Vista Rancheria of Me-Wuk Indians. Rhonda Morning Star, Chairperson. Initial letter sent 1/7/26 and follow up email sent 3/3/26. No response to date.
- Colfax-Todds Valley Consolidated Tribe; Clyde Prout, Chairperson, Pamela Cubbler, Vice Chairperson, and Preservation Cultural Department. Initial letter sent 1/7/26 and follow up email sent 3/3/26. No response to date.
- Ione Band of Miwok Indians; Sara D. Setshwaelo, Chairperson. Initial letter sent 1/7/26 and follow up email sent 3/3/26. No response to date.
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe; Cosme A. Valdez, Chairperson. Initial letter sent 1/7/26 and follow up email sent 3/3/26. No response to date.
- Shingle Springs Band of Miwok Indians; Kara Perry, Director of Site Protection and Mariah Mayberry, Site Protection Coordinator.
    - On March 4, 2026, Ms. Perry responded that consultation had been requested and a site visit was scheduled. Daniel Kehrer, City of Citrus Heights Engineer, responded on March 5, 2026

that two trail segments are in the environmental process for the City and that the current segment was different from the segment that the tribe had previously requested consultation and a site visit for. Additional correspondence clarified that the tribe could visit both trail segments during the scheduled visit. On March 12, 2026, the tribe surveyed the Project site.

- TSI-AKIM Maidu of the Taylorsville Rancheria; Ben Cunningham, Tribal Council Member and Ben Cunningham-Summerfield, Cultural Advisor. Initial letter sent 1/7/26 and follow up email sent 3/3/26. No response to date.
- United Auburn Indian Community of the Auburn Rancheria; Josef Fore, THPO.
    - Anna Starkey, UAIC Cultural Regulatory Manager, sent an email to Mr. Kehrer indicating the UAIC had identified the Project area as potentially culturally sensitive and requested to formally consult on the Project. As part of consultation, the Tribe requested to conduct a survey for the identification of TCRs. Ms. Starkey indicated once the identification of TCRs was complete, the Tribe would provide their recommendations and mitigation measures. Mr. Kehrer replied acknowledging receipt of the consultation request and provided additional information on access to the Project area.
    - On January 26-27, Luz Salazar, UAIC Cultural Regulatory Coordinator, emailed Mr. Kehrer to coordinate a tribal survey. Mr. Salazar indicated the Tribe would like to conduct their survey on February 3rd and did not require the consultant archaeologists to be present. Mr. Kehrer replied indicating his understanding and reiterating that the City was available for a meeting after the survey if needed.
    - Ms. Starkey emailed Mr. Kehrer on March 4, 2026 and conveyed that the tribal survey was negative for TCRs. The tribe also provided language, including background, methods and results, and mitigation measures, to be included in the CEQA TCR section and stated that consultation could be considered closed. Mr. Kehrer responded on March 9, 2026 agreeing to incorporate the tribe's language and stated that the City could provide the opportunity for the tribe to monitor initial ground disturbance but could not offer compensation for such work.
    - Mr. Kehrer emailed Ms. Starkey on March 10, 2026 to state the City is in agreement regarding the language of proposed TCR- 2 and TCR-3 and will incorporate into their CEQA document. Mr. Kehrer stated that compensated Tribal monitoring, as proposed in TCR-1, was not possible as the City considered monitoring without identified resources as consultation, which is not compensated by the City. Mr. Kehrer provided the City's standard CEQA measures and letter explaining compensation.
    - Ms. Starkey emailed Mr. Kehrer on March 11, 2026 to state that the UAIC does not consider Tribal monitoring as consultation but instead sees it as mitigation under CEQA. Ms. Starkey also stated that the City standard measures, specifically TCR-2, needed to be revised to acknowledge that Tribal, and not just archaeological, values should be utilized for determining TCR significance of discoveries. Ms. Starkey requested a meeting to discuss further.
    - Mr. Kehrer responded that the UAIC provided language for TCR- 2 would be utilized in place of the City's standard measures. Mr. Kehrer also stated that he would respond soon with meeting availability. Consultation regarding CEQA TCR measures is ongoing between the City, who is the CEQA lead agency, and the UAIC.
    - On May 15, 2026 tribal representatives from the UAIC conducted a pedestrian survey of the project area. As a result of the survey, tribal representative Anna Starkey requested that the City include measure TCR-1 Unanticipated Discoveries of TCRs be included. No further action was requested and consultation was closed out on May 19, 2026.
- Wilton Rancheria; Steven Hutchason, THPO, Michelle St. Clair, Executive Director of Cultural Preservation, and Cultural Preservation Department.

- On February 3, 2026, Ms. St. Clair replied to Daniel Kehrer, City of Citrus Heights Principle Civil Engineer via email and attached response letter indicating that the tribe would like to open formal consultation for the Project. The attached response letter included a general overview of the U.S. Government to Government Consultation Process with The Tribe and included a request for any cultural resources assessments or other assessments that have been completed on all or part of the Project's APE, and area surrounding the APE. Additional Tribal requests of note include the Tribe's request to be present at any field investigation survey and the request to be notified prior to any geotechnical testing.
- On February Mr. Kehrer replied indicating that the Tribe's comments and requests were recorded and would be incorporated in the Project mitigation measures. Mr. Kehrer indicated that Geotechnical testing is planned in the next couple weeks, and once the date of the testing was scheduled the tribe will be notified.
- Coordination resulted in a survey conducted on February 23, 2026, with tribal representatives Tacante Thomas and David Ornelas. No concerns were raised by the tribe at that time.
- On June 5, 2026 tribal representative Venesa Kremer requested that the City include an inadvertent discovery plan in the project avoidance and minimization measures and consultation was closed out June 5, 2026.

**United Auburn Indian Community of the Auburn Rancheria Environmental Setting**

The UAIC is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan) Tribal members who are traditionally and culturally affiliated with the Project area. The Tribe has a deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. It is the Tribe's goal to ensure the preservation and continuance of their cultural heritage for current and future generations.

**Tribal Cultural Resources Identification Methodology and Results**

UAIC conducted background search for the identification of TCRs for this Project, which included a review of pertinent literature, historic maps, and a records search using UAIC's Tribal Historic Information System (THRIS). UAIC's THRIS database is composed of UAIC's areas of oral history, ethnographic history, and places of cultural and religious significance, including UAIC Sacred Lands that are submitted to the NAHC. The THRIS resources shown in this region also include previously recorded indigenous resources identified through the California Historic Resources Information System Center as well as historic resources and survey data. According to THRIS data, a TCR consisting of obsidian flakes, hand stones, basalt flakes, a metate fragment, and a projectile point, is less than a 1-mile radius of the Project area. No known TCRs are recorded in the Project area and much of the surrounding area has not been previously surveyed for cultural resources.

On February 3, 2026, UAIC Cultural Regulatory Coordinator Luz Salazar and Tribal Monitor Mike Malanoski conducted a tribal survey of the Project area. The survey was completed using archaeological and tribal methods to identify cultural resources or areas of cultural significance within the Project area. From UAIC records, Arcade and Cripple Creek are known to have cultural sensitivity.

Ground surface visibility of the project area is approximately <20% due to the density of grass and vegetation. Native plants, such as Milk thistle, Soaproot, Miner's Lettuce, and Live Oak, were observed along Arcade Creek. The visible creek walls and trails showed a range of yellowish-brown sandy silt to sandy clay soil. The area showed signs of disturbance from a homeless encampment with hearths and clothes scattered around and near Arcade Creek.

***Discussion***

**a.i.-ii. Less than Significant with Mitigation Incorporated.** As described in the Environmental Setting section above, according to the provision of PRC Section 21080.3, tribal consultation was opened on

January 7, 2026. Information provided by UAIC during consultation indicates that no known TCRs are recorded within the Project area. UAIC also reported that the survey did not identify any TCRs; however, there remains a moderate potential for the presence of buried TCRs. To reduce potential impacts to the TCRs to less than significant, three mitigation measures were developed (**TCR-1** through **TCR-2**). With inclusion of these measures, impacts to TCRs would be less than significant with mitigation incorporated.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

**TCR-1 Unanticipated Discoveries of TCRs**

If any suspected TCRs or resources of cultural significance to UAIC, including but not limited to features, anthropogenic/cultural soils, cultural belongings or objects (artifacts), shell, bone, shaped stones or bone, or ash/charcoal deposits are discovered by any person during construction activities including ground disturbing activities, all work shall pause immediately within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. Work shall cease in and within the immediate vicinity of the find regardless of whether the construction is being actively monitored by a Tribal Monitor, cultural resources specialist, or professional archaeologist.

A Tribal Representative and the Lead Agency shall be immediately notified, and the Tribal Representative in coordination with the Lead Agency shall determine if the find is a TCR (PRC Section 21074) and the Tribal Representative shall make recommendations for further evaluation and treatment as necessary.

**TCR-2: Cultural Awareness and Sensitivity Training**

Cultural Awareness Training will be developed and provided to all personnel working in the Project area.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIX. UTILITIES AND SERVICE SYSTEMS - Would the project:** | | | | |
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | | | X | |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | | X |
| c. Result in a determination by the waste water 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? | | | | X |
| d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | | | X | |
| e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | | | | X |

The analysis presented in this section is based on the information provided in the General Plan, CCHGP EIR, and the resources cited in this analysis.

***Environmental Setting***

**Water Supply**

Water is the Project area is serviced by the Citrus Heights Water District (CHWD) (Citrus Heights 2011b). The CHWD encompasses the eastern two-thirds of the City. CHWD's service population is approximately 66,000. The estimated distribution of water in the CHWD includes 71% to single-family residential consumers and 9% to commercial and business users.

**Wastewater Service**

The Sacramento Regional County Sanitation and Sacramento Area Sewer Districts (SRCSD) provides public wastewater conveyance, treatment, and disposal in the urbanized portions of Sacramento County. SRCSD is a publicly owned wastewater agency serving over one million people in the major Sacramento Metropolitan Area through its three contributing agencies: the City of Folsom; the City of Sacramento; and SASD, of which Citrus Heights and adjacent portions of unincorporated Sacramento County are a part. Under the Master Interagency Agreement that defines the operational, financial, and administrative responsibilities of the SRCSD, the County

of Sacramento and the Contributing Agencies, SRCSD is responsible for the planning and financing of any new sewer facilities (Citrus Heights 2011b).

**Waste Management and Recycling**

Solid waste collection services in the City are generally provided by private haulers through either a contract or franchise. The City currently contracts residential solid waste collection and recycling services to Allied Waste Systems, a private waste disposal company. Residential waste collection and recycling services in the City have been provided by Allied Waste Systems since January 1, 2006. Eight commercial haulers are currently franchised to provide commercial solid waste collection and recycling service in the City.

***Discussion***

**a.** **Less than Significant.** The proposed Project would construct an addition to the planned CCTP and would not increase population in the Project vicinity; therefore, there would be no additional wastewater flows as a result of Project development; or result in expanded wastewater treatment or stormwater drainage treatment.

The Project would add a net impervious surface of approximately 0.47 acre to the area due to the addition of pavement for the construction of the trail, but would direct runoff appropriately. The impervious surface generated by the Project is the minimum area practicable, incorporating the natural drainage courses in the Project area, and preserving the maximum numbers of existing native trees and shrubs possible. The proposed Project is not anticipated to generate excessive runoff, and the proposed Project would not include construction of new stormwater drainage facilities, or expansion of existing facilities. Therefore, impacts would be less than significant.

**b.** **No Impact.** The Project would not result in the need for new or expanded water supplies. There may be a temporary need for water during construction to control dust; however, it is not anticipated to result in the need for water supply beyond what is currently available, and no increase in demand for long-term water supply would be generated by the Project. No impact would occur.

**c.** **No Impact.** The Project would not include the construction of any wastewater-generating uses. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of the proposed Project; therefore, the Project would not result in the need for new or expanded wastewater facilities. No impact would occur.

**d.** **Less than Significant.** Solid waste is not expected to be generated through use and operations of the proposed Project. Solid waste will be generated during construction; however, the amount will not substantially impact landfill capacities. This would not affect landfill capacity because the amounts would not be substantial and would occur for a short period of time during the 6-month construction period. A less than significant impact would occur.

**e.** **No Impact.** The Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste including the California Integrated Waste Management Act of 1989 (AB 939). No impact would occur.

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

None required.

***Significance Determination with Mitigation Measures***

Not applicable.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:** | | | | |
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan? | | | | X |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | | | | X |
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | | | | X |
| d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | | | | X |

***Discussion***

**a-d.** **No Impact.** According to the CAL FIRE Fire Hazard Severity Zone Map, the Project site is located within a LRA (CAL FIRE 2026). The surrounding land uses are also located within an LRA. The Project site and surrounding land uses are not within a Very High Fire Hazard Severity Zone (CAL FIRE 2026).

***Mitigation Measures from CCHGP EIR that apply to the Project***

None.

***Additional Project-Level Mitigation Measures***

None required.

***Significance Determination with Mitigation Measures***

Not applicable.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XXI. MANDATORY FINDINGS OF SIGNIFICANCE** | | | | |
| a. Does the project have the potential to substantially 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, substantially 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? | | X | | |
| 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). | | | X | |
| c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | X | | |

***Discussion***

**a.** **Less than Significant with Mitigation Incorporated.** Implementation of the Project would have the potential to degrade the quality of the existing environment. Potential impacts have been identified related to Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gases, Hazards and Hazardous Waste, Hydrology and Water Quality, Noise, Public Services, Transportation/Traffic, and Tribal Cultural Resources. Measures have been identified related to individual resource-specific impacts. See **Appendix I** for a summary of all mitigation measures, timing of implementation, and responsible party. Implementation of mitigation measures would reduce the level of all Project-related impacts to less than significant levels. Therefore, impacts are considered less than significant with mitigation incorporated.

**b.** **Less Than Significant.** CEQA Guidelines Section 15064(h) states that a lead agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must therefore be conducted in connection with the effects of past projects, or other current projects, and probable future projects.

The proposed Project is consistent with the General Plan as the existing roadway classification for Sylvan Road will remain unchanged and the zoning and/or land use designations for adjacent areas will not be changed. After the City of Citrus Heights' incorporation on January 1, 1997, the City of Citrus Heights Bikeway Master Plan includes this area as a proposed Class I bike lane, with the CCTP identifying 16 miles of feasible trail segments throughout the City of Citrus Heights including Arcade

Creek, Brooktree Creek, Cripple Creek, and the SMUD utility Corridor (City of Citrus Heights 2015). The creek corridors are adjacent to residential and commercial areas which allow for increased connections and mobility options, including through natural areas. One of the goals of the General Plan is to "establish a system of creek side trails, passive open space and parks for public use." CCTP will allow for a framework to meet this goal and create multi-use trails within the creek and SMUD utility corridors (City of Citrus Heights 2025c). Since the Project would construct an addition to the planned CCTP, it would not conflict with the General Plan or other relevant City of Citrus Heights plans (such as the Pedestrian Master Plan, Bikeway Master Plan, Safe Routes to School Master Plan, or ADA Master Plan).

The Project would make no significant contribution to cumulatively adverse impacts associated with existing or proposed development projects in the City as the Project would not directly generate vehicle trips. Construction of the proposed Project along with other construction in the City and Sacramento County would contribute to cumulative environmental impacts. However, the proposed Project's contribution would be minimal considering the highly developed land uses in the area. Therefore, impacts of the proposed Project related to cumulatively considerable impacts in the City of Citrus Heights and Sacramento County are considered less than significant.

**c.** **Less than Significant with Mitigation Incorporated.** The Project would not cause significant or unavoidable adverse effects to human beings, either directly or indirectly with mitigation incorporated. See **Appendix I**, for a summary of all mitigation measures, timing of implementation, and responsible party. All potentially significant impacts have been reduced to a less than significant level by mitigation measures related to individual resource-specific impacts:

- Aesthetics (**VIS-1** and **VIS-2**)
- Air Quality (**AQ-1**),
- Biological Resources (**BIO-1** through **BIO-15**),
- Cultural Resources (**CR-1** and **CR-2**),
- Geology and Soils (CCHGP EIR Mitigation Measure 4.7-7),
- Greenhouse Gases (**CC-1**)
- Hazards and Hazardous Materials (**HM-1** and **HM-2**)
- Hydrology and Water Quality (**WQ-1** through **WQ-4**),
- Noise (**NOI-1**),
- Public Services (**LU-1**)
- Transportation/Traffic (**LU-2**), and
- Tribal Cultural Resources (**TCR-1** through **TCR-2**).

***Mitigation Measures from CCHGP EIR that apply to the Project***

CCHGP EIR Mitigation Measure 4.7-7 is applicable to the proposed Project.

**Mitigation Measure 4.7-7: Discovery of Potential Paleontological Resources**

If potential paleontological resources are detected by construction workers or City staff during construction of future land uses, work shall stop immediately, and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include, but are not limited to, construction worker personnel education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures considered appropriate after further consultation.

***Additional Project Level Mitigation Measures***

See **Appendix I** for all Project specific measures.

***Significance Determination with Mitigation Measures***

Less than significant with mitigation incorporated.

## SECTION 5.0 - AGENCY COORDINATION

This section summarizes the City of Citrus Heights' efforts to identify, address and resolve Project-related issues through early and continuing coordination.

### *Consultation and Coordination with Public Agencies*

Coordination with the following agencies was initiated for the Project:

- California Department of Transportation
- Native American Heritage Commission.
- California Department of Fish and Wildlife

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# APPENDIX A: Visual Impact Assessment Memorandum

# Visual Impact Assessment Memorandum

# Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project

District 3—SAC
CRP 5475 (053)

**Prepared by:** _____ **Date:** 5/6/26
Dorienne Mendoza
Associate Environmental Planner, Dokken Engineering

**Concurred by**: _____ **Date:** 5/06/2026
T. Chris Johnson, PLA, CA License #5102 Landscape Architect
District 3 North Region Local Assistance

*Statement of Compliance:* Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

Per Exhibit D, Article XVIII, Section A. (1) of the contract: (c) 2020 California Department of Transportation.

## Table of Contents

**1 Introduction ..... 1**
1.1 Purpose of Report and Assessment Methodology ..... 1
**2 Establishment Phase ..... 1**
2.1 Project Location and Setting ..... 1
2.2 Project Description ..... 1
2.3 Description of Area of Visual Effect ..... 4
2.4 Visual Resources and Scenic Resources ..... 4
**3 Inventory Phase ..... 7**
3.1 Description of Landscape Visual Character ..... 7
3.2 Description of Landscape Visual Quality ..... 8
3.3 Viewers ..... 9
3.4 Viewpoints ..... 10
**4 Analysis Phase ..... 10**
4.1 Evaluation of Visual Impact ..... 10
**5 Mitigation Phase (Environmental Commitments) ..... 14**
5.1 Recommendations for Environmental Commitment Measures ..... 14
**6 Conclusions ..... 15**
**7 References ..... 16**

## List of Appendices

Appendix A: Scoping Questionnaire

## List of Figures

Figure 1. Project Vicinity ..... 2
Figure 2. Project Location ..... 3
Figure 3. Project Features ..... 5
Figure 4. Area of Visual Effect ..... 6

## List of Tables

Table 4-1 Visual Change with Environmental Commitments ..... **Error! Bookmark not defined.**
Table 4-2 Visual Change without Environmental Commitments ..... 10
Table 4-3 Visual Impact with Environmental Commitments ..... **Error! Bookmark not defined.**
Table 4-4 Visual Impact without Environmental Commitments ..... 12

## List of Acronyms and Abbreviations

| | |
|---|---|
| AVE | Area of Visual Effect |
| Caltrans | California Department of Transportation |
| CCTP | Creek Corridor Trail Project |
| CEQA | California Environmental Quality Act |
| City | City of Citrus Heights |
| FHWA | Federal Highway Administration |
| *Handbook* | *Caltrans 2023 VIA Handbook* |
| NEPA | National Environmental Policy Act |
| Project | Visual Impact Assessment Memorandum for the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project |
| VIA | Visual Impact Assessment |

# 1 Introduction

## 1.1 Purpose of Report and Assessment Methodology

The purpose of this Visual Impact Assessment (VIA) memorandum is to document potential visual change in the Area of Visual Effect (AVE). This memorandum follows the guidance outlined in the publication *Guidelines for the Visual Impact Assessment of Highway Projects*, published by the Federal Highway Administration (FHWA) in January 2015. The formatting of this template is aligned with the directions and examples included in the *Caltrans 2023 VIA Handbook* (*Handbook*), available at: https://dot.ca.gov/programs/design/lap-visual-impact-assessment.

# 2 Establishment Phase

The Establishment Phase consisted primarily of a desk assessment of available data about the Project and establishment of basic visual attributes of the Project and its surroundings. The scoping Questionnaire was completed, and the level of VIA report determined; the Scoping Questionnaire is attached as **Appendix A**.

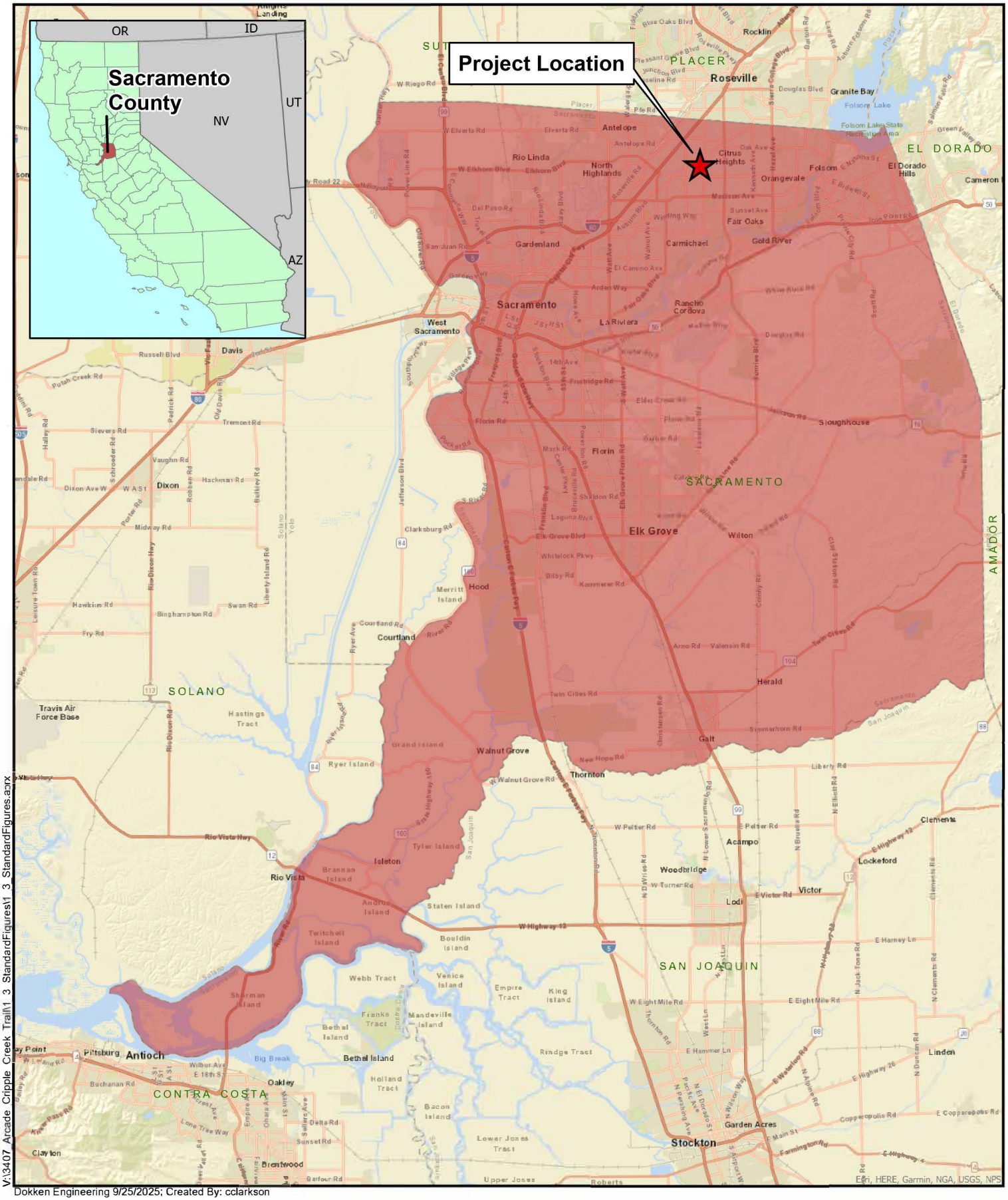
## 2.1 Project Location and Setting

The Arcade-Cripple Creek (Sylvan to Stock Ranch) Extension Project (Project) location and setting provide context for determining the type of changes to the existing visual environment. The proposed Project will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road in the City of Citrus Heights (City) in Sacramento County, California (**Figure 1. Project Vicinity** and **Figure 2. Project Location**). The Project is in the Sacramento Valley Floristic Province of California. As the Project is in the Sacramento Valley, the landscape is mostly flat with no significant landforms. Land cover within the Project area consists of urban, perennial stream channel (Arcade Creek) and unnamed tributary, water quality/detention basins, annual grassland, oak woodland and riparian woodland habitats. Urban areas include Sylvan Road and commercial/residential development surrounding the Project area. Natural land cover is present in the undeveloped areas, located primarily adjacent to the proposed trail alignment.

## 2.2 Project Description

The City of Citrus Heights (City) proposes to construct a 0.5-mile addition to the planned 16-mile Creek Corridor Trail Project (CCTP) as part of the proposed Project. The Project is funded through the federal Carbon Reduction Program and therefore requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for CEQA compliance is the City and the federal lead agency for NEPA compliance is the California Department of Transportation (Caltrans).

As described previously, the Project is located in the City and will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road. The proposed alignment begins south of the Walmart property boundary and proceeds



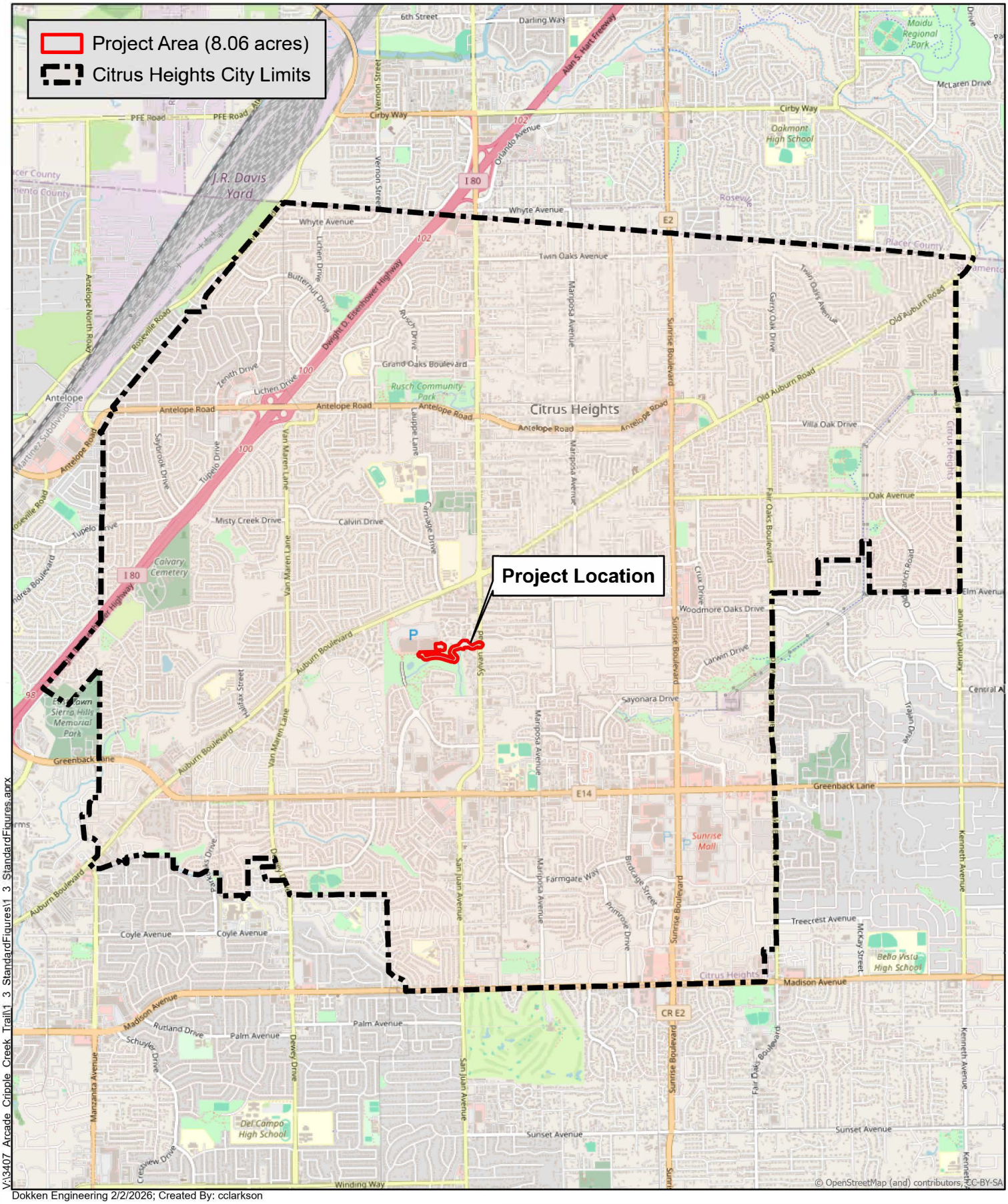

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Dokken Engineering 9/25/2025; Created By: cclarkson

0 3.5 7 Miles

**Figure 1**
**Project Vicinity**

CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Dokken Engineering 2/2/2026; Created By: cclarkson

0 1,750 3,500
Feet

**Figure 2**
**Project Location**
CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

east through the Stock Ranch Nature Preserve, curving south around Walmart's water quality detention basin. The alignment continues north, crossing a tributary of Arcade Creek, and traverses along the south side of the Huntington Square Apartments complex prior to connecting to Sylvan Road. The alignment terminates east of Sylvan Road at the location of a planned future trail extension segment from Sylvan Road to Mariposa Avenue. The Project has independent utility and would function as a stand-alone improvement.

Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, bank protection along a segment of Arcade Creek, and an at-grade signalized pedestrian crossing at Sylvan Road (**Figure 3. Project Features**). Construction activities will involve grading to achieve ADA-compliant slopes, installing the creek crossing, paving the trail, erecting the solar lighting, constructing bank protection, and adding pedestrian signal infrastructure with minor utility adjustments as needed.

To accommodate construction, right-of-way (ROW) acquisitions will be required from several parcels. These include a permanent easement and permit to enter (PTE) from the Sunrise Recreation & Park District and a TCE from Walmart. An existing trail easement exists across the Huntington Square Apartments property and there is potential for this permanent easement to be modified to best incorporate the trail alignment with the physical site features.

Construction access will be provided primarily through the Walmart parking lot under a TCE, as well as a permit to enter for access from the Huntington Square Apartments parcel. These provisions will allow safe and efficient construction of the trail and its associated improvements.

## 2.3 Description of Area of Visual Effect

The Area of Visual Effect (AVE) for the Project was developed based on perspective views of the road and from the road and the location of proposed Project features. **Figure 4. Area of Visual Effect** presents a map showing the AVE.

## 2.4 Visual Resources and Scenic Resources

Scenic resource and visual resource identification during the Establishment Phase was conducted based on a desktop search of available maps, regional and local plans, and other databases. In the context discussed in this memorandum, "scenic resources" are those officially designated by federal, state, regional, tribal, or local authorities; "visual resources" are those that exist in the Project AVE without being officially recognized.

National Scenic Byway Designation

The Project area does not contain or have views of any officially designated National Scenic Byways (FHWA 2026).




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Source: Dokken Engineering 2/4/2026; Created By: kjacobson

0 75 150 Feet

**Figure 3**
**Project Features**
CRP 5475(053)
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Source: Dokken Engineering 3/17/2026; Created By: ahale

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**Figure 4**
**Area of Visual Effect**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

State Scenic Highway Designation

The Project area does not contain or have views of any state scenic highways (Caltrans 2026).

Classified Landscaped Freeway

The Project area does not reside within a classified landscaped freeway (Caltrans 2026).

Local Scenic Resources

The City General Plan was adopted in August 2011 and most recently amended in August 2020. Section 4.12 Aesthetics of the General Plan Update and Greenhouse Gas Reduction Plan Final Environmental Impact Report (EIR) describes the visual character of the City as primarily suburban and largely developed with medium to high-density residential and commercial land uses located adjacent to major transportation corridors. Generally, low density residential uses can be found in the north-central portion of the City, characterized by rural, small-scale hobby farming/ranching with limited curb, gutter, and sidewalks. Undeveloped, natural habitats are predominantly limited to riparian areas along creeks and undeveloped grassland and oak savanna scattered throughout the City. Chapter 3 Resource Conservation of the General Plan describes the City's oak tree, wildlife habitat, creeks and riparian areas as unique, visual resources that stand apart from the urban environment (City 2020). In most areas, long-range views are limited to the immediate neighborhood because of the relatively flat topography. An exception is the northwest planning area, which may provide views of the Sierra Nevada Mountains on clear days. There are no areas within the City that provide views of any scenic vistas that are considered significant by the City (City 2011).

# 3 Inventory Phase

## 3.1 Description of Landscape Visual Character

The existing visual character of the AVE is dominated by the natural environment with moderate views of the surrounding urban areas including Sylvan Road and commercial/residential development.

As described previously in Section 2.1, the natural environment consists of the perennial stream channel (Arcade Creek) and unnamed tributary, water quality/detention basins, annual grassland, oak woodland and riparian woodland habitats. The existing lines in the natural environment are irregular and the form is heterogeneous. The vegetation in this area varies from deep greens to browns depending on the season and the texture is rough. Within the AVE, the cultural environment consists of residential housing, Sylvan Road, Huntington Square Apartments complex, Walmart parking lot, fences and ornamental plantings. Outside of the AVE, the cultural environment consists of other commercial developments adjacent to Walmart within the larger commercial center and medium to high density residential development. The residential houses, Huntington Square Apartments complex and

Walmart contain horizontal and vertical lines and neutral coloring. The ornamental plantings, which are planted south of Walmart's parking lot, are green and spherical shaped.

Lastly, the AVE consists of the segment of Sylvan Road between the residential streets of Sylvan Valley Way and Sylvan Creek Court, utility poles, street lighting, roadway signs and sidewalk on either side of Sylvan Road. Sylvan Road has straight lines, is colored gray with yellow and white lines to delineate the road as necessary and is made of smooth-textured concrete. Sylvan Road has two lanes going northbound, two lanes going southbound and a center turn lane. Sylvan Valley Way and Sylvan Creek Court are located north and south of the Project area; respectively. The utility poles contain vertical lines and contain brown coloring as well as grey coloring. The utility lines that connect the utility poles are thin horizontal lines with grey and/or black coloring. The existing roadway signs vary in shape and are supported by thin gray cylindrical forms made of galvanized steel with smooth texture. The signs vary in color, either yellow, green, or red and are also made of galvanized steel with smooth texture. Lastly, the undeveloped land within the project site contains the same visual character described for the natural environment.

Existing lighting in the area consists of streetlights along Sylvan Road and the residential streets as well as lighting from residential houses and commercial developments. Signage for street names and Arcade Creek are attached to light poles on either side of Sylvan Road.

The Project will be retaining dominant linear features in the area but will also introduce new linear features including the paved trail, a new prefabricated bridge across the unnamed creek tributary, bank protection along a segment of Arcade Creek, and an at-grade signalized pedestrian crossing at Sylvan Road. The Project will positively influence the Project environment by introducing an aesthetically pleasing pedestrian multi-use trail and prefabricated bridge but will negatively influence the natural environment by introducing human made features into a partially undeveloped natural area.

## 3.2 Description of Landscape Visual Quality

Vividness of the overall landscape is considered memorable as the dominant visual element is the natural environment, which consists of annual grassland, Arcade Creek and its unnamed tributary, riparian and oak woodlands. The cultural environment consists of the developed land within the AVE, specifically the Walmart commercial center, Huntington Square Apartments and medium-density residential development, including Sylvan Road and associated features. Intactness is moderate since the Walmart commercial center and high to medium-density residential developments disrupt the landscape character. Unity is also moderate as there is generally a filtered view of the Walmart commercial center and surrounding residential development which creates disruptions in viewing continuity from the proposed trail alignment.

## 3.3 Viewers

There are two major types of viewer groups: neighbors and travelers.

Neighbors are people who have views *to* the trail. For this Project, neighbors include:

- Residents
- Institutional viewers (workers/patrons at the commercial businesses in the vicinity)

Travelers are people who have views *from* the trail. For this Project, travelers include:

- Bicyclists
- Pedestrians

As previously described, the Project will include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, and bank protection along a segment of Arcade Creek within a natural environment, which may be considered of local scenic value. Both viewer sensitivity and viewpoint sensitivity is considered moderate, neighbors (people with views *to* the transportation project), travelers (people with views *from* the transportation project), and viewpoints will be affected by the proposed Project. See below for an analysis regarding viewer and viewpoint sensitivity.

Viewer Sensitivity

To determine viewer sensitivity, three attributes for viewer exposure (proximity, extent or number of viewers, and duration) and three attributes for viewer awareness (attention, focus, and protection) were evaluated.

The neighbors viewer groups would have moderate viewer exposure since they are in proximity to the Project features. The extent would be moderate as a moderate number of individuals would have direct views of the Project features, and duration would be high due to their fixed position. For the neighbors viewers group, viewer awareness is moderate as individuals in this viewer group would be observant of the proposed changes and are likely to value the natural environment that covers most of the Project area; however, neighbors would have a broad and general view of the area, resulting in less sensitivity to visual changes.

For the traveler viewer group, viewer exposure would be considered moderately low due to the limited available viewpoints, primarily from the proposed pedestrian signal crossing and the broad views from Walmart's rear parking lot, which is predominantly occupied by large delivery trucks. The duration of exposure would range from moderately low to low, as travelers are typically passing through the area rather than remaining stationary. Viewer awareness would be moderately low since individuals in this viewer group would be preoccupied with other activities, have a broad and general view of the area, but are likely to value the natural setting of the proposed Project.

Overall viewer sensitivity for neighbors and travelers is moderate.

Viewpoint Sensitivity

Viewpoint sensitivity is a judgment of the scenic importance of a viewpoint and whether it is part of an identified scenic resource. Sensitive viewpoints can be scenic or visual resources, vistas, landscape, or ocean views important to neighbors or travelers.

The natural environment containing Arcade Creek is considered a local scenic resource according to the Citrus Heights General Plan. However, filtered views of the Walmart commercial center and adjacent high to medium-density residences distracts from this resource. Therefore, viewpoint sensitivity is considered moderate.

## 3.4 Viewpoints

Viewpoints can be vistas, open landscape views, ocean views, views of important mountains, views of historic or attractive buildings, rock outcrops, heritage trees, tree groves etc. The importance of each viewpoint is determined by the level of scenic resource designation, the distance of the scenic or visual resource, and the visual quality of the scenic or visual resource. As stated above in Section 3.3 Viewpoint Sensitivity, the natural environment containing Arcade Creek is considered a local scenic resource according to the Citrus Heights General Plan.

# 4 Analysis Phase

## 4.1 Evaluation of Visual Impact

Visual impact is determined by combining visual change and visual sensitivity, both of which are analyzed below:

Visual Change

After analyzing visual compatibility and visual contrast as it relates to the proposed Project, it was determined that the overall visual change in the existing natural, cultural and Project environments created by the proposed Project will be moderately adverse. See **Tables 4-1** and visual compatibility and contrast analyses below for more information.

**Table 4-1 Visual Change without Environmental Commitments**

| Visual Compatibility | Visual Contrast | Visual Change |
|---|---|---|
| Slightly Adverse | Moderately Adverse | Moderately Adverse |

*Visual Compatibility*

The proposed Project's visual compatibility is analyzed by comparing the fit of the Project's visual character, intactness, lighting and glare with the same attributes of the natural, cultural and existing Project environments.

The existing visual character within the Project area is dominated by the natural environment; however, there are views of the Walmart commercial center and high to

medium-density residential that surrounds the Project area, including direct views of Sylvan Road at the proposed pedestrian signal crossing. Due to the construction of the proposed trail, installation of the prefabricated bridge over the unnamed tributary of Arcade Creek and the bank stabilization, the Project would remove 0.20 acre of annual grassland, 0.02 acre of oak woodland, and 0.01 acre of perennial stream channel and 0.20 acre of riparian woodland habitat. In total, the Project would remove approximately 0.42 acre of vegetation and 0.01 acre of waters. Therefore, the Project will exhibit a decrease in vegetation colors and textures and an increase grey color and human-made textures. Within the Project area, these habitats comprise 12.66 acres; thus, removal of 0.42 acre of vegetation and 0.01 acre of waters would impact a small percentage of the natural environment that contributes to the visual character of the area. Temporary impacts to these habitats due to construction activities, such as the cut and fill areas, etc. are also anticipated; however, visual change would be minimized with implementation of **BIO-2, BIO-5 and BIO-6** from the 2026 Natural Environment Study. The prefabricated bridge over the unnamed tributary of Arcade Creek would introduce a large horizontal element to the natural environment in addition to the proposed paved trail. However, these Project features would minimally obstruct views of the natural environment. To further minimize visual change, aesthetic treatments will be applied to all Project features to complement the visual character of the area, per **VIS-1**.

The Project would also have a slightly adverse effect on intactness since it would introduce human-made features to an undeveloped open area. Lastly, the proposed Project would install solar lighting along the length of the trail. This lighting is not anticipated to result in substantial new light and glare impacts as the lights would be downcast to minimize glare, per **VIS-2**. Additionally, surrounding light from adjacent developed areas would still dominate the area.

Although the environmental commitments listed above would minimize visual change, visual compatibility of the proposed Project with the existing natural, cultural, and Project environments would remain slightly adverse with and without implementation of the environmental commitments since the surrounding area is highly urbanized and a small percentage of vegetation that contributes to the visual character of the area would be removed or impacted by Project.

*Visual Contrast*

The proposed Project's visual contrast is analyzed by comparing the fit of the Project's vividness and unity with the same attributes of the natural, cultural and existing Project environments.

Currently, vividness of the overall landscape is moderate as the dominate visual element is the natural environment, and unity is moderate since the Walmart commercial center, high to medium-density residential and the natural environment are not balanced or in scale with each other. Applying aesthetic treatments on the prefabricated bridge, per **VIS-1**, will increase vividness by providing a memorable structure that compliments the natural environment. Although the removal of 0.42 acre of vegetation would impact a small percentage of vegetation in the area, vividness of the area would be decreased as a result of the Project. As such, **BIO-2, BIO-5** and **BIO-**

**6** would be implemented to minimize visual change related to the removal of vegetation. Lastly, unity of the natural environment would decrease since the Project would introduce new human-made features. Overall, the visual contrast of the proposed Project with the existing natural, cultural, and Project environments will have a moderately adverse effect, as construction of the proposed trail and prefabricated bridge without aesthetic treatments would decrease vividness of the area.

With implementation of environmental commitments (**BIO-2**, **BIO-5**, **BIO-6**, **VIS-1** and **VIS-2**), the visual contrast of the proposed Project with the existing natural, cultural and Project environments will have a slightly adverse effect.

Visual Sensitivity

As discussed in Section 3.3, the overall visual sensitivity to the proposed Project in the existing natural, cultural, and Project environments will be moderate.

Visual Impact

After analysis of visual change and visual sensitivity, the visual impact was determined based on visual change and visual sensitivity descriptions, in accordance with Table 4-6 in the *Handbook*. Without implementation of the environmental commitments, the overall visual impact of the proposed Project on the existing natural, cultural, and Project environments will be moderately low adverse, see **Table 4-2**.

As visual change and sensitivity are of equal importance, with implementation of the environmental commitments, the overall visual impact of the proposed Project on the existing natural, cultural, and Project environments will be very low adverse, see **Table 4-3**.

**Table 4-2 Visual Impact without Environmental Commitments**

| Visual Change | Visual Sensitivity | Visual Impact |
|---|---|---|
| Moderately Adverse | Moderate | Moderately Low Adverse |

**Table 4-3 Visual Impact with Environmental Commitments**

| Visual Change | Visual Sensitivity | Visual Impact |
|---|---|---|
| Slightly Adverse | Moderate | Very Low Adverse |

CEQA Checklist Aesthetics questions:

Would the project:

a) Have a substantial adverse effect on a scenic vista?

According to the General Plan Update and Greenhouse Gas Reduction Plan Final EIR, there are no areas within the City that provide views of any scenic

vistas that are considered significant by the City (City 2011). Therefore, there would be no impact.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Project area does not contain or have views of any state scenic highways (Caltrans 2026). Therefore, there would be no impact.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The Project is located in the City of Citrus Heights, which is an urbanized area. Zoning within the Project area is a mixture of Open Space, General Commercial, and Medium Density Residential designations. The Project would construct a 0.5-mile addition to the planned 16-mile CCTP. As such, the proposed Project would be consistent with the existing zoning. Additionally, per **VIS-1**, aesthetic treatments would be applied to all Project features to minimize aesthetic impacts, ensuring that the Project would not conflict with regulations governing scenic quality, including the City of Citrus Heights Design Guidelines.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The solar lighting along the trail would be downcast to minimize glare per measure **VIS-2**. Impacts to Aesthetics under CEQA will be less than significant.

# 5 Mitigation Phase (Environmental Commitments)

## 5.1 Recommendations for Environmental Commitment Measures

Environmental commitments have been proposed to lessen the visual impact of the Project, which may also help generate public acceptance of a Project. Environmental commitments will be designed and implemented by the City of Citrus Heights.

The following environmental commitments, identified in the 2026 Natural Environment Study, are proposed to avoid or minimize the Project's adverse visual effects as a result of vegetation removal and to enhance visual character and aesthetic quality:

**BIO-2:** Prior to the start of construction activities, the Project limits adjacent to the Arcade Creek, the Arcade Creek tributary and the riparian woodland habitat will be marked with flagging, staking, or high visibility fencing to ensure construction will not further encroach into adjacent sensitive resources.

**BIO-5:** Native vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes.

**BIO-6:** Following the completion of construction, all temporary effects to riparian woodland, annual grassland and oak woodland habitat will be recontoured and re-seeded at a 1:1 ratio, to allow for the habitat to return to its previous function. All temporarily disturbed areas will be seeded with a Project biologist-approved native seed mix. Any trees removed from the riparian woodland and oak woodland habitat will be appropriately mitigated for through replanting or other methods in coordination with CDFW and the City of Citrus Heights.

As a result of the analysis described above, the following environmental commitments are also proposed to avoid or minimize the Project's adverse visual effects and to enhance visual character and aesthetic quality:

**VIS-1:** Aesthetic treatments on the new paved trail and prefabricated bridge over Arcade Creek will be consistent with other trails and bridges along the CCTP.

**VIS-2:** Lighting along the trail will be downcast to minimize glare. The Project's lighting design must be consistent with the City Citrus Heights lighting guidelines and standards.

## 6 Conclusions

The proposed Project will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road in the City of Citrus Heights in Sacramento County, California. There would be no substantial impacts on scenic highways, scenic vistas, or eligible or listed historic structures.

The overall visual impact of the proposed Project without implementation of the environmental commitments, listed in Section 5, will be moderately low adverse. However, with implementation of **BIO-2, BIO-5, BIO-6, VIS-1** and **VIS-2**, visual impacts will be minimized. As part of the Project, aesthetic treatments will be applied to the paved trail, prefabricated bridge, and at-grade signalized pedestrian crossing at Sylvan Road. With implementation of the environmental commitments, visual impact was determined to be very low adverse.

# 7 References


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Caltrans. Arcade Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project - Natural Environment Study (Minimal Impact). 2026.

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Caltrans. Visual Impact Assessment Handbook. 2023. Available at: < https://dot.ca.gov/-/media/dot-media/programs/design/documents/via-handbook--a11y.pdf>

Caltrans. Visual Impact Assessment Handbook Appendix. 2023. Available at: <https://dot.ca.gov/-/media/dot-media/programs/design/documents/via-handbook-appendix-a11y.pdf>

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City of Citrus Heights. General Plan. 2020. Available at: < https://www.citrusheights.net/201/General-Plan >

City of Citrus Heights. General Plan Update Draft Environmental Impact Report. 2011. Available at: < https://www.citrusheights.net/204/Environmental-Impact-Report >

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# Appendix A: Scoping Questionnaire

# Landscape Architecture Scoping Questionnaire to Determine Visual Impact Assessment Level

August 2023

# Introduction

This questionnaire assists the qualified visual impact assessment (VIA) preparer (i.e., California Licensed Landscape Architect) in determining whether a VIA report is needed, in estimating the potential visual impacts of a proposed project on the environment, and in understanding the degree and breadth of the possible visual impact issues. The goal is to develop VIA documentation that is appropriate to the scale of the project and is thorough, concise, and defensible.

Enter basic information about the project and its visual context, visual resource regulatory context, and the expected visual change and sensitivity in the Baseline Information Form and then consider each of the 12 questions below. The resulting score will serve as a guide to help determine the appropriate level of VIA documentation for the project. For some projects with no or minimal visual impact, this questionnaire is all that is necessary. Both capital and maintenance projects should be reviewed. Select the response that most closely applies to the proposed project. The score is automatically computed at the bottom of the questionnaire. The total score should be matched to one of the four groups of scores at the end of the questionnaire that include recommended levels of VIA documentation (i.e., this completed questionnaire, VIA memorandum, standard VIA report, and advanced VIA report) and reference to associated annotated outlines for these documents.

Use the scoring system as a preliminary guide rather than a substitute for professional analysis on the part of the preparer. Although the total score may recommend a lower level of VIA document, circumstances associated with any one of the 12 questions may indicate the need to elevate the VIA to a greater level of detail. For projects on the State Highway System, the District Landscape Architect should be consulted when scoping the VIA level and provide concurrence on the findings of this questionnaire.

# Preparer Qualifications

The Standard Environmental Reference, Volume I: Chapter 27-Visual & Aesthetics Review (website link) lists preparer qualifications for conducting the visual impact assessment process:

“Scenic Resource Evaluations and VIAs are performed under the direction of licensed Landscape Architects. Landscape Architects receive formal training in the area of visual resource management with a curriculum that emphasizes environmental design, human factors, and context sensitive solutions. When recommending specific visual mitigation measures, Landscape Architects can appropriately weigh the benefits of these different measures and consider construction feasibility and maintainability.”

This questionnaire shall be prepared by, or under the direct supervision of a California Licensed Landscape Architect. It shall be signed and stamped by that Landscape

Architect, and written concurrence shall be provided by the District Landscape Architect (for projects on State Highway System).

# Project and Visual Context Baseline Information

Project and visual context baseline information is gathered early in the Establishment Phase of the VIA process to identify key information and issues applicable to the preparation of the VIA Scoping Questionnaire. Should the baseline information change in the course of the project, the questionnaire should be updated accordingly.

Gathering of the baseline information may be accomplished through desktop research, field reconnaissance, coordination with the Caltrans environmental and project development teams, and consultation with key stakeholders. The Caltrans VIA Handbook (website link) includes further information about the Establishment Phase.

Complete the following Baseline Information Form to document the baseline project and visual resource information that was available at the time of preparation of the questionnaire:

# Project and Visual Context Baseline Information Form

| | |
|---|---|
| **Project Name:** | Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project |
| **EA or EFIS Number** | CRP 5475(053) |
| **Project Location (Dist-Co-Rte-PM):** | 3-SAC |
| **Questionnaire Preparer Name and CA LA License Number:** | Amy Bakker, Senior Environmental Planner |
| **District Landscape Architect (DLA) Providing Concurrence, CA LA Lic. #:** | |
| **Visual Features of Project and its Alternative(s).** | Proposes to construct the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project, a 0.5-mile addition to the planned 16-mile Creek Corridor Trail Project (CCTP). The purpose of this project is to close a gap in the existing trail system by replacing dirt and narrow concrete paths with an ADA-compliant Class I multi-use trail and pedestrian crossing over a tributary to Arcade Creek.. This extension will enhance pedestrian and bicycle connectivity, provide a safe recreational facility, and improve access through the Arcade Creek greenbelt. The project is located within an urban setting with residential structures and riparian vegetation.<br><br>Vegetation removal is necessary to construct the project, but the low profile and narrow swath of the paved trail represents a minimal interruption to the creek riparian setting, which already contains a gravel path and paved roadways.<br><br>**Form & Line**: Gently curving trail alignment following the creek's contours; linear elements could include signage.<br>**Color**: Black paved surface with decomposed granite shoulders, muted greens and browns from surrounding vegetation, grays from bridge infrastructure, blacks from the roadway.<br>**Texture**: Smooth paved surface, rough natural terrain, and vegetative softness. |

| | |
|---|---|
| | **Scale**: Human-scale infrastructure; low vertical profile.<br>**Vertical Elements**: Bridge structure overhead, possible retaining walls or railings, signage posts, rock slope protection. |
| **Additional Visual Context Remarks:** | The project exhibits visual coherence through:<br>• Consistent trail design standards.<br>• Integration with existing trail, sidewalk, and urban infrastructure.<br>• Landscaping that transitions naturally between natural and urban.<br>• Use of materials and forms that reflect both natural and urban contexts. |

## Regulatory Framework

| | |
|---|---|
| **Potential Agencies that may have to be Involved:** | ☒ Federal ☒ State ☒ Local ☒ Tribal ☐ Other<br>Notes: Caltrans (on behalf of FHWA): City of Citrus Heights |

## Visual Change and Sensitivity

| | |
|---|---|
| **Landscape Observations:** | ☒ Water ☐ Visually dominant landforms ☒ Natural vegetation<br>☐ Visually Appealing Structures ☐ Other features of interest<br>Notes: Arcade Creek is present throughout the project area. |
| **Impact of Project on Natural, Cultural, and Existing Project Environments:** | ☒ Highly compatible ☐ Moderately compatible ☐ Not compatible ☐ Other<br>Notes: The proposed work would connect to an existing trail segment within an urban setting that is adjacent to a creek. |
| **Landscape Context and Development Patterns:** | ☒ Natural/Undeveloped ☐ Rural ☐ Suburban ☒ Urban<br>Notes: The Project Area of Visual Effect contains an existing gravel trail, riparian corridor, Arcade Creek, paved roadways, curb/gutter, recreational park and residential homes. |

| | |
|---|---|
| **Scenic, Visual and Historic Resource(s) within the Area of Visual Effect:** | ☐ Officially designated State Scenic Highway ☐ Eligible Scenic Highway<br>☒ Visual resources ☐ Federally (or otherwise) designated historic, scenic resource<br>Notes: The creek and adjacent riparian vegetation are natural components set within a very urbanized setting. |
| **Expected Agency Involvement:** | City of Citrus Heights, Caltrans, California Department of Fish and Wildlife, US Army Corps of Engineers, Regional Water Quality Control Board, Native American Groups |
| **Expected Public Feedback:** | ☐ Scenic resources identified as important ☒ Not important<br>☐ No public feedback<br>Notes: The City received positive public feedback in favor of filling in gaps within the existing City trail network during the public outreach conducted for the overall 16-mile Creek Corridor Trail Project. |

□

# Regulatory Context

1. Does the project's aesthetic approach appear to be consistent with applicable laws, ordinances, regulations, policies, or standards?

   Although the State is not required to comply with regional and local planning ordinances and other regulations, these documents are critical in understanding the importance that communities place on visual resources. The Caltrans Environmental Planning branch may have copies of the planning documents that pertain to the project. If not, this information can be obtained by contacting the local planning department.

   Select a Response (Score)

   - Low Consistency (4 Points)
   - Moderate Consistency (3 Points)
   - High Consistency (2 Points)
   - Not Applicable (1 Point)

   2

- **Assumptions/Issues: Adheres to all current Caltrans, City, and State applicable laws, ordinances, regulations, policies, or standards, including the City's General Plan.**

2. Will permits be required by outside regulatory agencies (i.e., federal, state, or local)?

   Permit requirements can have an unintended consequence on the visual environment. Anticipated permits, as well as specific permit requirements may be determined by talking with the project Environmental Planner and Project Engineer. Note: coordinate with the Caltrans representative responsible for obtaining the permit prior to communicating directly with any permitting agency.

   Select a Response (Score)

   - Yes, both federal and state, or multiple permits required (4 Points) — 4
   - Yes, either federal, or state, or federal and local, or state and local (3 Points)
   - Yes, local or multiple local only (2 Points)
   - No (1 Point)

- **Assumptions/issues: To construct the project, impacts to a tributary of Arcade Creek will occur due to grading and rock slope protection installation. Permitting through the US Army Corps of Engineers, California Department of Fish and Wildlife, and Regional Water Quality Control Board will be obtained.**

# Visual Change

3. Will the project character be compatible with the visual character of the existing landscape?

   Consider the types of adverse changes to the scenic integrity of the landscape caused by the project. Evaluate the scale and extent of the project features compared to the surrounding scale of the community. Is the project likely to give an urban appearance to an existing rural or suburban community?

   Select a Response (Score)

   - No Compatibility (4 Points)
   - Low Compatibility (3 Points)
   - Moderate Compatibility (2 Points)
   - High Compatibility (1 Point)

   1

- **Assumptions/issues: The proposed work, a paved trail segment, would connect to an existing trail system within an urban setting that crosses a creek. The urban setting includes an existing gravel path, recreational park, Arcade Creek, paved roadways, curb/gutter, and residential homes.**

4. Will the project contrast adversely with the memorability (vividness), natural harmony and/or cultural order (unity) of the existing landscape?

   Evaluate the scale and extent of the project features compared to the scale of the visual elements within the surroundings. Is the project likely to change the appearance in a way that is contrasting with the line, color, form, and texture of the existing landscape visual character?

   Select a Response (Score)

   - High Adverse Contrast (4 Points)
   - Moderate Adverse Contrast (3 Points)
   - Low Adverse Contrast (2 Points)
   - No Contrast (1 Point)

   2

   **Assumptions/issues:**

   **Memorability (Vividness)**

   The trail's visual features will be memorable due to the contrast and harmony between natural and urban elements:

   Form & Line: Gently curving trail alignment following the creek's contours; linear elements could include signage.

   Color: Black paved surface with decomposed granite shoulders, muted greens and browns from surrounding vegetation, grays from bridge infrastructure, blacks from the roadway.

   Texture: Smooth paved surface, rough natural terrain, and vegetative softness.

   Scale: Human-scale infrastructure; low vertical profile.

   Vertical Elements: Bridge structure, possible retaining walls or railings, signage posts, rock slope protection.

   **Coherence (Unity)**

   The project exhibits visual coherence through:

   -Consistent trail design standards.

   -Integration with existing trail, sidewalk, and urban infrastructure.

-Landscaping that transitions naturally between natural and urban.

-Use of materials and forms that reflect both natural and urban contexts.

5. Will the project, when viewed together with other past or foreseeable projects, result in a cumulative adverse change in the visual quality or character of the existing landscape?

   Identify any projects in the area (both Caltrans' and others') that have been recently constructed and/or are reasonably foreseeable and/or currently planned for future construction. The window of time and the extent of area applicable to possible cumulative impacts should be based on a reasonable anticipation of the viewing public's awareness of cumulative change.

   Select a Response (Score)

   - Project may result in substantial adverse cumulative visual impacts (4 Points)
   - Project will result in noticeable adverse cumulative visual impacts (3 Points)
   - Project is unlikely to result in noticeable adverse cumulative visual impacts (2 Points)
   - Project will not result in cumulative impacts (1 Point)

   1

- **Assumptions/issues: No. The proposed trail would connect to an existing trail system along Arcade Creek. Additionally, trail segments, including trail segments along creeks, are ubiquitous throughout the City of Citrus Heights.**

6. Will the project produce a new source of substantial light or glare, which will adversely affect daytime or nighttime views within the area?

   Identify new sources of lighting and glare and how day- and nighttime visual conditions may change.

   Select a Response (Score)

   - High potential for adverse effects (4 Points) 1
   - Moderate potential for adverse effects (3 Points)
   - Low potential for adverse effects (2 Points)
   - No potential for adverse effects (1 Point)

- **Assumptions/issues: No. Lighting is not a component of this project.**

## Visual Sensitivity

7. What is the potential that the project proposal will be controversial within the community?

   Assess the level of public concern by talking with local agency management and staff familiar with the affected community's sentiments as evidenced by past projects and/or current information.

   Select a Response (Score)

   - High Potential that project will be controversial (4 Points) 2
   - Moderate Potential that project will be controversial (3 Points)
   - Low Potential that project will be controversial (2 Points)
   - No Potential that project will be controversial (1 Point)

- **Assumptions/issues: The City received positive public feedback in favor of filling in gaps within the existing City trail network.**

8. How sensitive are potential viewer groups likely to be regarding visible changes proposed by the project?

   Consider among other factors who the viewer groups represent, the number of viewers within the group, probable viewer expectations, activities, viewing duration, and orientation. The expected viewer sensitivity level may be scoped by applying professional judgment, and by soliciting information from other Caltrans staff, local agencies and community stakeholders familiar with the affected community's sentiments and demonstrated concerns.

   Select a Response (Score)

   - High Sensitivity (4 Points)
   - Moderate Sensitivity (3 Points)
   - Low Sensitivity (2 Points)
   - No Sensitivity (1 Point)

   1

- **Assumptions/issues: The project area vicinity contains an existing gravel trail, recreational park, Arcade Creek, paved roadways, curb/gutter, and residential homes. The proposed project would connect to the existing trail system along Arcade Creek. Viewer groups would have no sensitivity as the proposed work would offer consistency with existing infrastructure. The narrow width of the trail and low profile would also not interrupt views of the creek and riparian areas within/adjacent to the creek. The new segment of trail would also be partially hidden from motorists' views due to the dense riparian vegetation within/adjacent to the creek that would remain after construction of the project. Additionally, viewer groups have expressed support for the project as a way for them to better interact with the natural environment within an urban setting.**

9. What level of local concern is there for the types of specific project features (e.g., bridge structures, large excavations, sound barriers, or median planting removal) and construction impacts that are proposed?

   Certain project improvements can be of special interest to local citizens, causing a heightened level of public concern, and requiring a more focused visual analysis.

   Select a Response (Score)

   - High Level of Concern (4 Points) 2
   - Moderate Level of Concern (3 Points)
   - Low Level of Concern (2 Points)
   - No Concern (1 Point)

- **Assumptions/issues: The City received positive public feedback in favor of filling in gaps within the existing City trail network.**

10. Are there federally, state, locally designated scenic or historic resources, or other visual resources within the project area of visual effect (i.e., viewshed)?

    For example: protected viewsheds, visually sensitive public use areas, national historic/scenic trails, historic sites or structures, scenic designated viewpoints, wild and scenic rivers, state scenic highways or federal scenic byways, or potential visual resources such as stands of trees, rock outcroppings, etc.

    Select a Response (Score)

    - Multiple designated scenic resources (4 Points) 2
    - Multiple potential visual resources or a single designated scenic resource (3 Points)
    - One potential visual resource (2 Points)
    - No identifiable scenic resources (1 Point)

- **Assumptions/issues: While there is a visual resource, Arcade Creek and its riparian corridor, it would connect to an existing paved trail in addition to other urban features including sidewalk, paved roadways, curb/gutter, and residential homes.**

## Design Process Considerations

11. Will the project sponsor or public benefit from a more detailed visual analysis in order to help reach consensus on a course of action to address potential visual impacts?

    Consider the proposed project features, possible visual impacts, and probable environmental commitments.

    Select a Response (Score)

    - High Benefit (4 Points) 1
    - Moderate Benefit (3 Points)
    - Low Benefit (2 Points)
    - No Benefit (1 Point)

- **Assumptions/issues: No. The City received positive public feedback in favor of filling in gaps within the existing City trail network.**

12. Will the project likely require design changes to reduce the extent of visual resource impacts?

    Consider design changes and enhancements such as realignment, additional alignment alternatives, vertical profile adjustments, extensive landscaping, architectural treatment, color and texture treatments and/or lighting of aboveground structures.

    Select a Response (Score)

    - Extensive changes and/or redesign (4 Points) 1
    - Some redesign or minimization measures (3 Points)
    - Minimal design changes (2 Points)
    - No design changes (1 Point)

**Assumptions/issues: No. The trail maintains environmental and community integrity by:**

- **Following existing natural and built corridors (creek, bridge, paved roadways, and sidewalk).**

- **Minimizing disruption to existing vegetation due to the narrow trail width and low profile.**
- **Enhancing connectivity without introducing incongruent infrastructure.**

Highlight the number below and press FN+F9 to calculate the final project score.

**20**

## Project Score:

Store a copy of this completed questionnaire in the project file.
Attach a copy of this completed questionnaire to the VIA report.

# Project Score

## Select an Outline Based on Project Score

The total score will indicate the recommended VIA level for the project. In addition to considering circumstances relating to any one of the 12 questions that would justify elevating the VIA level, also consider any other project factors that would influence level selection.

### Score 12-18 – VIA Questionnaire

No visual resource related regulatory requirements. No or negligible visual changes to the environment are proposed. None or minimal public concern has been identified. This **Questionnaire** with rationale for selected responses to questions in the available spaces after each question along with a statement of no visual resource impact is appropriate and provides a sufficient rationale why a technical study is not required.

### Score 19-28 –VIA Memorandum

Very limited visual resource related regulatory requirements. Minor visual changes to the environment are proposed. Minor public concern from the public may be expected. A **VIA Memorandum** is appropriate in this case. The VIA Memorandum should briefly describe project features, impacts and any environmental commitment measures. Visual simulations are not necessary. Go to the Directions for using and accessing VIA Memorandum Annotated Outline (website link).

### Score 29-38 – Standard VIA Report

Several visual resource related regulatory requirements. Moderately noticeable visual changes to the environment are proposed. Moderate public concern may be expected. A fully developed **Standard VIA Report** is appropriate. The report should describe in detail the project's visual attributes, its visual impact and potential environmental commitment measures. Visual simulations are recommended. This report will likely receive public review. Go to the Directions for using and accessing the Standard VIA Annotated Outline (website link).

### Score 39-48 – Advanced VIA Report

Extensive visual resource related regulatory requirements and clearly noticeable changes to the environment are proposed. Moderate to high public concern may be expected. A fully developed **Advanced VIA Report** is appropriate. The report should describe in detail and numerically score the project's visual change and sensitivity, its visual impact and any environmental commitments proposed. Visual simulations are required. It is appropriate to alert the Project Development Team to the potential for highly adverse impacts and to consider project alternatives to avoid those impacts. This

technical study will receive close public review. Go to the Directions for using and accessing the Advanced VIA Annotated Outline (website link).

# APPENDIX B: Air Quality Technical Memorandum



# Air Quality Technical Memorandum

Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project

City of Citrus Heights, Sacramento County, California

District 3–SAC

CRP 5475 (053)

April 2026

STATE OF CALIFORNIA

Caltrans

CALIFORNIA DEPARTMENT OF TRANSPORTATION

# Air Quality Technical Memorandum

## Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project

City of Citrus Heights, Sacramento County, California

District 3–SAC

CRP 5475 (053)

**April 2026**

STATE OF CALIFORNIA

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

Prepared By: _____ Date: 4/10/26

Ken Chen, Environmental Planner
Dokken Engineering
110 Blue Ravine Rd, 200
Folsom, CA, 95630
(916) 858-0642

Reviewed By: _____ Date: _____

Daniel Kehrer, Principal Civil Engineer
(916) 727-4770
City of Citrus Heights General Services Department
6360 Fountain Square Drive
Citrus Heights CA 95621

Approved By: _____ Date: _____

Caitlin Greenwood, Associate Environmental Planner
District 3 North Region Local Assistance

Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

## INTRODUCTION

This memorandum discusses temporary air quality impacts and minimization measures for the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project in the City of Citrus Heights, Sacramento County, California. This memorandum identifies the proposed Project as exempt from conformity requirements pursuant to 40 CFR 93.126, Table 2 “Bicycle and pedestrian facilities”. The Project will construct a 0.5-mile segment extension of an existing bicycle/pedestrian trail and will not result in any changes to the local roadway. As such, the proposed Project is not anticipated to have a long-term impact on air quality.

## PROJECT DESCRIPTION

The City of Citrus Heights (City) proposes to construct a 0.5-mile addition to the planned 16-mile Creek Corridor Trail Project (CCTP) as part of the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project (Project) (**Appendix A. Figure 1. Project Location; Figure 2. Project Vicinity**). The Project is funded through the federal Carbon Reduction Program and therefore requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for CEQA compliance is the City of Citrus Heights and the federal lead agency for NEPA compliance is the California Department of Transportation (Caltrans).

The Project is located in Citrus Heights and will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center, also known as the Stock Ranch Retail Center, to Sylvan Road. The proposed alignment begins south of the Walmart property boundary and proceeds east through the Stock Ranch Nature Preserve, curving south around Walmart’s water quality detention basin. The alignment continues north, crossing a tributary of Arcade Creek and passes south of the Huntington Square Apartments connecting to Sylvan Road. The alignment terminates east of Sylvan Road at the location of a planned future trail extension segment from Sylvan Road to Mariposa Avenue. The Project has independent utility and will function as a stand-alone improvement.

Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, bank protection along a segment of Arcade Creek and an at-grade signalized crossing at Sylvan Road (**Appendix A. Figure 3. Project Features**). Construction activities will involve grading to achieve ADA-compliant slopes, installing the creek crossing, paving the trail, erecting the solar lighting, constructing bank protection, and adding pedestrian signal infrastructure with minor utility adjustments as needed.

To accommodate construction, partial right-of-way (ROW) acquisitions will be required from several parcels. These include permanent easement and permit to enter (PTE) from the Sunrise Recreation & Park District and a temporary construction easement (TCE) from Walmart. An existing trail easement exists across the Huntington Square Apartments property and there is potential for

permanent easement to be modified to best incorporate the trail alignment with the physical site features.

Construction access will be provided primarily through the Walmart parking lot under a TCE, as well as a PTE for access from the Huntington Square Apartments parcel. These provisions will allow safe and efficient construction of the trail and its associated improvements.

Construction is anticipated to start in 2027 and last approximately 6 months.

## AFFECTED ENVIRONMENT

The Project is located in Citrus Heights, which falls within the Sacramento Valley Air Basin (SVAB). Air quality regulation in SVAB is administered by the Sacramento Metropolitan Air Quality Management District (SMAQMD). Table 1 lists the state and federal attainment status for all regulated pollutants.

**Table 1. Attainment at Project Location**

| Criteria Pollutant | Attainment Status | |
|---|---|---|
| | State | Federal |
| Ozone | Non-attainment | Non-attainment |
| $PM_{10}$ | Non-attainment | Maintenance |
| $PM_{2.5}$ | Attainment | Non-attainment |
| Carbon Monoxide | Attainment | Unclassified/Attainment |
| Nitrogen Dioxide | Attainment | Unclassified/Attainment |
| Sulfur Dioxide | Attainment | Unclassified/Attainment |
| Lead | Attainment | Unclassified/Attainment |
| Visibility Reducing Particles | Unclassified | No Federal Standard |
| Sulfates | Attainment | No Federal Standard |
| Hydrogen Sulfide | Unclassified | No Federal Standard |

Source: California Air Resources Board, October 2018

## SMAQMD EMISSION THRESHOLDS OF SIGNIFICANCE

The SMAQMD has established mass emissions thresholds for ozone precursors and particulate matter because the Sacramento Region does not meet state and federal ozone ambient air quality standards. The thresholds are listed in Table 2 below. Emissions of ozone precursors or particulate matter from an individual project could contribute to the cumulative non-attainment problem. A “considerable” or “substantial” contribution means one that exceeds the mass emission threshold levels.

**Table 2. SMAQMD Thresholds of Significance**

| **Pollutant** | **Construction Threshold Lbs/day** | **Operational Threshold Lbs/day** |
|---|---|---|
| ROG | None | 65 |
| $NO_x$ | 85 | 65 |
| $PM_{10}$ | 80[1] | 80[1] |
| $PM_{2.5}$ | 82[1] | 82[1] |
| **Pollutant** | **Construction Threshold Metric Tons/year** | |
| $CO_2$ | 1,100 | |
| [1] assumes all feasible BACT/BMPs are applied | | |

## TEMPORARY/CONSTRUCTION IMPACTS

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and will include carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOCs), directly emitted particulate matter ($PM_{10}$ and $PM_{2.5}$), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NOx and VOCs in the presence of sunlight and heat.

Heavy trucks and construction equipment powered by gasoline and diesel engines will generate CO, $SO_2$, NOx, VOCs and some soot particulate ($PM_{10}$ and $PM_{2.5}$) in exhaust emissions. If construction activities were to increase traffic

congestion in the Project vicinity, CO and other emissions from traffic will increase slightly while those vehicles are delayed. These emissions will be temporary and limited to the immediate area surrounding the Project area.

Dust generated will result in a temporary, local impact, limited to areas of construction. Dust control practices will be incorporated into the Project to mitigate this potential impact. The dust control practices will comply with the current Caltrans' Standard Specifications.

Construction emissions were estimated using the Caltrans 2021 Construction Emissions Tool (CAL-CET v1.0.2). Construction-related emissions for the proposed Project are presented in Table 3. The emissions presented are based on the best information available at the time of calculations. The emissions represent the peak daily construction emissions that will be generated by construction of the proposed Project.

**Table 3. Construction Emissions**

| | **ROG** (lbs/day) | **$PM_{10}$** (lbs/day) | **$PM_{2.5}$** (lbs/day) | **CO** (lbs/day) | **$NO_x$** (lbs/day) | **$CO_2$** (Metric Tons/Year) |
|---|---|---|---|---|---|---|
| **Land Clearing/Grubbing** | 1.013 | 5.865 | 6.194 | 5.865 | 6.194 | 5 |
| **Roadway Excavation & Removal** | 1.950 | 13.001 | 13.226 | 13.001 | 13.226 | 34 |
| **Structural Excavation & Removal** | 0.456 | 1.388 | 2.421 | 1.388 | 2.421 | 1 |
| **Base/Subbase/ Imported Borrow** | 2.779 | 20.441 | 19.128 | 20.441 | 19.128 | 24 |
| **Structure Concrete** | 0.683 | 2.146 | 3.364 | 2.146 | 3.364 | 8 |
| **Paving** | 2.039 | 6.400 | 15.345 | 6.400 | 15.345 | 16 |
| **Drainage/Environment /Landscaping** | 2.823 | 8.359 | 17.997 | 8.359 | 17.997 | 62 |
| **Traffic Signalization/Signage/ Striping/Painting** | 1.348 | 6.568 | 10.204 | 6.568 | 10.204 | 49 |
| **Maximum daily (lbs/day)** | 2.823 | 20.441 | 19.128 | 20.441 | 19.128 | - |
| **Project Total (tons/construction project)** | 0.122 | 0.548 | 0.809 | 0.548 | 0.809 | 200 |

| | **ROG** (lbs/day) | **$PM_{10}$** (lbs/day) | **$PM_{2.5}$** (lbs/day) | **CO** (lbs/day) | **$NO_x$** (lbs/day) | **$CO_2$** (Metric Tons/Year) |
|---|---|---|---|---|---|---|
| **SMAQMD Construction Thresholds of Significance** | - | Zero (0). If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year | Zero (0). If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year | - | 85 lbs/day | 1,100 metric tons/year |

## PERMANENT OPERATIONAL IMPACTS

The proposed Project is exempt from all Project-level conformity requirements because it falls under Table 2—Exempt Projects "Bicycle and pedestrian facilities" listed in 40 CFR 93.126. There will be no long-term operational air quality emissions associated with the proposed Project.

## MINIMIZATION MEASURES

Construction activities will be short-term and intermittent in duration; therefore, no long-term impacts to air quality will occur. Implementation of the avoidance and minimization measures **AQ-1** and **CC-1** will reduce air quality impacts resulting from construction activities. Please note that although these measures are anticipated to reduce construction-related emissions, these reductions cannot be quantified at this time.

**AQ-1**: Implement Sacrameto Metropolitan Air Quality Management District (SMAQMD) Basic and Enhanced Construction Emission Control Practices to Reduce Fugitive Dust.

The implementing agency will require, as a standard or specification of their contract, the construction contractor(s) to implement basic and enhanced control measures to reduce construction-related fugitive dust. Although the following measures are outlined in the SMAQMD's California Environmental Quality Act (CEQA) guidelines, they are required for the entirety of the construction area. The implementing agency will ensure through contract provisions and specifications that the contractor adheres to the mitigation measures before and during construction and documents compliance with the adopted mitigation measures.

- Water 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 2 feet of freeboard space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that will be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout 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.
- All trail, and curb/sidewalk paving should be completed as soon as possible.

  The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board (CARB) enforces idling limitations and compliance with diesel fleet regulations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 3 minutes. Provide clear signate that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, Sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.

**CC-1:** The implementing agency will require through construction contract terms and specifications that the contractor adheres to the mitigation measures and implements all applicable Sacrameto Metropolitan Air Quality Management District (SMAQMD) best management practices for reducing construction-related Greenhouse Gas (GHG) emissions. Documentation will be provided to the implementing agency on a weekly basis. The contract provisions and specifications will authorize the implementing agency to sanction contractors for non-compliance. The implementing agency will consult SMAQMD prior to construction about the most current recommended construction best management practices and will adopt those practices. Practices include the following:

- Improve fuel efficiency from construction equipment:
    - Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes. 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 determined to be running in proper condition before it is operated.
  - Train equipment operators in proper use of equipment, including limiting idling time, minimizing warm-up time, performing routine maintenance, and optimizing equipment use.
  - Avoid using equipment that is larger than the job requires.
  - Use equipment with new technologies (e.g., repowered engines, electric drivetrains).
- Perform on-site material hauling with trucks equipped with on-road engines (if the air districts or CARB determine them to emit less than the off-road engines).
- Use alternative fuels for generators at construction sites, rather than gasoline or diesel (e.g., propane or solar), or use electrical power.
- Use a California Air Resources Board-approved low-carbon fuel for construction equipment. (NOx emissions from the use of low-carbon fuel must be reviewed and increases mitigated.)
- Encourage and provide carpools, shuttle vans, and transit passes for construction worker commutes.
- Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and using the most efficient heating and cooling units available.
- Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75% by weight) to avoid landfill disposal.
- Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials, and based on volume for trail, sidewalk and curb materials). Wood products utilized should be certified through a sustainable forestry program.
- Minimize the amount of concrete for paved surfaces or utilize a low carbon concrete option.
- Produce concrete on-site if determined to be less emissive than transporting ready mix.
- Use Smartway certified trucks for deliveries and equipment transport.
- Develop a plan to efficiently use water for adequate dust control.

## SUMMARY

No substantially adverse air quality impacts from construction are anticipated because construction will be short-term and intermittent and conducted in accordance with Caltrans' standard specifications and County requirements.

## REFERENCES

Caltrans CAL-CET2021 v1.0.2

California Air Resources Board. November 2023. Area Designations Maps/state and National, https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed January 2026.

Sacramento Metropolitan Air Quality Management District. CEQA Guide December 2009, last revised April 2020. SMAQMD Thresholds of Significance Table, https://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf

# APPENDIX C: Natural Environment Study

**Arcade-Cripple Creek Trail** **NES**

**(Sylvan Road to Stock Ranch) Extension Project**



# Natural Environment Study

Discussion of Biological Resources, Aquatic Resources, Impacts, and Mitigation

City of Citrus Heights, Sacramento County, California

District 3-SAC

CRP 5475(053)

**April 2026**

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

# Natural Environment Study

Discussion of Biological Resources, Aquatic Resources, Impacts, and Mitigation

City of Citrus Heights, California

District 3-SAC

CRP 5475(053)

**April 2026**

STATE OF CALIFORNIA

Department of Transportation

Prepared By: _____ Date: 4/10/26

Katie Jacobson, Biologist/Environmental Planner
(916) 858-0642
Dokken Engineering
110 Blue Ravine Road, Suite 200
Folsom, CA 95630

Reviewed By: _____ Date: 4/15/26

Daniel Kehrer, Principal Civil Engineer
(916) 727-4770
City of Citrus Heights General Services Department
6360 Fountain Square Drive
Citrus Heights CA 95621

Approved By: _____ Date: 4/28/2026

Gregory Saiyo, Environmental Scientist
(530) 845-3397
North Region Environmental
California Department of Transportation - District 3

Approved By: Veronica Wilson _____ Date: 4/28/2026

Veronica Wilson, Senior Environmental Scientist, Branch Chief
(530) 649-4871
North Region Environmental
California Department of Transportation - District 3

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alternate formats, please call or write to Department of Transportation, Attn: Dennis Keaton, Public Information Officer, 703 B Street Marysville, CA 95901; (916) 825-5252 (Voice) or use the California Relay Service (800) 735-2929 (TTY to Voice), (800) 735-2922 (Voice to TTY) or 711.

## Table of Contents

Summary ..... v
Chapter 1: Introduction ..... 1
Project Description ..... 1
Chapter 2 – Study Methods ..... 6
Federal Regulations ..... 6
State Regulations ..... 8
Local Regulations ..... 10
Studies Required ..... 11
Personnel and Survey Dates ..... 12
Agency Coordination and Professional Contacts ..... 12
Limitations That May Influence Results ..... 13
Chapter 3 – Results: Environmental Setting ..... 14
Description of the Existing Physical and Biological Conditions ..... 14
Chapter 4 – Results: Biological Resources, Discussion of Impacts, and Mitigation ..... 42
Habitats and Natural Communities of Special Concern ..... 42
Special Status Plant Species ..... 51
Special Status Animal Species ..... 53
Chapter 5 – Conclusions and Regulatory Determinations ..... 63
Federal Endangered Species Act Consultation Summary ..... 63
Essential Fish Habitat Consultation Summary ..... 64
California Endangered Species Act Consultation Summary ..... 65
Wetlands and Other Waters Coordination Summary ..... 65
Invasive Species ..... 65
Other ..... 65
**Appendix A. USFWS Species List ..... 71**
**Appendix B. CNDDB Species List ..... 72**
**Appendix C. CNPS Species List ..... 73**
**Appendix D. NMFS Species List ..... 74**
**Appendix E. Reference Photographs ..... 75**
**Appendix F. OHWM Datasheet ..... 83**
**Appendix G. CDFW Region 2 Fisheries Biologist Coordination ..... 84**

**List of Tables**

Table 1. Species Observed ..... 18
Table 2: Special Status Species with Potential to Occur in the Project Vicinity ..... 22
Table 3. Impacts to Sensitive Natural Habitats ..... 42
Table 4. Federally Listed Species Determinations ..... 63

## List of Figures

Figure 1: Project Vicinity ..... 2
Figure 2: Project Location ..... 3
Figure 3: Project Features ..... 5
Figure 4: Waters and Vegetation Communities ..... 15
Figure 5: Project Impacts ..... 43

## Acronyms List

| | |
|---|---|
| °F | Fahrenheit |
| ADA | Americans with Disabilities Act |
| BMP | Best Management Practice |
| BSA | Biological Study Area |
| Caltrans | California Department of Transportation |
| CCTP | Creek Corridor Trail Project |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CESA | California Endangered Species Act |
| CFG | California Fish and Game |
| CFR | Code of Federal Regulations |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| City | City of Citrus Heights |
| CWA | Clean Water Act |
| DBH | Diameter at Breast Height |
| DOT | Department of Transportation |
| EFH | Essential Fish Habitat |
| EO | Executive Order |
| ESA | Environmentally Sensitive Area |
| FESA | Federal Endangered Species Act |
| FHWA | Federal Highway Administration |
| FR | Federal Register |
| HAPC | Habitat Areas of Particular Concern |
| iPaC | Information for Planning and Consultation |
| ITP | Incidental Take Permit |
| LiDAR | Light Detection and Ranging |
| MBTA | Migratory Bird Treaty Act |
| NEPA | National Environmental Policy Act |
| NES | Natural Environment Study |
| NMFS | National Marine Fisheries Service |
| NPDES | National Pollutant Discharge Elimination System |
| NRCS | Natural Resources Conservation Service |
| NWPT | Northwestern Pond Turtle |
| OHWM | Ordinary High-Water Mark |
| PFMC | Pacific Fishery Management Council |
| PMP | Pedestrian Master Plan |
| Project | Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project |
| ROW | Right-of-way |
| RSP | Rock Slope Protection |
| RWQCB | Regional Water Quality Control Board |
| SWRCB | State Water Resources Control Board |
| U.S. | United States |
| USACE | U.S. Army Corps of Engineers |

| | |
|---|---|
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| VELB | Valley Elderberry Longhorn Beetle |
| WQC | Water Quality Certification |

## Summary

The City of Citrus Heights (City) proposes to construct the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project (Project), a 0.5-mile addition to the planned 16-mile Creek Corridor Trail Project (CCTP). The purpose of this Project is to close a gap in the existing trail system by replacing dirt and narrow concrete paths with an Americans with Disabilities Act (ADA) compliant Class I multi-use trail. This trail extension is needed to enhance pedestrian and bicycle connectivity, provide a safe recreational facility, and improve access through the Arcade Creek greenbelt.

This Natural Environment Study (NES) provides a review and evaluation of the potential impacts to threatened, endangered, listed, or special status species and protected habitat resources as a result of the proposed Project. Field surveys were conducted within the Biological Study Area (BSA) which encompasses the Project area at the proposed trail alignment with an approximate 165-foot buffer to assess adjacent sensitive vegetation communities.

During biological survey efforts, three vegetation communities were observed within the BSA, including annual grassland, oak woodland, and riparian woodland. In addition, the BSA includes two aquatic features: Arcade Creek and Arcade Creek tributary (perennial stream channel) and portions of, an unnamed ephemeral tributary and two water quality/detention basins. Because these basins are artificial ponds constructed in dry land for stormwater treatment and detention, they fall under the exclusion at 40 Code of Federal Regulations (CFR) § 120.2(b)(5) and therefore do not meet the current definition of waters of the U.S. In addition, permitting under Section 401 of the CWA is not warranted as there is little to no risk of discharge to another water body and there is no potential for the Project improvements to encroach on these features. Arcade Creek and the Arcade Creek tributary are jurisdictional waters of both the United States (U.S.) and the state, whereas the ephemeral tributary. These surface waters are regulated under Section 401 of the Clean Water Act (CWA), as administered by the Regional Water Quality Control Board (RWQCB), and Arcade Creek and its tributary are additionally subject to Section 404 of the Clean Water Act administrated by USACE. The California Department of Fish and Wildlife (CDFW) also asserts jurisdiction over the bed, bank, and channel of these waters, as well as any associated riparian vegetation.

The Project would result in temporary and permanent impacts to jurisdictional waters and vegetation communities within the BSA. Approximately 0.10 acres of Arcade Creek mainstem and its tributary would be temporarily impacted, while approximately 0.01 acres of Arcade Creek will be permanently impacted. In addition, temporary impacts totaling approximately 0.89 acres and permanent impacts totaling approximately 0.20 acres are anticipated within the riparian woodland community. The Project would also affect upland vegetation communities, including approximately 0.17 acres of temporary impacts and 0.02 acres of permanent impacts to oak woodland.

For the purposes of this analysis, “special status species” includes any species that has been afforded special recognition by federal, state or local resources agencies (e.g., United States Fish and Wildlife Service [USFWS], CDFW, etc.), and/or resource conservation organizations (e.g., California Native Plant Society [CNPS]). Literature research, habitat assessments, and biological surveys determined that the BSA was

potentially suitable for five special status species: song sparrow (“Modesto” population) (*Melospiza melodia pop. 1*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*; VELB), Swainson’s hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*) and northwestern pond turtle (*Actinemys marmorata*; NWPT). With the inclusion of appropriate avoidance and minimization measures, the proposed Project is not expected to result in take of any state listed species; and therefore coordination with CDFW under Section 2081 Incidental Take Permit (ITP) is not anticipated. Based on the location of VELB habitat in relation to the BSA and the nature of the Project, it has been determined that the Project will have *no effect* on VELB. The USFWS is currently not providing conference opinions for northwestern pond turtle (based on the timing of this NES). However, given that northwestern pond turtle is proposed to be listed under the FESA, Section 7 consultation will be required with USFWS upon official listing of the species. Though no determination will be made for purposes of Section 7 at this time, once officially listed under FESA, the determination for northwestern pond turtle is proposed to be *may affect, not likely to adversely affect*. Conservation measures are proposed for the species as a show of good faith, to further the protection and recovery of the species, and in anticipation of any future listings.

The following permits will be obtained for the proposed Project prior to construction: Section 401 Water Quality Certification from the RWQCB, non-reporting Section 404 Nationwide Permit 14, and a Section 1602 Streambed Alteration Agreement from CDFW.

The Project is funded through the federal Carbon Reduction Program. The California Department of Transportation (Caltrans) is the lead agency for National Environmental Policy Act (NEPA) compliance. The City will be the lead agency for California Environmental Quality Act (CEQA) compliance.

# Chapter 1: Introduction

The Arcade-Cripple Creek Trail is part of a 16-mile trail network identified in the City's CCTP. Planned since 2012, the Creek Corridor Trail is being built segment by segment, starting with 4.2 miles of Priority 1 trails identified in the Creek Corridor Trail Project Feasibility Study. To advance its vision of using the natural Arcade Creek greenbelt as a recreational resource and to enhance connectivity between communities, the City of Citrus Heights, in partnership with the Sunrise Recreation and Parks District, is proposing to construct the 0.5-mile Priority 1 trail segment from Sylvan Road to Stock Ranch. Currently, the trail includes dirt paths through the Stock Ranch Nature Preserve and narrow concrete paths through the Huntington Square apartments. This Project will upgrade these sections to a paved, ADA-compliant Class I multi-use trail, bringing the Priority 1 trail network over 10% closer to completion and providing safe, accessible connections between communities.

The Project is located west of Sylvan Road within the City of Citrus Heights in Sacramento County, California, within the Citrus Heights 7.5-minute U. S. Geological Survey (USGS) quadrangle (**Figure 1. Project Vicinity** and **Figure 2. Project Location**).

## Project Purpose and Need

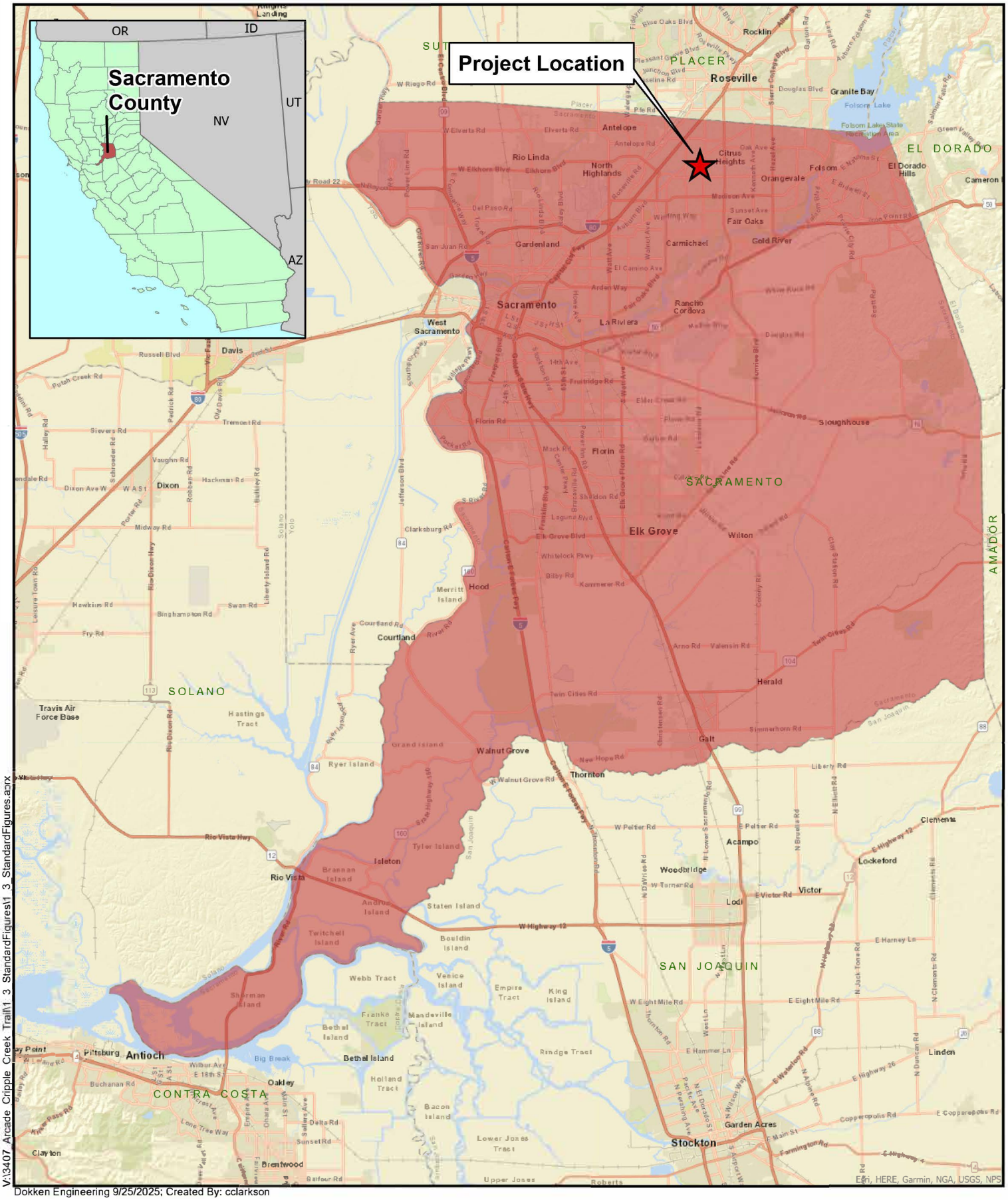
The purpose of this Project is to construct one of the several planned segments of the CCTP by replacing dirt and narrow concrete paths with an ADA-compliant Class I multi-use trail. This trail extension is needed to enhance pedestrian and bicycle connectivity, provide a safe recreational facility, and improve access through the Arcade Creek greenbelt.

## Project Description

The City proposes to construct a 0.5-mile addition to the planned 16-mile CCTP as part of the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project (Project). The Project is funded through the federal Carbon Reduction Program.

The Project is located in Citrus Heights and will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road. The proposed alignment begins south of the Walmart property boundary and would proceed east through the Stock Ranch Nature Preserve, curving south around Walmart's water quality detention basin. The alignment continues north, crossing a tributary of Arcade Creek, and traverses along the south side of the Huntington Square Apartment complex prior to connecting to Sylvan Road. The alignment terminates east of Sylvan Road with a planned future trail extension segment from Sylvan Road to Mariposa Avenue. The Project has independent utility and would function as a stand-alone improvement.

To accommodate construction, right-of-way (ROW) acquisitions will be required from several parcels. These include a permanent and temporary easement from



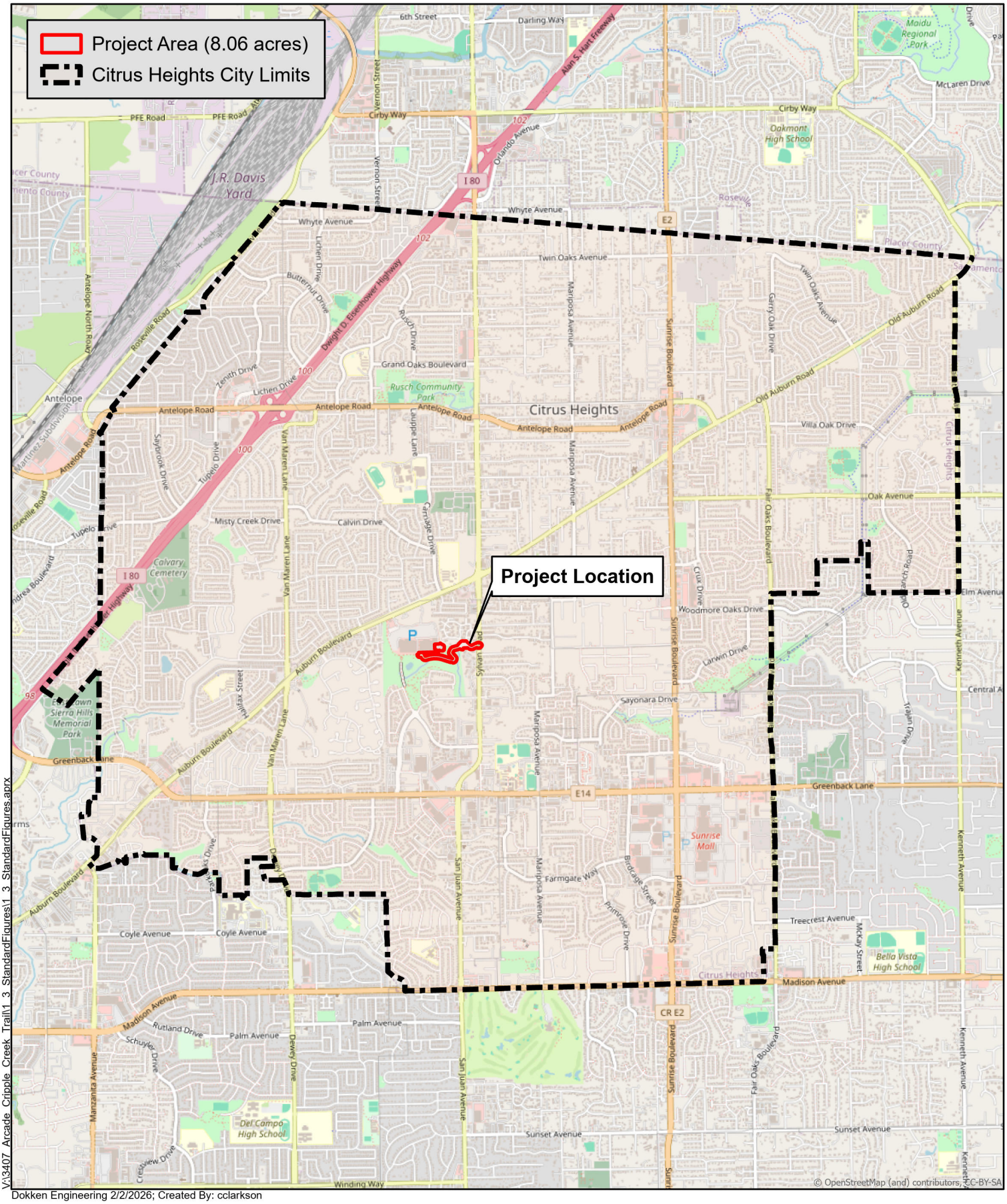

V:\3407 Arcade Cripple Creek Trail\1 3 StandardFigures\1 3 StandardFigures.aprx

Dokken Engineering 9/25/2025; Created By: cclarkson

0 3.5 7 Miles

**Figure 1**
**Project Vicinity**

Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




V:\3407 Arcade Cripple Creek Trail\1 3 StandardFigures\1 3 StandardFigures.aprx

Dokken Engineering 2/2/2026; Created By: cclarkson

0 1,750 3,500

Feet

**Figure 2**
**Project Location**

Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

the Sunrise Recreation and Park District, a temporary access easement from Walmart and/or Costco, and a temporary access easement from Huntington Square Apartments. If the existing trail easement across the Huntington Square Apartment property is insufficient to contain the construction activities, an additional temporary construction easement would be needed.

Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, and an at-grade signalized pedestrian crossing at Sylvan Road (**Figure 3. Project Features**). Construction activities will involve grading to achieve ADA-compliant slopes, installing the creek crossing (the prefabricated bridge), paving the trail, erecting the solar lighting, and adding pedestrian signal infrastructure with minor utility adjustments as needed. The Project also includes installation of a gabion basket retaining wall along an actively eroding portion of Arcade Creek to stabilize the bank and prevent further erosion.

Construction access will be provided primarily through the Walmart and/or Costco parking lot under a temporary construction easement, with potential supplemental access from the Huntington Square Apartments parcel. These provisions will allow safe and efficient construction of the trail and its associated improvements.




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Source: Dokken Engineering 2/4/2026; Created By: kjacobson

0 75 150 Feet

**Figure 3**
**Project Features**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

# Chapter 2 – Study Methods

This section describes the federal, state, and local plans, policies, and laws that are relevant to biological resources within the BSA. Applicable federal permits and approvals that will be required before construction of the Project are provided in Chapter 5.

## Federal Regulations

### *National Environmental Policy Act*

NEPA provides an interdisciplinary framework for environmental planning by federal agencies and contains action-forcing procedures to ensure that federal agency decisions take environmental factors into account. NEPA is applicable when a federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans is the designated NEPA lead agency for this Project acting under delegation from the Federal Highway Administration (FHWA).

### *Federal Endangered Species Act*

The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by USFWS or National Marine Fisheries Service (NMFS). One federally threatened species, VELB, along with one federally proposed threatened species, NWPT, have potential to occur within the BSA.

### *Clean Water Act*

The CWA was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the U.S. The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. Environmental Protection Agency to set national water quality standards and effluent limitations and includes programs addressing both point source and nonpoint source pollution. Point source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Nonpoint source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is the CWA's primary regulatory tool.

#### Section 401

The RWQCB has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with waters of the U.S. including any wetlands. The RWQCB also asserts authority over "waters of the state"

under WDRs pursuant to the Porter-Cologne Water Quality Control Act. The Project is located within the jurisdiction of the Central Valley RWQCB and would require a Water Quality Certification (WQC) prior to construction. WQCs are issued to applicants for a federal license or permit for activities that may result in a discharge into waters of the U.S., including but not limited to the discharge or dredged or fill material.

#### Section 402

The California State Water Resources Control Board (SWRCB) regulates construction projects that involve ground disturbance of one acre or greater. These projects must obtain coverage under the SWRCB General Permit for Storm Water Discharges Associated with Construction Activity (General Construction Permit). Operators of regulated construction sites are required to develop a Stormwater Pollution Prevention Plan; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the General Construction Permit.

#### Section 404

The United States Army Corp of Engineers (USACE) regulates discharges of dredged or fill material into waters of the U.S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations). Arcade Creek and the Arcade Creek tributary, within the BSA, are jurisdictional waters of the U.S. and will require Section 404 permitting through the USACE.

### *Executive Order 11990 – Protection of Wetlands*

The Executive Order (EO) 11990 established a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. The U. S. Department of Transportation (DOT) promulgated DOT Order 5660.1A in 1978 to comply with this direction. On federally funded projects, impacts on wetlands must be identified. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included. This must be documented in a specific Wetlands Only Practicable Alternative Finding.

An additional requirement is to provide early public involvement in projects affecting wetlands. FHWA provides technical assistance in the Guidance for Preparing and Processing Environmental and Section 4(f) Documents (Technical Advisory T 6640.8A) and reviews environmental documents for compliance.

### *Executive Order 13112 – Invasive Species*

EO 13112 (signed February 3, 1999) directs all federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO and directives from the FHWA require consideration of

invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

#### *Magnuson-Stevens Fishery Conservation and Management Act*

The Magnuson-Stevens Fishery Conservation and Management Act of 1976 was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

#### *Migratory Bird Treaty Act*

This treaty with Canada, Mexico and Japan makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests (such as swallow nests on bridges) occupied by migratory birds during the breeding season. California Fish and Game Code Sections 3503 and 3503.5 (protection of birds' nests) and 3513 (taking Migratory Bird Treaty Act birds) also prohibit the destruction of any nest, egg, or nestling.

### State Regulations

#### *California Environmental Quality Act*

CEQA is a California state law designed to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to identify measures to reduce these negative environmental impacts. The City is the CEQA lead agency for this Project.

#### *California Endangered Species Act*

The California Fish and Game (CFG) Code Section 2050, henceforth referred to as the California Endangered Species Act (CESA), requires CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080–2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code

Regulations, Title 14, Section 783.4(b)]. Swainson's hawk listed as threatened under CESA has a low potential to occur within the BSA.

### *Section 1602: Streambed Alteration Agreement*

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

### *Section 3503 and 3503.5: Bird and Raptors*

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests.

### *Section 3513: Migratory Birds*

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the Migratory Bird Treaty Act (MBTA) or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

### *Section 3511: Fully Protected Birds*

CFG Code Section 3511 designates certain bird species as fully protected and prohibits the take or possession of these species, or any part thereof, except as expressly authorized for scientific research, species recovery, or limited relocation purposes by CDFW. The white-tailed kite is a fully protected species and has low potential to occur within the BSA.

### *Porter-Cologne Water Quality Control Act*

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., such as groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined and this definition is broader than the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by WDRs and may be required even when the discharge is already permitted or exempt under the CWA.

The RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body

segments in their jurisdictions and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants, which are then state listed in accordance with CWA Section 303(d). If a state determines that waters are impaired, and the standards cannot be met through point source or nonsource point controls (National Pollutant Discharge Elimination System [NPDES] permits), the CWA requires the establishment of Total Maximum Daily Loads which specify allowable pollutant loads from all sources (point, nonpoint, and natural) for a given watershed. The ephemeral tributary within the BSA is considered a jurisdictional water of the state.

#### *Regional Water Quality Control Board*

The SWRCB adjudicates water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, Total Maximum Daily Loads, and NPDES permits. RWQCBs are responsible for protecting beneficial use of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

### Local Regulations

#### *City of Citrus Heights 2011 General Plan*

The City's General Plan contains goals, policies, and actions that embody the City's approach for achieving the community's vision for its future. Goals identify physical, economic, environmental and/or social ends that the community desires. The policies are used directly to guide City decision makers and staff to respond by developing proposals and community actions (City of Citrus Heights 2011).

Compliance with all relevant goals and policies outlined in the General Plan will be required as part of the Project, including but not limited to:

**Goal 17:** Develop the Stock Ranch property with a mix of uses that enhance the City’s economic base, are compatible with surrounding land uses, and are sensitive to natural resources

**Policy 17.3:** Promote development in Stock Ranch in a manner that creates an attractive, distinct, cohesive, high-quality place. Features shall include: recognition of site and City history; good automobile and pedestrian connection; compatibility with surrounding land uses; avoids cut-through traffic; and maintains open space.

**Policy 17.4:** Incorporate trail, park, open space and public access along Arcade Creek.

**Policy 29.4:** Support safe, complete and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context.

**Goal 38:** Establish a system of creekside trails, passive open space and parks for public use

### *City of Citrus Heights Pedestrian Master Plan*

The City Council adopted the first Citrus Heights Pedestrian Master Plan (PMP) on August 11, 2016. The PMP provides a broad vision, strategies, and actions for improving the pedestrian environment in the City by guiding the prioritization of investments in pedestrian infrastructure. It serves as a strategic framework to secure funding for pedestrian safety and livable community initiatives and to encourage more walking trips. The overall goal of the PMP is to enhance personal mobility, promote physical activity, and improve quality of life for City residents. The proposed Project is identified as a Local Priority Pedestrian Corridor Network within the PMP (City of Citrus Heights 2016).

The proposed Project aligns with the following goals and objectives listed in the PMP:

**Goal 1:** Improve walking safety.

**Objective 1.C:** Create an environment where people feel safe walking in Citrus Heights.

**Goal 2:** Increase and improve pedestrian access for all ages and abilities throughout the community.

**Goal 4:** Develop a walking environment that supports a vibrant community.

**Objective 4.A:** Create vibrant public spaces that encourage walking.

**Objective 4.B:** Create vibrant pedestrian friendly street environments in commercial and retail areas.

**Objective 4.C:** Create pedestrian priority corridors that serve as ‘walksheds’ to direct pedestrians to these safer, convenient paths between key destinations.

### *City of Citrus Heights Tree Preservation and Protection Regulations*

Native oak trees and other mature trees 19 inches or greater in diameter are protected and require a permit for removal.

The following trees are protected and require a tree permit:

- Native oaks 6 inches or more in diameter
- Mature trees 19 inches or more in diameter
- Trees planted as part of a condition of approval or mitigation requirement with a discretionary permit

## Studies Required

Online databases from USFWS Information for Planning and Consultation (iPaC), California Natural Diversity Database (CNDDB), NMFS West Coast Region California Species List, and CNPS Inventory of Rare and Endangered Plants of California were queried for presence of potential threatened, endangered, rare, or special status species within the USGS 7.5-minute quadrangles of Rio Linda (3812164), Citrus Heights (3812163), Folsom (3812162), Sacramento East (3812154), Buffalo Creek (3812152)), Carmichael (3812153), Rocklin (3812172), Roseville (3812173), and Pleasant Grove (3812174). These searches identified 23 special status wildlife species and 12

special status plant species with potential to occur in the vicinity of the Project (**Appendix A** through **Appendix D**). These species are described in **Table 2. Special Status Species with Potential to Occur in the Project Vicinity**, which provides a comprehensive list and presents specific characteristics, habitat requirements, and potential for occurrence for each species.

### Personnel and Survey Dates

A general biological survey was conducted on October 17, 2025, by Dokken Engineering biologists Caroline Clarkson and Katie Jacobson. The survey consisted of a general assessment of biological conditions of the BSA, with special attention given to sensitive plant and wildlife species that were determined by the literature assessment to have a potential of occurring within the Project vicinity. Methodology involved walking meandering transects throughout the BSA and recording observed vegetation and wildlife species, as well as categorizing existing vegetation communities.

In addition, an aquatic resources delineation was conducted in accordance with technical methods outlined in *A Field Guide to the Identification of the Ordinary High-Water Mark* (OHWM) *in the Arid West Region of the Western United States* (Lichvar & McColley 2008) to determine the boundaries of the OHWM of Arcade Creek and the Arcade Creek tributary. During survey efforts, these aquatic features were mapped in the field using an EOS Arrow 100 Receiver paired with ArcGIS Pro 3.6 software. This fieldwork was supplemented by desktop analysis of current and historical aerial imagery, as well as Light Detection and Ranging (LiDAR) data. The OHWM datasheet is included in the attached appendices (**Appendix F. OHWM Datasheet**).

### Agency Coordination and Professional Contacts

#### *United States Fish and Wildlife Service*

On September 29, 2025, an official species list was obtained from the USFWS iPaC list for federally endangered and threatened species that could occur in the vicinity of the Project. An updated species list was obtained from iPaC on February 2, 2026 (**Appendix A**).

#### *California Department of Fish and Wildlife*

On March 12, 2026, a nine-quadrangle CNDDB search for special status species was obtained and used to create a list of species potentially occurring in the vicinity of the Project (**Appendix B**).

On January 23, 2026, Dokken Engineering contacted Skyler Burson, District Anadromous Fisheries Biologist with CDFW Region 2, to confirm the status of anadromous fish in Arcade Creek within the BSA. Skyler indicated that the potential for listed fish species to occur in this reach of Arcade and Cripple Creeks is very low. While there have been unverified reports of steelhead in the lower portions of Arcade Creek following large flow events, these are likely hatchery-origin fish. In November 2025, a small number of adult fall-run Chinook salmon entered Cripple Creek; however, Cripple Creek functions as a dead-end system with limited to no suitable spawning habitat, and any successful spawning

or juvenile survival is considered highly unlikely (**Appendix G. CDFW Region 2 Fisheries Biologist Coordination**).

#### *California Native Plant Society*

On March 12, 2026, a special status plant list was obtained from CNPS Inventory of Rare and Endangered Plants of California (**Appendix C**).

#### *National Oceanic and Atmospheric Administration*

On March 12, 2026, a list of federally listed fish species was obtained from NMFS West Coast Region California Species List (**Appendix D**).

### Limitations That May Influence Results

Sensitive wildlife species with the potential to occur in the BSA may be cryptic (difficult to detect) or transient, migratory species. The population size and locations of sensitive species may fluctuate through time. Because of this, the data collected for this NES represents a “snapshot” in time and may not reflect actual future conditions. The collection of biological field data is normally subject to environmental factors that cannot be controlled or reliably predicted. Consequently, the interpretation of field data must be conservative and consider the uncertainties and limitations imposed by the environment. However, due to the experience and qualifications of the consulting biologists involved in the surveys, this limitation is not expected to severely influence the results or substantially alter the findings of this NES.

# Chapter 3 – Results: Environmental Setting

## Description of the Existing Physical and Biological Conditions

The following sections discuss ecological conditions of the region and biological resources present within the BSA.

### *Study Area*

The Project is located south of Auburn Boulevard and west of Sylvan Road within Citrus Heights, California, and partially within the Stock Ranch Nature Preserve, a 47-acre open-space park with over 1.5 miles of walking paths along the Arcade and San Juan creeks. The Project area encompasses approximately 8.06 acres and accounts for all temporary and permanent impacts associated with construction, including proposed construction easements, temporary access roads, cut and fill limits, and potential staging areas. The BSA was defined as the area necessary for Project activities with an approximate 50-meter (165-foot) buffer to evaluate adjacent sensitive habitat resources and to accommodate for potential changes in the Project design. The BSA measures approximately 32.62 acres (**Figure 4. Waters and Vegetation Communities**).

### *Physical Conditions*

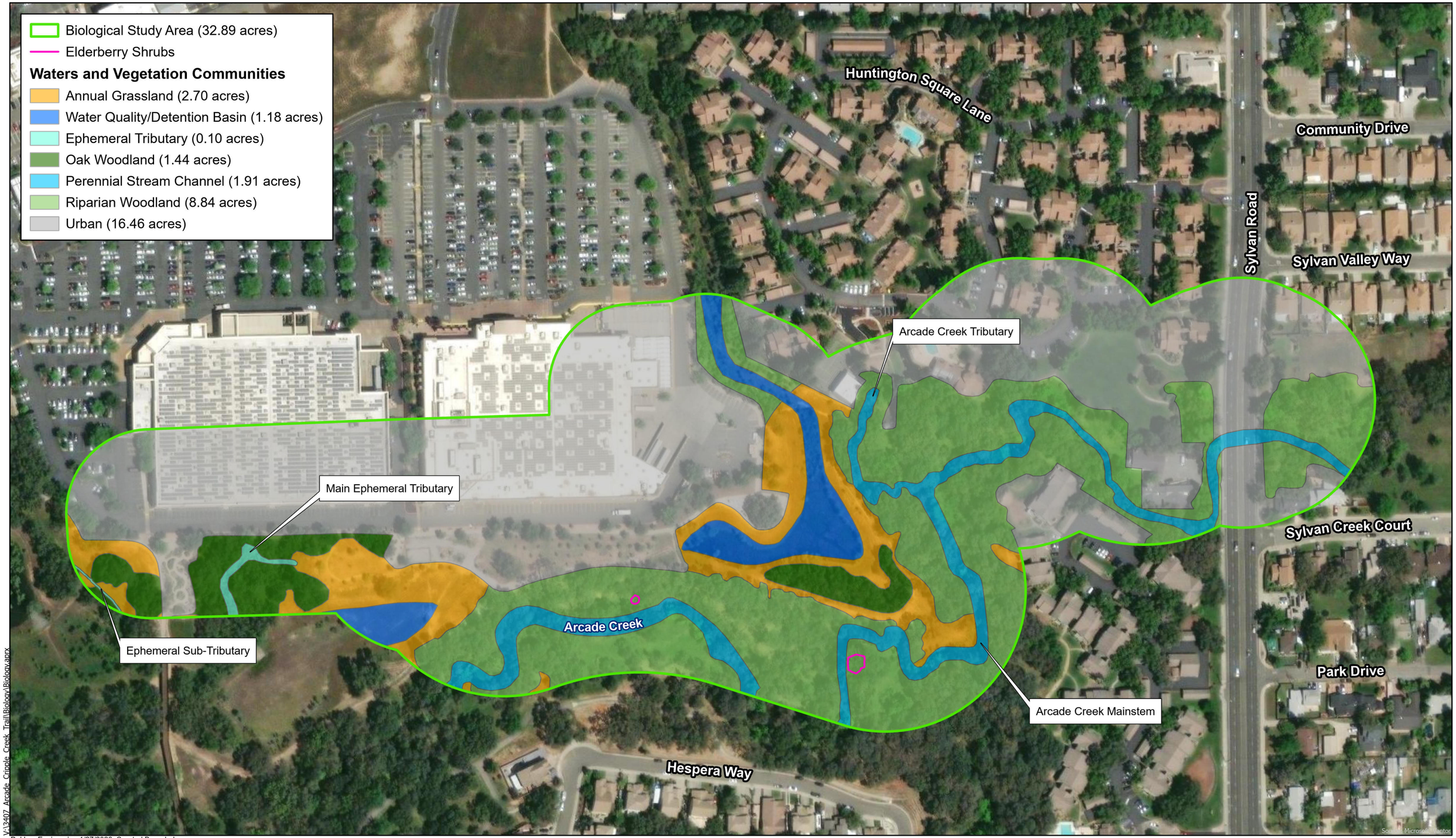
The Project is located in the City of Citrus Heights, Sacramento County, California, approximately 2.4 miles south of Interstate 80. Land use within the vicinity of the trail alignment includes open space, residential and commercial areas. The Project is located in the Sacramento Valley Floristic Province (Jepson 2025). Sacramento County experiences a mediterranean climate consisting of hot, dry summers and cool, wet winters. The average annual high temperature is approximately 75 degrees Fahrenheit (°F), and the average annual low temperature is approximately 49°F. The region averages 18.14 inches of precipitation annually (U.S. Climate Data 2025). The topography within the BSA is flat and the elevation of the BSA ranges between approximately 125 feet to 140 feet above mean sea level. The Natural Resources Conservation Service (NRCS) Custom Soil Resource Report was queried for the Project, and the soil types within the BSA include Fiddyment-Orangevale complex, 2 to 8 percent slopes (95.5% of the BSA) and Fiddyment-Orangevale-Urban land complex, 2 to 8 percent slopes (4.5% of the BSA) (NRCS 2025).

### *Hydrology*

Two aquatic feature types were observed within the BSA during the October 2025 biological survey: Arcade Creek and its tributary (perennial stream channel), an ephemeral tributary to Arcade Creek, and portions of two manmade water quality/detention basins. Each is discussed individually below:

#### Arcade Creek

Arcade Creek, a perennial stream channel, flows northeast to southwest through the BSA, and holds water year-round.




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Dokken Engineering 1/27/2026; Created By: cclarkson

0 175 350 Feet

**Figure 4**
**Waters and Vegetation Communities**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

The mainstem of Arcade Creek, which originates in Orangevale and flows into the Natomas East Main Drainage Canal (also called Steelhead Creek), is approximately 16.2 miles long with a watershed area of about 29.7 square miles. It ultimately discharges to the Sacramento River. Within the BSA, the Arcade Creek channel also includes a perennial tributary which splits off from the mainstem south of Huntington Square Lane (**Figure 4**). Historic aerial imagery indicates that the tributary once flowed south from Auburn Boulevard, but over time residential development shortened the channel, leaving only a remnant of the original tributary. The Arcade Creek channel and its tributary are part of the Arcade Creek watershed, a small, urbanized watershed covering approximately 38 square miles. Surrounding land use in the Arcade Creek watershed is primarily residential and commercial with transportation infrastructure such as roads, trails and parking lots. Historically, Arcade Creek functioned as a seasonal stream that carried water predominantly during the winter and spring months. In some years, portions of the creek and its tributaries would completely dry out during the summer. With increasing urbanization, the creek transitioned to a perennial system, likely beginning around 60 years ago. Today, dry-weather flows are sustained by inputs such as landscape irrigation runoff, car washing, industrial discharges, and other non-stormwater sources, resulting in Arcade Creek maintaining continuous flow throughout the year. A majority of surface water within Arcade Creek is urban runoff (City of Sacramento 2003).

Arcade Creek and its tributary comprise approximately 1.91 acres (6%) of the BSA.

Arcade Creek and its tributary are jurisdictional waters of the U.S. and state that are subject to the Section 401 and 404 of the CWA.

### Ephemeral Tributary

During the October 2025 biological survey, an ephemeral tributary to Arcade Creek was observed within the western portion of the BSA. The tributary has two parts, a main larger tributary measuring approximately 5 feet wide, and a sub-tributary measuring approximately 2 feet wide. The ephemeral tributaries collect rainwater and stormwater runoff from Auburn Boulevard and the shopping center north of the project and carry it toward Arcade Creek. The east main tributary splits off Arcade Creek from the west, outside of the BSA and flows southwest from two ponded areas which empty into Arcade Creek. The smaller sub-tributary splits off from the main tributary channel and flows south from a detention basin located northwest of the BSA, eventually merging with the main tributary. At the time of the survey, pooled water was present within the main tributary, but no flows were exhibited. No water was present within the sub-tributary. The boundaries of the ephemeral tributary were mapped in the field in accordance with the following OHWM indicators: change in vegetation species and density, break in bank slope, and presence of a bed, bank and channel. Dominant vegetation observed within the bed, banks, and surrounding area of the ephemeral tributary includes curly dock (*Rumex crispus*), spreading rush (*Juncus patens*), interior live oak, and Himalayan blackberry. The BSA contains approximately 0.10 acres (<1%) of ephemeral tributary.

Because the ephemeral tributary does not meet the “relatively permanent standard” under the current definition of waters of the U.S., it is considered a water of the state subject to Section 401 of the CWA.

#### Water Quality/Detention Basins

During the October 2025 field survey, portions of two water quality/detention basins were documented within the BSA. These areas are gently sloping, engineered depressions designed to capture and temporarily detain stormwater runoff.

The western basin was completely dry at the time of the survey. However, historic aerial imagery (from November 2023) indicates that the area becomes inundated with water during heavy rain events caused by stormwater runoff from the adjacent commercial and residential areas. The basin supports annual grassland habitat dominated by spikeweed (*Centromadia fitchii*) and wild oat (*Avena fatua*) which appeared to have been recently trimmed.

The eastern basin was full of water at the time of the survey. This basin is supplied by a small stream channel to the north, which collects stormwater runoff from adjacent residential homes to the east and the paved parking lot to the west. The connected stream channel originates at the homes along Gallant Circle and flows south and southeast before reaching the basin. According to historic aerial imagery, this basin tends to hold water longer than the western basin, allowing it to grow hydrophytic vegetation species such as broadleaf cattail (*Typha latifolia*), tule (*Schoenoplectus acutus var. occidentalis*), cottonwoods and willow trees (*Salix lasiolepis*, *Salix gooddingii*). At the time of the survey, the cattails and tules in the channel appeared to be in poor health and recently trimmed. The BSA contains approximately 1.18 acres (4%) of water quality/detention basins.

Because these basins are artificial ponds constructed in dry land for stormwater treatment and detention, they fall under the exclusion at 40 CFR § 120.2(b)(5) and therefore do not meet the current definition of waters of the U.S. In addition, permitting under Section 401 of the CWA is not warranted as there is little to no risk of discharge to another water body and there is no potential for the Project improvements to encroach on these features. As such, these features are not discussed further in the document.

### *Biological Conditions*

#### Vegetation Communities

Plant and wildlife species observations within the BSA during the October 2025 biological survey efforts were used to define vegetation communities based on composition, abundance, and cover (**Table 1. Species Observed List**). As discussed above in the hydrology section, waters within the BSA include Arcade Creek and the tributary to Arcade Creek as well as two manmade water quality/detention basins. Natural vegetation communities within the BSA include annual grassland, riparian woodland and oak woodland. In addition, the BSA encompasses urban areas including paved parking lots, roadways, a wooden pedestrian bridge, sidewalks, residential homes and commercial businesses (**Figure 4; Appendix E. Reference Photographs**).

Annual Grassland

Annual grasslands are open areas dominated primarily by annual plant species. In the BSA, this vegetation community is found along the edges of the two water quality/detention basins and the ephemeral tributary, bordering the oak woodland vegetation community. Common species observed in this vegetation community include wild oat, dogtail grass (*Cynosurus echinatus*), spikeweed, and common vetch (*Vicia sativa*). Annual grasslands cover approximately 2.70 acres (8%) within the BSA.

Riparian Woodland

The BSA includes a dense, mature riparian woodland that borders the length of Arcade Creek and the Arcade Creek tributary. This vegetation community is dominated by a variety of native tree species including valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), box elder (*Acer negundo*), Oregon ash (*Fraxinus latifolia*), Fremont cottonwood (*Populus fremontii*), and northern California black walnut (*Juglans hindsii*). The understory is comprised of Himalayan blackberry, periwinkle (*Vinca minor*), Harding grass (*Phalaris aquatica*) and tall flat sedge (*Cyperus eragrostis*). Within the riparian woodland, two clusters of elderberry shrubs were observed: one located on the southern bank of Arcade Creek mainstem north of Hesperia Way and the second located on the north bank of Arcade Creek mainstem, south of the Walmart. . Riparian woodland provides suitable habitat for a variety of wildlife species including birds, mammals and insects. Riparian woodland comprises approximately 8.84 acres (27%) of the BSA.

Oak Woodland

The BSA includes mature oak woodland that occupies the upland areas of the site. This community is dominated by native oak tree species such as valley oak, blue oak (*Quercus douglasii*), and interior live oak. The canopy is moderately dense, providing partial shade and contributing to a well-developed litter layer of decomposing oak leaves and twigs. The understory consists primarily of native and non-native grasses and forbs, including wild oat, Italian rye grass (*Festuca perennis*), and English plantain (*Plantago lanceolata*). Seasonal herbaceous growth is most abundant in spring, while the summer understory tends to dry and thin considerably. Shrub species such as poison oak (*Toxicodendron diversilobum*) are also common in this vegetation community. The oak woodland vegetation community provides important foraging, nesting, and cover opportunities for a variety of wildlife species. Oak woodlands comprise approximately 1.44 acres (4%) of the BSA.

**Table 1. Species Observed**

| Common Name | Scientific Name | Native (N) / Non-Native (X) [Cal-IPC Rating] |
|---|---|---|
| Plant Species | | |
| American pokeweed | *Phytolacca americana* | X [Limited] |
| American sweetgum | *Liquidambar styraciflua* | X |
| Arroyo willow | *Salix lasiolepis* | N |
| Baltic rush | *Juncus balticus* | N |
| Bigleaf maple | *Acer macrophyllum* | N |

| Common Name | Scientific Name | Native (N) / Non-Native (X) [Cal-IPC Rating] |
|---|---|---|
| Blue elderberry | *Sambucus mexicana* | N |
| Blue oak | *Quercus douglasii* | N |
| Box elder | *Acer negundo* | N |
| Brazilian vervain | *Verbena litoralis* | X |
| Broadleaf cattail | *Typha latifolia* | N |
| Bur chervil | *Anthriscus caucalis* | X |
| California mugwort | *Artemisia douglasiana* | N |
| California pipevine | *Aristolochia californica* | N |
| California sycamore | *Platanus racemosa* | N |
| California wild grape | *Vitis californica* | N |
| Callery pear | *Pyrus calleryana* | X |
| Chicory | *Cichorium intybus* | X |
| Chinese elm | *Ulmus parvifolia* | X |
| Chinese photinia | *Photinia serratifolia* | X |
| Chinese pistache | *Pistacia chinensis* | X |
| Clustered dock | *Rumex conglomeratus* | X |
| Common knotweed | *Persicaria lapathifolia* | N |
| Common vetch | *Vicia sativa* | X |
| Coyote brush | *Baccharis pilularis* | N |
| Curly dock | *Rumex crispus* | X [Limited] |
| Dogbane | *Apocynum cannabinum* | N |
| Dogtail grass | *Cynosurus echinatus* | X [Moderate] |
| English ivy | *Hedera helix* | X [High] |
| English plantain | *Plantago lanceolata* | X [Limited] |
| Firethorn | *Pyracantha coccinea* | X [Limited] |
| Fremont cottonwood | *Populus fremontii* | N |
| French broom | *Genista monspessulana* | X [High] |
| Goodding's willow | *Salix gooddingii* | N |
| Harding grass | *Phalaris aquatica* | X [Moderate] |
| Himalayan blackberry | *Rubus armeniacus* | X [High] |
| Honey locust | *Gleditsia triacanthos* | X |
| Interior live oak | *Quercus wislizeni* | N |
| Italian rye grass | *Festuca perennis* | X [Moderate] |
| Italian thistle | *Carduus tenuiflorus* | X [Limited] |
| Johnsongrass | *Sorghum halepense* | X |
| Northern California black walnut | *Juglans hindsii* | N |
| Olive tree | *Olea europaea* | X [Limited] |
| Oregon ash | *Fraxinus latifolia* | N |
| Pampas grass | *Cortaderia jubata* | X [High] |
| Periwinkle | *Vinca minor* | X |
| Poison oak | *Toxicodendron diversilobum* | N |
| Red willow | *Salix laevigata* | N |
| Rose clover | *Trifolium hirtum* | X [Limited] |
| Shumard oak | *Quercus shumardii* | X |
| Silk tree | *Albizia julibrissin* | X |
| Silver maple | *Acer saccharinum* | X |
| Smilo grass | *Stipa miliacea* | X |
| Southern catalpa | *Catalpa speciosa* | X |
| Spanish clover | *Acmispon americanus* | N |
| Spikeweed | *Centromadia fitchii* | N |
| Spreading rush | *Juncus patens* | N |
| Tall flat sedge | *Cyperus eragrostis* | N |

| Common Name | Scientific Name | Native (N) / Non-Native (X) [Cal-IPC Rating] |
|---|---|---|
| Toyon | *Heteromeles arbutifolia* | N |
| Tree of heaven | *Ailanthus altissima* | X [Moderate] |
| Tule | *Schoenoplectus acutus var. occidentalis* | N |
| Valley oak | *Quercus lobata* | N |
| Velvet ash | *Fraxinus velutina* | N |
| White horehound | *Marrubium vulgare* | X [Limited] |
| Wild oat | *Avena fatua* | X [Moderate] |
| Yellow star thistle | *Centaurea solstitialis* | X [High] |
| Wildlife Species | | |
| Acorn woodpecker | *Melanerpes formicivorus* | N |
| American robin | *Turdus migratorius* | N |
| Anna's hummingbird | *Calypte anna* | N |
| Bewick's wren | *Thryomanes bewickii* | N |
| Black phoebe | *Sayornis nigricans* | N |
| Bullfrog | *Lithobates catesbeianus* | X |
| California scrub jay | *Aphelocoma californica* | N |
| California towhee | *Melozone crissalis* | N |
| Canada goose | *Branta canadensis* | X |
| Cedar waxwing | *Bombycilla cedrorum* | N |
| Domestic cat | *Felis catus* | X |
| European starling | *Sturnus vulgaris* | X |
| House finch | *Haemorhous mexicanus* | N |
| Lesser goldfinch | *Spinus psaltria* | N |
| Mallard | *Anas platyrhynchos* | N |
| Mourning dove | *Zenaida macroura* | N |
| Northern flicker | *Colaptes auratus* | N |
| Northern mockingbird | *Mimus polyglottos* | N |
| Nuttall's woodpecker | *Dryobates nuttallii* | N |
| Oak titmouse | *Baeolophus inornatus* | N |
| Pacific chorus frog | *Pseudacris regilla* | N |
| Red-shouldered hawk | *Buteo lineatus* | N |
| Spotted towhee | *Pipilo maculatus* | N |
| Tree squirrel | *Sciurus niger* | N |
| White-breasted nuthatch | *Sitta carolinensis* | N |
| Wild turkey | *Meleagris gallopavo* | X |

[1]California Invasive Plant Council (Cal-IPC) Rating

### *Wildlife*

The BSA contains a variety of waters and vegetation communities (riparian woodland, oak woodland, water quality/detention basin, perennial stream channel, ephemeral tributary and annual grassland) which support a diversity of native and non-native wildlife species, including birds, mammals and amphibians. During the biological survey conducted on October 17, 2025, a high level of bird activity was observed throughout the BSA, particularly within the riparian woodland and oak woodland vegetation communities. Dominant bird species detected included acorn woodpecker (*Melanerpes formicivorus*), California scrub jay (*Aphelocoma californica*), northern flicker (*Colaptes auratus*), oak titmouse (*Baeolophus inornatus*), and northern mockingbird (*Mimus polyglottos*). The water quality/detention basins also support waterfowl such as Canada geese (*Branta canadensis*) and mallards (*Anas platyrhynchos*). Locally common

amphibian species, pacific chorus frog (*Pseudacris regilla*) and bullfrog (*Lithobates catesbeianus*) were also heard calling throughout the Arcade Creek corridor.

### *Habitat Connectivity*

The CDFW *Biogeographic Information & Observation System* (CDFW 2025a) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA was determined to be within an area of *Terrestrial Connectivity Rank 1 – Limited Connectivity Opportunity*. This ranking indicates that either land-use conditions limit the potential for wildlife or ecological processes to move through that area (urban, agriculture), or that no significant connectivity importance has been identified in relevant models. Rank 1 areas are classified by CDFW as lower priority for connectivity conservation efforts compared to Ranks 2–5.

The Arcade Creek Trail extension will follow an existing informal dirt path that passes through the open space area north of Arcade Creek. The Project will not introduce new barriers or cause additional habitat fragmentation. Upon completion, the Project will allow for the continued movement of terrestrial wildlife across the trail and throughout the surrounding oak woodland, riparian woodland, and grassland habitats. Existing habitat connectivity will be maintained throughout Project implementation.

### *Regional Species and Habitats and Natural Communities of Concern*

Plant and wildlife species are considered to have special status if they have been listed as such by federal or state agencies or by one or more special interest groups, such as CNPS.

Prior to the field surveys, online databases from USFWS, CNDDB, CNPS and NMFS were queried for presence of potential threatened, endangered, rare, or special status species. Database search results identified ten special status or sensitive wildlife species and seven special status or sensitive plant species with potential of occurring in the vicinity of the BSA. **Table 2** below includes a complete list of these special status species along with a discussion and determination of each species' potential of occurring within the BSA. An analysis of habitat requirements, recorded observations, and field surveys determined that the following species have potential to occur within the BSA: song sparrow ("Modesto" population), Swainson's hawk, white-tailed kite, VELB, and NWPT.

## Table 2: Special Status Species with Potential to Occur in the Project Vicinity

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| *Amphibian Species* | | | | | | |
| Western spadefoot | *Spea hammondii* | Fed:<br>State:<br>CDFW: | PT<br>--<br>SSC | Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground for most of the year and is active above ground during rainfall. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeds from late winter to March. | A | **Presumed Absent:** The BSA lacks shallow temporary pools required for reproduction of this species. The nearest CNDDB occurrence of the species is located approximately 4.8 miles southeast of the BSA at Phoenix Field Vernal Pools (1995). In addition, no small mammal burrows were observed within the BSA during the October 2025 biological survey. Based on lack of suitable habitat features and lack of nearby occurrences, this species is presumed absent. No impacts are anticipated, and the Project will have *no effect* on the species. |
| *Bird Species* | | | | | | |
| Bank swallow | *Riparia riparia* | Fed:<br>State:<br>CDFW: | --<br>T<br>-- | A migratory colonial nester inhabiting lowland and riparian habitats west of the deserts during spring through fall. Majority of current breeding populations occur along the Sacramento and Feather Rivers in the north Central Valley. Forages in grassland, brushland, wetlands, and cropland during migration. Requires vertical banks or cliffs with fine textured/sandy soils for nesting (tunnel and burrow excavations). Nests exclusively near streams, rivers, lakes, or the ocean. Breeds from May through July. | A | **Presumed Absent:** The BSA lacks sandy cliffs or vertical banks required for nesting. There is some grassland and riparian habitat present within the BSA that could be used as foraging habitat. However, no individuals of the species have been recorded along Arcade Creek in the vicinity of the Project. The nearest documented CNDDB occurrence is located approximately 4 miles southeast of the BSA, along the north bank of the American River (1990). Based on the lack of suitable nesting habitat and lack of nearby occurrences, this species is presumed absent, and no take will occur. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Burrowing owl | *Athene cunicularia* | Fed:<br>State:<br>CDFW: | --<br>CE<br>SSC | The species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Can be associated with open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in old small mammal burrows but may dig own burrow in soft soil. Nests are lined with excrement, pellets, debris, grass, and feathers. The species may use pipes, culverts, and nest boxes, and even buildings where burrows are scarce. Breeding occurs March through August (below 5,300 feet). | A | **Presumed Absent:** The BSA is surrounded by urban development (residential and commercial properties) and lacks open areas with sparse vegetation cover. No large burrows or other evidence of burrowing owl habitation was observed within the BSA during the October 2025 biological survey. The nearest CNDDB occurrence of the species is located approximately 7.7 miles northwest of the BSA near the City of Roseville (1998). Based on lack of suitable habitat and evidence of burrowing owls as well as the lack of nearby occurrences, this species is presumed absent, and no take will occur. |
| California black rail | *Laterallus jamaicensis coturniculus* | Fed:<br>State:<br>CDFW: | --<br>T<br>FP | A rare, yearlong California resident of brackish and freshwater emergent wetlands in delta and coastal locations including the San Francisco Bay area, Sacramento–San Joaquin Delta , Morro Bay, the Salton Sea, and lower Colorado River. More than 90% of the species are found in the tidal salt marshes of the northern San Francisco Bay region, predominantly in San Pablo and Suisun Bays. Smaller populations occur in the San Francisco Bay, the Outer Coast of Marin County, and freshwater marshes in the foothills of the Sierra Nevada. The species is extirpated from San Diego County and the majority of coastal southern California. Occurs in tidal emergent wetlands dominated by pickleweed, in brackish marshes | A | **Presumed Absent:** The BSA lacks tidal salt marsh and freshwater wetland habitat. There are also no documented CNDDB occurrences within 10 miles of the BSA. Due to lack of suitable habitat and lack of nearby occurrences, this species is presumed absent, and no take will occur. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | dominated by bulrushes with pickleweed, and in freshwater wetlands dominated by bulrushes, cattails, and salt grass. Species prefer high wetland areas, away from areas experiencing fluctuating water levels. Requires vegetation providing adequate overhead cover for nesting. Eggs are laid from March through June. | | |
| Golden eagle | *Aquila chrysaetos* | Fed:<br>State:<br>CDFW: | --<br>--<br>FP | Inhabits rolling foothills, mountain areas, sage-juniper flats, and desert communities. Requires open terrain for hunting, often utilizing rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops, grasslands and early successional stages of forest and shrub habitats. Territory is estimated to average 36 mi² in southern California and 48 mi² in northern California. Nests on cliffs of all heights and in large trees in open areas may reuse previous nest sites. Breeds from late January through August (0–11,500 feet). | A | **Presumed Absent:** The Project occurs in a highly developed area and lacks open terrain for hunting. Although there are mature trees along the riparian corridor of Arcade Creek within the BSA, they are surrounded by urban development and do not provide optimal nesting habitat for the species. No individuals have ever been recorded nesting in the area. Additionally, no suitable nesting cliffs are present within the Project vicinity. There are no CNDDB occurrences of the species documented within 10 miles of the BSA. Based on the absence of suitable foraging and nesting habitat and the lack of nearby occurrence records, the species is presumed absent, and no take will occur. |
| Grasshopper sparrow | *Ammodramus savannarum* | Fed:<br>State:<br>CDFW: | --<br>--<br>SSC | Inhabits foothills and lowlands with dry, dense, well-drained grasslands with a variety of grasses, tall forbs, and shrubs for perches. In southern California largely utilizes hillsides, and lower mountain slopes. Nests are composed of grasses and forbs on slight depressions in the ground. Species may form small | A | **Presumed Absent:** The BSA is in a highly developed area and lacks large contiguous open grassland habitat. There are also no documented CNDDB occurrences of the species within 10 miles of the BSA. Due to lack of suitable habitat and lack of nearby occurrences, |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | groups when nesting. Breeds April through July (0-5,000 feet). | | this species is presumed absent, and impacts are not anticipated. |
| Purple martin | *Progne subis* | Fed:<br>State:<br>CDFW: | --<br>--<br>SSC | Present in California as a summer migrant, arriving in March and departing by late September. Inhabits valley foothill and montane hardwood, hardwood-conifer, coniferous habitats, and riparian habitats. Associated with closed-cone pine-cypress, ponderosa pine, Douglas-fir, and redwood. Nests in tall, old, isolated trees or snags in open forest or woodland and in proximity to a body of water. Frequently nests within former woodpecker cavities and may nest in human-made structures such as nesting boxes, under bridges and in culverts. Needs abundant aerial insect prey. Breeds April through August. | A | **Presumed Absent:** The BSA contains mature riparian trees along Arcade Creek that may provide suitable nesting sites for the species. The nearest CNDDB occurrence is located approximately 6.1 miles northeast of the BSA, in which a nesting pair was observed at the Highway 65 Overpass over Taylor Road on the south edge of Rocklin (2007). Although it is possible for a purple martin to occur within the BSA, it is unlikely due to their reliance on human-made structures for nesting within Sacramento and Placer Counties (Airola & Grantham 2003). Furthermore, no individuals were observed during the May 2024 biological survey, and the presence of European starlings and acorn woodpeckers, both of which compete with purple martins for nesting sites, further reduces the likelihood of their occurrence. Given the lack of recent sightings in the Secret Ravine area and the presence of competitive species, it is unlikely that purple martins inhabit the Project vicinity. Due to this species pattern of occurrence along with the lack of observations of the species within the BSA, the purple martin is presumed absent, and impacts are not anticipated. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Song sparrow ("Modesto" population) | *Melospiza melodia pop. 1* | Fed:<br>State:<br>CDFW: | --<br>--<br>SSC | An endemic bird found exclusively in the north-central portion of the Central Valley, with highest densities in the Butte Sink and Sacramento–San Joaquin River Delta. The species is usually found in open brushy habitats, along the borders of ponds or streams, abandoned pastures, desert washes, thickets, or woodland edges. In addition, there is a strong affinity for emergent freshwater marshes dominated by tules and cattails, riparian willow thickets, and valley oak forests with a blackberry understory. Nests found in base of shrubs or clumps of grass, requiring low, dense vegetation for cover, usually near water. Breeds from March through August. | HP | **Low Potential:** The BSA contains mature riparian habitat along Arcade Creek containing oak trees and blackberry that may provide suitable habitat for the species. There is one CNDDB occurrence within 10 miles of the BSA, located approximately 9.2 miles southwest in which a specimen was collected (1990). The CNDDB occurrence notes indicate that development has replaced much of the wetlands and other suitable habitat in the area, so it is unlikely that this species is still present there. Based on the potentially suitable habitat present onsite, this species has a low potential to occur within the BSA. See Chapter 4 for details and analysis. |
| Swainson's hawk | *Buteo swainsoni* | Fed:<br>State:<br>CDFW: | --<br>T<br>-- | Inhabits grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable forage areas such as grasslands, alfalfa or grain fields that support a stable rodent prey base. Breeds March to late August. | HP | **Low Potential:** The BSA is highly developed and lacks open grasslands or other suitable foraging habitat. There are mature oak trees along the riparian corridor of Arcade Creek and in the oak woodland habitat that could be utilized as nesting habitat. However, the species has never been recorded nesting in the area. The nearest documented CNDDB occurrence is located approximately 4.8 miles south of the BSA in which a nest was observed in a eucalyptus tree near Ancil Hoffman Park (2004). There is also a nearby iNaturalist occurrence of the species located approximately 2.2 miles southwest of the BSA along Wendal |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | | | Lane, recorded in August 2025. Based on the presence of suitable nesting habitat and nearby occurrences, this species has a low potential to occur within the BSA.. |
| Tricolored blackbird | *Agelaius tricolor* | Fed:<br>State:<br>CDFW: | --<br>T<br>SSC | Inhabits freshwater marsh, swamp and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3–5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests in dense cattails, tules, willow, blackberry, wild rose, or tall herbs. Nests mid-March to early August but may extend until October or November in the Sacramento Valley region. | A | **Presumed Absent:** The BSA contains two water quality/detention basins, one of which holds standing water and supports vegetation such as cattails, tules, and willows, which are typically used by tricolored blackbirds for nesting. At the time of the biological survey, however, the cattails and tules appeared recently trimmed and lacked the dense structure required for nesting. Furthermore, there are no agricultural fields or undeveloped open habitats within 3–5 miles that could provide suitable foraging areas. The BSA is surrounded by highly developed residential and commercial areas, which are likely unsuitable for supporting individuals of the species. The nearest CNDDB occurrence is located approximately 5.2 miles northeast of the BSA within Granite Bay (1999). According to the CNDDB occurrence notes, on subsequent surveys of the same area in April 2011 and 2014, no individuals of the species were observed. Based on the absence of dense nesting vegetation, the lack of nearby foraging habitat, and the surrounding urbanized landscape, this species is presumed |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | | | absent. No take will occur, and impacts are not anticipated. |
| Western yellow-billed cuckoo | *Coccyzus americanus occidentalis* | Fed:<br>State:<br>CDFW: | T<br>E<br>-- | Species inhabits riparian forests, along broad, lower flood bottoms of larger river systems. Nests in large blocks of riparian forests, often mixed with cottonwoods. Nesting appears to be preferred in riparian forest habitats with a dense understory; it requires water near nesting site. Breeds June to August. | A | **Presumed Absent:** The BSA contains an approximately 12-acre riparian corridor along Arcade Creek. However, this species prefers large (at least 50 acres), contiguous patches of multilayered riparian habitat for nesting (NPS 2025). In addition, there are no presumed extant CNDDB occurrences of the species within 10 miles of the BSA. Based on the lack of suitable large riparian forest habitat and the lack of nearby occurrences, this species is presumed absent. No take will occur. The Project will have *no effect* on the species. |
| White-tailed kite | *Elanus leucurus* | Fed:<br>State:<br>CDFW: | --<br>--<br>FP | Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows or marshes for foraging close to isolated, dense-topped trees for nesting and perching. In southern California, it will roost in saltgrass and Bermuda grass. Often found near agricultural lands. Nests are placed near the tops of dense oak, willow, or other tree stands. Breeds February through October. | HP | **Low Potential:** The BSA is surrounded by urban development and lacks open grasslands, meadows and marshes that could be used as foraging habitat. The riparian corridor along Arcade Creek along with the oak woodland habitat contains mature oak trees that may provide suitable nesting habitat for the species. The nearest CNDDB occurrence is located approximately 3.5 miles northeast of the BSA at Woodbridge Park in Orangevale in which a pair nested in a large tree south of the pond (1992). Due to the presence of potentially suitable nesting habitat, this species has a low potential to occur. |
| *Fish Species* | | | | | | |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Chinook Salmon Central Valley spring-run ESU | *Oncorhynchus tshawytscha pop. 11* | Fed:<br>State:<br>CDFW: | T<br>T<br>-- | Spring-run Chinook enter the Sacramento –San Joaquin River system to spawn, requiring larger gravel particle size and more water flow through their redds than other salmonids. The remaining runs occur in Butte, Mill, Deer, Antelope, and Beegum Creeks, tributaries to the Sacramento River. Known to occur in Siskiyou and Trinity counties. | EFH | **Presumed Absent:** Arcade Creek is considered EFH for Chinook salmon as it is within the Lower American-Below Nimbus Watershed (NOAA 2025). However, the BSA encompasses a highly urbanized reach of Arcade Creek with limited flow, poor water quality, and degraded habitat, making it unsuitable for salmon spawning or rearing. In addition, according to the City of Sacramento's "Existing Conditions and Assessment Report and Stream Corridor Management Plan for the Arcade Creek Watershed," Chinook salmon and steelhead trout have not been reported in Arcade Creek for over 20 years. This absence is attributed to the lack of suitable rearing and spawning habitats, as well as low summer flows, which are not conducive to supporting these species (Jones & Stokes 2007). Furthermore, Skyler Burson, District Anadromous Fisheries Biologist with CDFW Region 2 was contacted in January 2026 regarding anadromous fish presence in Arcade Creek within the BSA. They indicated that the likelihood of listed fish occurring in this reach of Arcade and Cripple Creeks is very low; while occasional fall-run Chinook salmon have been observed, these fish are likely hatchery-origin or unable to successfully spawn due to limited habitat. Based on this information, this species is presumed absent. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Chinook Salmon Sacramento River winter-run ESU | *Oncorhynchus tshawytscha pop. 7* | Fed:<br>State:<br>CDFW: | E<br>E<br>-- | Winter-run Chinook are currently restricted within the Sacramento River below Keswick dam; species do not spawn in tributaries. Species require cold water over gravel beds to spawn. | A | **Presumed Absent:** Arcade Creek is considered EFH for Chinook salmon as it is within the Lower American-Below Nimbus Watershed (NOAA 2025). However, the BSA encompasses a highly urbanized reach of Arcade Creek with limited flow, poor water quality, and degraded habitat, making it unsuitable for salmon spawning or rearing. According to the City of Sacramento's "Existing Conditions and Assessment Report and Stream Corridor Management Plan for the Arcade Creek Watershed," Chinook salmon and steelhead trout have not been reported in Arcade Creek for over 20 years. This absence is attributed to the lack of suitable rearing and spawning habitats, as well as low summer flows, which are not conducive to supporting these species (Jones & Stokes 2007). Furthermore, Skyler Burson, District Anadromous Fisheries Biologist with CDFW Region 2 was contacted in January 2026 regarding anadromous fish presence in Arcade Creek within the BSA. They indicated that the likelihood of listed fish occurring in this reach of Arcade and Cripple Creeks is very low; while occasional fall- run Chinook salmon have been observed, these fish are likely hatchery-origin or unable to successfully spawn due to limited habitat. In addition, this species is currently restricted to the Sacramento |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | | | River below Keswick Dam. Based on this information, this species is presumed absent. |
| Steelhead California Central Valley DPS | *Oncorhynchus mykiss irideus pop. 11* | Fed: State: CDFW: | T -- SSC | This species is known to occur along most of the California coastline and inhabits freshwater streams and tributaries in northern and central California. The preferred habitat consists of estuaries, freshwater streams and near shore habitat with productive costal oceans. Spawning occurs in small freshwater streams and tributaries occurs from January through March and could extend into spring. Spawning occurs where cool, well oxygenated water is available year-round. Approximately 550-1,300 eggs are deposited in an area with good intergravel flow. The fry emerge from the gravel about 4-6 six weeks after hatching and remain in shallow protected areas associated with stream margin. Juveniles may remain in freshwater for the rest of their life cycle or return to the ocean. The principal remaining wild populations spawn annually in Deer and Mill Creeks in Tehama County, in the lower Yuba River, and a small population in the lower Stanislaus River. | A | **Presumed Absent:** According to the City of Sacramento's "Existing Conditions and Assessment Report and Stream Corridor Management Plan for the Arcade Creek Watershed," Chinook salmon and steelhead trout have not been reported in Arcade Creek for over 20 years. This absence is attributed to the lack of suitable rearing and spawning habitats, as well as low summer flows, which are not conducive to supporting these species (Jones & Stokes 2007). Furthermore, Skyler Burson, District Anadromous Fisheries Biologist with CDFW Region 2 was contacted in January 2026 regarding anadromous fish presence in Arcade Creek within the BSA. They indicated that the likelihood of listed fish occurring in this reach of Arcade and Cripple Creeks is very low; while occasional adult steelhead have been observed, these fish are likely hatchery-origin or unable to successfully spawn due to limited habitat. Critical habitat for this species is also not within the BSA. The nearest critical habitat is approximately 3 miles north of the BSA within Dry Creek. Based on this information, this species is presumed absent. |
| *Invertebrate Species* | | | | | | |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Crotch's bumble bee | *Bombus crotchii* | Fed:<br>State:<br>CDFW: | --<br>CE<br>-- | This species is known to occur in central California, Nevada south to Baja California and into Mexico. Inhabits coastal areas, deserts and the Central Valley. The species nests underground in grassland, shrubland and chaparral habitats. The species has a short tongue and primarily feeds on the following plants *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia* and *Salvia.* | A | **Presumed Absent:** Although there is marginal grassland habitat present within the BSA, it lacks suitable foraging plants for this species including *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia* and *Salvia.* There are also no CNDDB occurrences within 10 miles of the BSA. Due to lack of suitable foraging habitat and lack of nearby occurrences, this species is presumed absent, and no take will occur. |
| Valley elderberry longhorn beetle | *Desmocerus californicus dimorphus* | Fed:<br>State:<br>CDFW: | T<br>--<br>-- | Species requires red or blue elderberry (*Sambucus sp.*) as host plants. Typically occurs in moist valley oak woodlands associated with riparian corridors in the lower Sacramento River and upper San Joaquin River drainages. Adults are active, feeding, and breeding from March until June (sea level to 3,000 feet). | HP | **High Potential:** There is riparian and oak woodland habitat that could provide suitable habitat for this species. The nearest CNDDB occurrence is located approximately 6 miles northeast of the BSA at a VELB mitigation site (2006). In addition, one elderberry shrub cluster was observed within the BSA during the October 2025 biological survey, with several exit holes observed. Due to the presence of this species host plant, and the presence of exit holes, this species has a high potential to occur. However, given the location of the elderberry shrub in relation to the Project footprint and the nature of the proposed Project there would be *no effect* to the species. See Chapter 4 for details and analysis. |
| Vernal pool fairy shrimp | *Branchinecta lynchi* | Fed:<br>State:<br>CDFW: | T<br>--<br>-- | In California, the species inhabits portions of Tehama County, south through the Central Valley, and scattered locations in Riverside County and the Coast Ranges. The species is associated with smaller and shallower | A | **Presumed Absent:** There are no vernal pools present within the BSA. Due to lack of suitable habitat, this species is presumed absent. The Project will have *no effect* on the species. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | cool-water vernal pools approximately 6 inches deep and short periods of inundation. In the southernmost extremes of the range, the species occurs in large, deep cool-water pools. Inhabited pools have low to moderate levels of alkalinity and total dissolved solids. The shrimp are temperature sensitive, requiring pools below 50 F to hatch and dying within pools reaching 75 F. Young emerge during cold-weather winter storms. | | |
| Vernal pool tadpole shrimp | *Lepidurus packardi* | Fed:<br>State:<br>CDFW: | E<br>--<br>-- | Distribution of vernal pool tadpole shrimp is patchy from Shasta County to Tulare County. Inhabits vernal pools and swales containing clear to highly turbid waters such as pools located in grass bottomed swales of unplowed grasslands, old alluvial soils underlain by hardpan, and mud-bottomed pools with highly turbid water. Can also be found in ephemeral drainages, stock ponds, reservoirs, and ditches. | A | **Presumed Absent:** There are no vernal pools present within the BSA. Due to lack of suitable habitat, this species is presumed absent. The Project will have *no effect* on the species. |
| *Mammal Species* | | | | | | |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| American badger | *Taxidea taxus* | Fed:<br>State:<br>CDFW: | --<br>--<br>SSC | Prefers treeless, dry, open stages of most shrub and herbaceous habitats with friable soils and a supply of rodent prey. Species also inhabits forest glades, meadows, marshes, brushy areas, hot deserts, and mountain meadows. Species maintains burrows within home ranges estimated between 338-1,700 acres, dependent on seasonal activity. Burrows are frequently re-used, but new burrows may be created nightly. Young are born in March and April within burrows dug in relatively dry, often sandy, soil, usually in areas with sparse overstory cover. Species is somewhat tolerant of human activity, but is sensitive to automobile mortality, trapping, and persistent poisons (up to 12,000 feet). | A | **Presumed Absent:** The BSA is surrounded by urban development and lacks open shrub and/or herbaceous habitats. No large burrows or other evidence such as tracks or scat were observed within the BSA during the October 2025 biological survey. There is only one CNDDB occurrence documented within 10 miles of the BSA, located approximately 8.3 miles east in which 1 dead adult badger was observed in the center median of East Natoma Street (May 2015). Based on the lack of contiguous natural habitat, along with the lack of nearby occurrences and suitable habitat features (burrows), this species is presumed absent, and impacts are not anticipated. |
| Pallid bat | *Antrozous pallidus* | Fed:<br>State:<br>CDFW: | --<br>--<br>SSC | Inhabits low elevations of deserts, grasslands, shrub lands, woodlands and forests year-round. Most common in open, dry habitats with rocky areas for roosting. Forages over open ground within 1-3 miles of day roosts. Prefers caves, crevices, and mines for day roosts, but may utilize hollow trees, bridges and buildings. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. Maternity colonies form early April and young are born April-July (below 10,000 feet). | A | **Presumed Absent:** The BSA does not provide suitable roosting habitat for this species, including caves, bridges crevices, mines, or buildings. Additionally, the BSA is surrounded by urban development and lacks open, dry areas with rocky substrates that could support the species. There is only one documented CNDDB occurrence within 10 miles of the BSA located approximately 5.0 miles east in which 1 female specimen was collected (1941). Based on the lack of suitable roosting habitat and lack of evidence of bats utilizing the BSA, this species is |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | | | presumed absent, and impacts are not anticipated. |
| *Reptile Species* | | | | | | |
| Giant garter snake | *Thamnophis gigas* | Fed:<br>State:<br>CDFW: | T<br>T<br>-- | A highly aquatic species that inhabits marshes, swamps, wetlands (including agricultural wetlands), sloughs, ponds, rice fields, low gradient streams and irrigation/drainage canals adjacent to uplands. Ideal habitat contains both shallow and deep water with variations in topography. The species requires adequate water during the active season (April through November), emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat and mammal burrows estivation. Requires grassy banks and openings in waterside vegetation for basking and higher elevation uplands for cover and refuge from flood waters during winter dormant season. Mating occurs in the spring and females bear live young. | A | **Presumed Absent:** The BSA is outside of the current USFWS-designated range of the species. There are also no CNDDB occurrences within 10 miles of the BSA. Due to this species current range and lack of suitable habitat features and occurrences, this species is presumed absent. No take will occur. The Project will have *no effect* on the species. |
| Northwestern pond turtle | *Actinemys marmorata* | Fed:<br>State:<br>CDFW: | PT<br>--<br>SSC | A fully aquatic turtle of ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with aquatic vegetation. Suitable habitat includes woodland, forests, and grasslands. Requires logs, rocks, cattail mats, and exposed banks for basking. Suitable upland habitat (sandy banks or grassy open field) is required for reproduction, which begins in April and ends with egg laying as late as August (sea level to 4,700 feet). | HP | **Low Potential:** The BSA contains Arcade Creek and water quality/detention basins which provides suitable aquatic habitat for the species. There is also annual grassland habitat present upland of the aquatic habitat which could provide suitable nesting habitat for the species. According to the City of Sacramento's "Existing Conditions and Assessment Report and Stream Corridor Management Plan for the Arcade Creek Watershed", |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | | | northwestern pond turtles have been observed in the Arcade Creek stream corridor during spring and summer 2007 field surveys (Jones & Stokes 2007). The nearest CNDDB occurrence is located approximately 6.4 miles northeast of the BSA within the Baldwin Reservoir Wetland and Wildlife Preserve in Granite Bay (1997). Based on the potentially suitable habitat present, this species has a low potential to occur. See Chapter 4 for details and analysis. |
| *Plant Species* | | | | | | |
| Ahart's dwarf rush | *Juncus leiospermus* var. *ahartii* | Fed: State: CNPS: | -- -- 1B.2 | An annual grasslike herb inhabiting grassland swales, gopher mounds, freshwater wetlands, wetland-riparian habitats and foothill grassland communities. Flowers March–May (100–750 feet). | A | **Presumed Absent:** The BSA contains riparian habitat along the banks of Arcade Creek but lacks wetland areas where this species is normally found. There are no CNDDB occurrences within 10 miles of the BSA, and all CNPS occurrences of the species are located south of Highway 50 in a more undeveloped area. Based on lack of suitable wetland habitat along with the lack of nearby occurrences, this species is presumed absent, and impacts are not anticipated. |
| Big-scale balsamroot | *Balsamorhiza macrolepis* | Fed: State: CNPS: | -- -- 1B.2 | A perennial herb inhabiting open grassy or rocky slopes and valleys within chaparral, cismontane woodland, valley and foothill grassland communities; sometimes occurs in serpentinite soils. Flowers March-June (300-5,100 feet). | A | **Presumed Absent:** There is marginal suitable grassland habitat present within the BSA. However, no individuals of the species were observed within the BSA during the October 2025 biological survey. The nearest CNDDB occurrence is approximately 7.1 miles south of the BSA, recorded in 1958. Based on the lack of nearby occurrences and lack of |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | | | observation of the species during the biological survey, it is presumed absent, and impacts are not anticipated . |
| Boggs Lake hedge-hyssop | *Gratiola heterosepala* | Fed: State: CNPS: | -- E 1B.2 | An annual herb inhabiting clay soils and shallow waters of marshes, swamps, lake margins, and vernal pools. Flowers April–August (30–7,800 feet). | A | **Presumed Absent:** The BSA lacks marshes, swamps, lake margins and vernal pools. The nearest presumed extant CNDDB occurrence is located approximately 5.8 miles northwest of the BSA in vernal pool habitat (2019). Due to lack of suitable habitat within the BSA, this species is presumed absent. No take will occur, and impacts are not anticipated. |
| Dwarf downingia | *Downingia pusilla* | Fed: State: CNPS: | -- -- 2B.2 | An annual herb inhabiting vernal pools and mesic soils in valley and foothill grassland communities. Flowers March to May (0–1,500 feet). | A | **Presumed Absent:** The BSA lacks vernal pool habitat and mesic soils. The nearest CNDDB occurrence is located approximately 4.8 miles southeast of the BSA within Phoenix Park, east of Fair Oaks (1976). Based on lack of vernal pool habitat, this species is presumed absent, and impacts are not anticipated. |
| Hispid salty bird's-beak | *Chloropyron molle* ssp. *hispidum* | Fed: State: CNPS: | -- -- 1B.1 | An annual herb inhabiting moist alkaline soils of saline marshes and flats, meadows and seeps, playas, and valley and foothill grassland communities. Flowers June-July (0-500 feet). | A | **Presumed Absent:** The BSA lacks alkaline soils within saline marsh, meadows, playas and valley grassland habitat. There is only one documented CNDDB occurrence within 10 miles of the BSA, located approximately 8.9 miles northeast of the BSA, within Stanford Ranch Alkali Seep Preserve (1997). Based on lack of suitable habitat and lack of nearby occurrences, this species is presumed absent, and impacts are not anticipated. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Legenere | *Legenere limosa* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.1 | An annual herb endemic to California occurring in wetlands, vernal pools valley grassland and wetland-riparian areas. Flowers April to June (0-3,500 feet). | A | **Presumed Absent:** The BSA contains riparian habitat along Arcade Creek but lacks wetlands and vernal pools. The nearest CNDDB occurrence is approximately 8.4 miles southeast of the BSA in north Sacramento within wetland habitat (1991). Due to lack of suitable wetland habitat along with the lack of nearby occurrences, this species is presumed absent, and impacts are not anticipated. |
| Pincushion navarretia | *Navarretia myersii* ssp. *myersii* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.1 | An annual herb native to California inhabiting vernal pool communities, often in acidic soil conditions. Flowers April-May (65-1,080 feet). | A | **Presumed Absent:** The BSA lacks acidic soils and vernal pool habitat. There is only one CNDDB occurrence within 10 miles of the BSA, located approximately 4.9 miles southwest of the BSA at Phoenix Park in Fair Oaks within shallow, dry vernal pools (2015). Due to lack of suitable habitat within the BSA, this species is presumed absent, and impacts are not anticipated. |
| Red Bluff dwarf rush | *Juncus leiospermus* var. *leiospermus* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.1 | An annual herb inhabiting vernally mesic soils of chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pool communities. Flowers April-June (100-4,100 feet). | A | **Presumed Absent:** The BSA occurs in a dry area and lacks vernally mesic soils. There is also no chaparral, cismontane woodland, meadows, seeps, vernal pools, or valley foothill grassland habitats within the BSA. There is only one CNDDB occurrence within 10 miles of the BSA, located approximately 7.9 miles north (1997). Due to lack of suitable habitat and lack of nearby occurrences, this species is presumed absent, and impacts are not anticipated. |
| Sacramento Orcutt grass | *Orcuttia viscida* | Fed:<br>State: | E<br>E | An annual herb inhabiting vernal pools, freshwater wetlands, valley grassland | A | **Presumed Absent:** The BSA contains the riparian corridor of Arcade Creek but |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | CNPS: | 1B.1 | and wetland-riparian areas. Flowers April to July (100–330 feet). | | lacks wetland habitat where this species is normally found. The nearest presumed extant CNDDB occurrence is located approximately 4.9 miles southeast of the BSA within the Phoenix Vernal Pool Complex (2022). Due to lack of suitable wetland habitat, this species is presumed absent. No take will occur, and impacts are not anticipated. The Project will have *no effect* to this species. |
| Sanford's arrowhead | *Sagittaria sanfordii* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.2 | A perennial rhizomatous herb inhabiting freshwater marshes, swamps, ponds, and ditches. Flowers May to October (0–2,130 feet). | HP | **Low Potential:** Arcade Creek, the Arcade Creek tributary and the water quality/detention basins within the BSA may provide suitable aquatic habitat for this species. The nearest documented CNDDB occurrence of the species is approximately 2.2 miles northeast of the BSA within Sunrise Creek (1994). No individuals of the species were observed during the October 2025 biological survey. Based on the potentially suitable habitat and the nearby occurrences, this species has a low potential to occur within the BSA. See Chapter 4 for details and analysis. |
| Slender Orcutt grass | *Orcuttia tenuis* | Fed:<br>State:<br>CNPS: | T<br>E<br>1B.1 | An annual herb inhabiting vernal pools, often within gravelly soils. Flowers May to October (115–5,775 feet). | A | **Presumed Absent:** The BSA lacks vernal pool habitat and gravelly soils. There is only one CNDDB occurrence within 10 miles of the BSA, located approximately 9.9 miles southeast near Mather Air Force Base (2012). Based on lack of suitable habitat and lack of nearby occurrences, this species is presumed absent, and impacts are not anticipated. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Spicate calycadenia | *Calycadenia spicata* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.3 | An annual herb endemic to California inhabiting slopes in foothill woodland and valley grassland habitat communities. Blooms May-September (245-2,295 feet). | A | **Presumed Absent:** The BSA contains marginal grassland habitat and oak woodland riparian that may provide suitable habitat for this species. However, it is highly fragmented and surrounded by urban development. There are three CNDDB occurrence within 10 miles of the BSA, with the nearest approximately 6.5 miles southeast, near the City of Folsom (1955). All CNPS occurrences of the species are located south of Highway 50 in more undeveloped areas. No individuals of this species were observed within the BSA during the biological survey. Therefore, this species is not expect to occur within the BSA, and impacts are not anticipated |
| Suisun marsh aster | *Symphyotrichum lentum* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.2 | A perennial rhizomatous herb endemic to California inhabiting wetlands, freshwater marsh, and brackish-marsh communities. Flowers May to November (0–10 feet). | A | **Presumed Absent:** The BSA lacks wetlands, freshwater marsh and brackish-marsh communities. There are no CNDDB occurrence documented within 10 miles of the BSA. The elevation range where this species is normally found is also below the elevation range within the BSA. Due to lack of suitable habitat and lack of nearby occurrences, this species is presumed absent. |

**Federal Designations (Fed):**
(FESA, USFWS)
**E:** Federally listed, endangered
**PT:** Federally listed, proposed threatened
**T:** Federally listed, threatened
**DL**: Federally listed, delisted

**State Designations (CA):**
(CESA, CDFW)
**E:** State listed, endangered
**T: State** listed, threatened
**CE:** State listed, candidate endangered

**Other Designations**

CDFW_SSC: CDFW Species of Special Concern
CDFW_FP: CDFW Fully Protected

**California Native Plant Society (CNPS) Designations:**
***Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.***
**1A:** Plants presumed extinct in California.
**1B:** Plants rare and endangered in California and throughout their range.
**2:** Plants rare, threatened, or endangered in California but more common elsewhere in their range.
**3:** Plants about which need more information; a review list.

**Plants 1B, 2, and 4 extension meanings:**
**_.1 Seriously** endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
**_.2 Fairly** endangered in California (20-80% occurrences threatened)
**_.3** Not very endangered in California (<20% of occurrences threatened or no current threats known)

**Habitat Potential**
Absent [A] - No habitat present and no further work needed.
Habitat Present [HP] - Habitat is or may be present. The species may be present.
Critical Habitat [CH] – Project is within designated Critical Habitat.

**Potential for Occurrence Criteria:**
**Present**: Species was observed on site during a site visit or focused survey.
**High**: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site.
**Low-Moderate**: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search.
**Presumed Absent**: Focused surveys were conducted, and the species was not found, or species was found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.

**Source: (CDFW 2025b), (CNPS 2025), (Calflora 2025), (Jepson 2025), (USFWS 2026), (NMFS 2025).**

# Chapter 4 – Results: Biological Resources, Discussion of Impacts, and Mitigation

## Habitats and Natural Communities of Special Concern

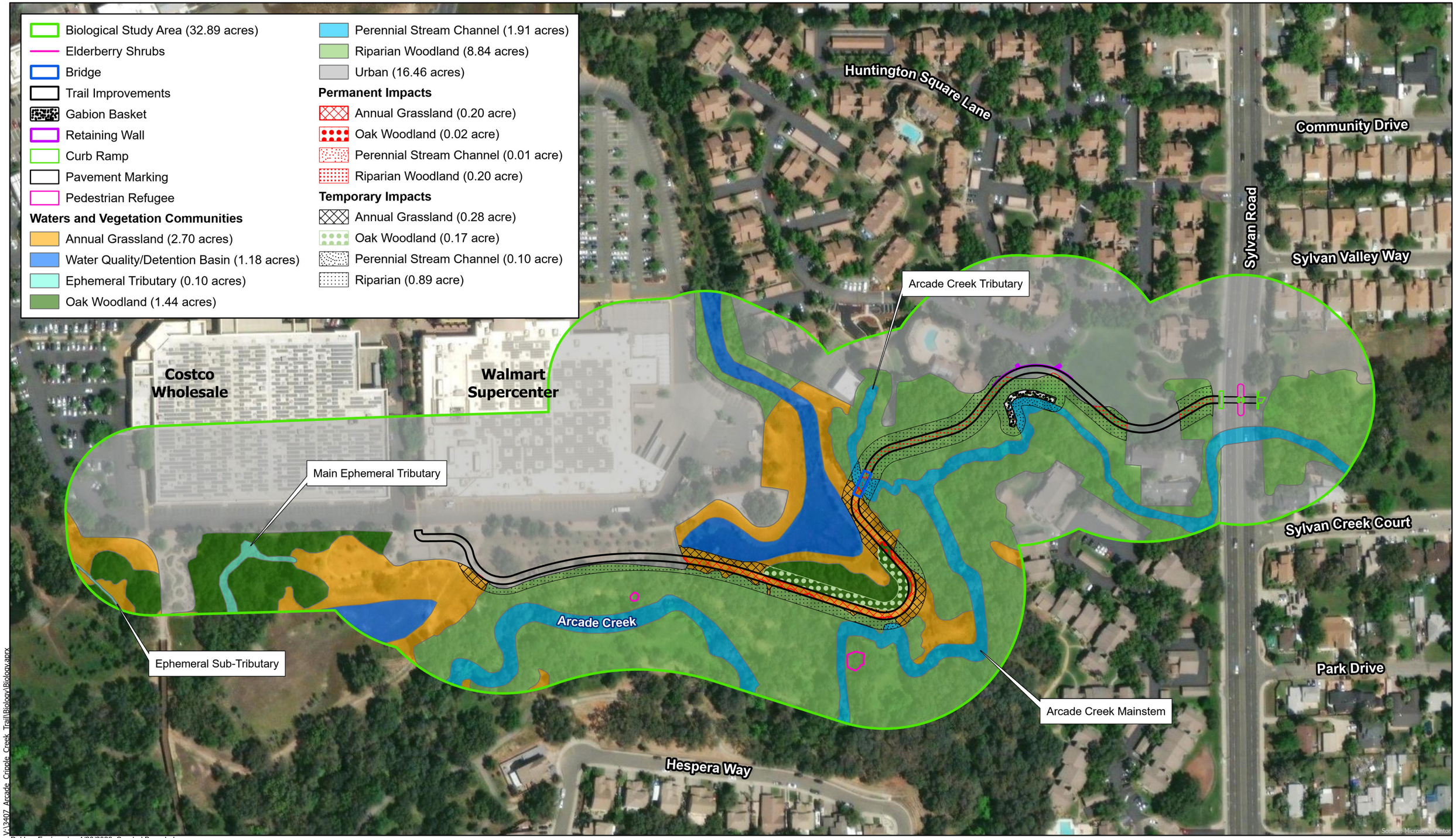
Habitats are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special status plants or animals occurring on site. Wetlands and waters of the United States are also considered sensitive by both federal and State agencies. Within the BSA, Arcade Creek has been identified as a natural community of special concern as it is a jurisdictional water of the U.S. and state. The ephemeral tributary also qualifies as a water of the state and therefore is included as natural community of special concern. Avoidance, minimization, and compensatory mitigation measures for Arcade Creek and its tributary are discussed below. Additionally, oak woodland, and riparian woodland occur within the BSA and are considered natural communities of special concern as they provide potentially suitable habitat for special status plant and wildlife species. These natural communities are shown in **Figure 4**. In addition, **Table 3. Impacts to Sensitive Natural Habitats** and **Figure 5. Project Impacts** summarize the Project's effects on these natural communities.

**Table 3. Impacts to Sensitive Natural Habitats**

| Impact Type | Sensitive Natural Habitat | | |
|---|---|---|---|
| | **Oak Woodland** | **Perennial Stream Channel** | **Riparian Woodland** |
| **Temporary** | 0.17 acres | 0.10 acres | 0.89 acres |
| **Permanent** | 0.02 acres | 0.01 acres | 0.20 acres |
| ***Total*** | **0.19 acres** | **0.11 acres** | **0.99 acres** |

### *Discussion of Perennial Stream Channel*

The perennial stream channel habitat includes Arcade Creek and its tributary. Arcade Creek, a perennial stream channel, flows northeast to southwest through the BSA. Also included in this habitat is the Arcade Creek tributary, which flows southeast into Arcade Creek. The channel originates in Orangevale and flows into the Natomas East Main Drainage Canal, which ultimately discharges to the Sacramento River. The tributary is fed almost entirely by urban stormwater runoff carried through a series of stormwater inlets and culverts from the surrounding development. Within the BSA, the channel has highly incised banks and the width of the channel ranges from approximately 10 to 60 feet. As a perennial channel, water is present year-round. The larger creek watershed is




V:\3407_Arcade_Cripple_Creek_Trail\Biology\Biology.aprx

Dokken Engineering 1/28/2026; Created By: cclarkson

0 175 350 Feet

**Figure 5**
**Project Impacts**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

frequently bisected by roadways and is lined by both residential and commercial developments. Local urbanization has resulted in the proliferation of non-native and invasive species, a degradation in water quality, and a decrease in bank stability as a result of the altered hydrologic flows (DPR 2003).

### Survey Results

During the aquatic resource delineation conducted on October 17, 2025, observed OHWM indicators in the mainstem of Arcade Creek and its tributary included a defined break in bank slope, exposed roots along the banks, evidence of slope erosion, formation of benches, accumulation of drift and debris, a defined bed and bank, and observable changes in vegetation species composition and density. Arcade Creek and its tributary contained standing water; however, no active flow was observed. The channel and its tributary exhibited deeply incised banks with evidence of localized erosion, and the width of the channel ranges from approximately 10 to 60 feet. There is a wooden pedestrian boardwalk west of the BSA which crosses over the mainstem of Arcade Creek and runs south to north from Stock Ranch Road to the back parking lot of Costco. There is evidence of human modification within the bed and banks of Arcade Creek near the pedestrian boardwalk including culverts, a pipeline, rock slope protection (RSP) and erosion control matting. In addition, the tributary to Arcade Creek contained a significant amount of trash within the channel, likely attributed to the adjacent residential and commercial developments. The tributary receives water primarily from stormwater runoff generated by impervious surfaces associated with the apartment complex to the north and other surrounding development. All upstream water sources are routed through underground pipes and discharge at the tributary outlet, rather than flowing overland or from natural sources. As a result, the tributary is fed almost entirely by urban stormwater runoff.

Dominant vegetation observed within the bed and banks and riparian area of Arcade Creek and its tributary include southern catalpa trees (*Catalpa speciosa*), common knotweed (*Persicaria lapathifolia*), interior live oak trees (*Quercus wislizeni*) and Himalayan blackberry (*Rubus armeniacus*). Within the BSA, this habitat community comprises approximately 1.91 acres.

### Project Impacts

Construction of the trail will result in approximately 0.10 acres of temporary impacts to Arcade Creek and the Arcade Creek tributary due to access during installation of the gabion basket wall and placement of the prefabricated bridge. The bridge crossing over the Arcade Creek tributary will not require dewatering or any in-channel work, as it will be a prefabricated bridge and set over the creek using a crane or other heavy equipment. The bridge abutments will also be constructed outside of the OHWM of the Arcade Creek tributary so no excavation within the channel is anticipated. As a result, temporary impacts associated with prefabricated bridge placement would be limited to short-term increases in noise and vibration within the immediate work area. Approximately 0.01 acres of permanent impacts are also anticipated within Arcade Creek due to the installation of a gabion basket wall along an actively eroding section of the channel (**Figure 5**). RSP is currently not anticipated at the bridge abutments but

may be required based on future refinements in design and hydraulic studies and, if required, would be minimal.

### Avoidance and Minimization Efforts

The following avoidance and minimization measures will be incorporated into the Project design and Project construction to reduce potential impacts to perennial stream channel habitat:

**BIO-1:** Every individual working on the Project must attend a biological awareness training session conducted by the Project biologist. This training program will include information regarding the sensitive habitats and an overview of special status wildlife species that may be encountered within the work area. During biological awareness training, construction personnel will be briefed on topics including, but not limited to, the protected status of the valley elderberry longhorn beetle (VELB) and the northwestern pond turtle (NWPT), as well as the need to protect elderberry shrubs, the host plant of VELB.

**BIO-2:** Prior to the start of construction activities, the Project limits adjacent to the Arcade Creek, the Arcade Creek tributary and the riparian woodland habitat will be marked with flagging, staking, or high visibility fencing to ensure construction will not further encroach into adjacent sensitive resources.

**BIO-3:** Best Management Practices (BMPs) will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):

- Exposed soils and material stockpiles will be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction.
- Implementation of the Project shall require approval of a site-specific SWPPP or Water Pollution Control Program that will implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques.
- All construction areas will be properly protected to prevent excess erosion, sedimentation, and water pollution.
- All vehicle and equipment fueling/maintenance will be conducted outside of any surface waters and/or sensitive habitat.
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants.
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters.
- All erosion control measures, and storm water control measures will be properly maintained until the site has returned to a pre-construction state.

- All construction materials will be hauled off-site after completion of construction.

### Compensatory Mitigation

The Project would result in approximately 0.10 acres of temporary impacts to perennial stream channel habitat (Arcade Creek and Arcade Creek tributary), and approximately 0.01 acres of permanent impacts. Avoidance and minimization measures **BIO-1** through **BIO-3** will be implemented to avoid and minimize Project-related impacts to Arcade Creek and the Arcade Creek tributary.

Compensatory mitigation for permanent impacts to the stream channel will be required and will be determined in coordination with CDFW and the RWQCB during the permitting process. Compensatory mitigation measure BIO-4 will be implemented to offset permanent impacts to this aquatic feature.

**BIO-4:** Permanent effects to stream channel and riparian woodland habitat will be provided compensatory mitigation to result in no net loss of habitat, at an agency-approved mitigation ratio via one of the following compensatory mitigation options:

- payment of an in-lieu fee to an agency-approved mitigation site,
- compensatory off-site mitigation at an agency-approved mitigation site,
- compensatory on-site mitigation, or
- a combination of the above compensatory mitigation options.

### Cumulative Impacts

The proposed Arcade-Cripple Creek Trail–Mariposa Extension project is currently in the preliminary design phase and would construct an additional 0.5-mile segment of the trail along Arcade Creek. In combination with previously constructed trail segments and another planned segment which would connect Sylvan Road to Mariposa Avenue, the Project would contribute to minor cumulative effects on the creek corridor. Potential cumulative impacts include slight increases in impervious surfaces, temporary sediment runoff during construction, limited disturbance to riparian vegetation, and minor permanent impacts to the Arcade Creek mainstem associated with installation of a gabion basket wall along an actively eroding section of the channel. These impacts are not anticipated to be cumulatively considerable, as Arcade Creek is already substantially degraded due to long-term urban development. In addition, standard erosion control, sediment management and revegetation measures would be implemented to minimize temporary effects to the channel. The gabion basket wall would also stabilize the streambank and reduce ongoing erosion, further limiting the potential for adverse cumulative impacts. Overall, the Project's temporary and minor permanent impacts are expected to have minimal effects on the Arcade Creek corridor and its ecological functions.

### *Discussion of Ephemeral Tributary*

One ephemeral tributary to Arcade Creek is present within the western portion of the BSA. The tributary has a larger main channel as well as a smaller sub-tributary. Water flow within this tributary only occurs in direct response to rainfall and stormwater runoff from adjacent commercial businesses and residential homes. The main tributary splits off Arcade Creek from the west, outside of the BSA and flows northeast, emptying into two ponded areas. The smaller sub-tributary splits off of the main tributary channel and flows northwest towards a detention basin outside of the BSA.

#### Survey Results

During the October 2025 biological survey, an aquatic resources delineation was conducted in accordance with technical methods outlined in the USACE *A Field Guide to the Identification of the Ordinary High-Water Mark in the Arid West Region of the Western United States* (Lichvar & McColley 2008) to determine the boundaries of the OHWM. During survey efforts, the ephemeral tributary was mapped in the field using an EOS Arrow 100 Receiver paired with ArcGIS Pro 3.6 software. This fieldwork was supplemented by desktop analysis of current and historical aerial imagery, as well as LiDAR data. The boundaries of the ephemeral tributary were mapped in the field in accordance with the following OHWM indicators: change in vegetation species and density, break in bank slope, and presence of a bed, bank and channel. The main larger tributary measures approximately 5 feet wide, and a sub-tributary measures approximately 2 feet wide. Water was present in the main tributary during survey efforts but was not flowing, and the sub-tributary was dry. Within the BSA, this habitat community comprises approximately 0.10 acres.

#### Project Impacts

No temporary or permanent impacts to the ephemeral tributary are anticipated as a result of the Project, as trail construction will be confined to the area east of these features. However, construction activities could result in potential indirect impacts, including sedimentation and the introduction of trash, oil, grease, or fuels associated with equipment and construction materials. Furthermore, an increase in impervious surface area may cause an increase in stormwater runoff within the vicinity of the new trail.

#### Avoidance and Minimization Efforts

Although no direct impacts to the ephemeral tributary are anticipated, avoidance and minimization measures **BIO-1** through **BIO-3** will be implemented into the Project to reduce potential indirect impacts to the ephemeral tributary.

#### Compensatory Mitigation

With incorporation of measures **BIO-1** through **BIO-3**, impacts to ephemeral tributary habitat will be avoided and minimized to the greatest extent feasible. No compensatory mitigation is required as no permanent impacts to the ephemeral tributary are anticipated.

### Cumulative Impacts

The Project will have no temporary or permanent impacts to the ephemeral tributary. The City does not have any future and/or reasonably foreseeable actions that would result in impacts to ephemeral tributary habitat at this location. The implementation of any project occurring within or near this habitat community would be considered separate from the proposed . There are no additional past, current, future and/or reasonably foreseeable actions that are threatening the ephemeral tributary.

## *Discussion of Riparian Woodland*

Riparian woodland habitat is found in valleys and lower foothills, associated with floodplains and gentle topography. This community occurs in corridors along wet areas, usually with abrupt transitions to adjacent habitat types. Mature riparian woodland canopies are dominated by trees such as cottonwoods, sycamores, and oaks. There is typically a subcanopy of species such as white alder and Oregon ash. The usual understory is dominated by shrubs such as willows, wild grape, wild rose, and elderberry. An herbaceous layer may be found in openings in the dense understory, and plants such as sedges, rushes, miner's lettuce, and poison-hemlock can be found here (Grenfell 1988). Riparian habitats are known to have high ecological importance, providing food, water, cover, and movement corridors for a number of wildlife species (CDFW 2025c).

### Survey Results

Riparian woodland habitat borders Arcade Creek as it flows through the BSA. Dominant tree species observed within this vegetation community include valley oak, interior live oak, box elder, Oregon ash, Fremont cottonwood, and northern California black walnut. The understory is comprised of Himalayan blackberry, periwinkle, Harding grass, and tall flat sedge. Within the BSA, this habitat community comprises approximately 8.84 acres.

### Project Impacts

Paving of the trail will result in approximately 0.18 acres of permanent impacts to riparian woodland habitat. An additional 0.81 acres of temporary impacts are anticipated due to construction access. To estimate the area needed for equipment access, a 20-foot temporary impact buffer was applied along the trail alignment. Tree removal within the riparian woodland habitat will be required; however, the specific trees to be removed have not yet been identified. Field observations during a site visit conducted on December 18, 2025, indicate that most trees within the riparian woodland are likely to be avoided, and impacts would be largely limited to the area around the proposed bridge crossing at the Arcade Creek tributary. Much of the mapped area in **Figure 4** likely represents overstory canopy, and construction would occur within the understory, so major tree removal is not anticipated to be necessary. Some trees may only need to be trimmed to allow equipment access. The temporary and permanent impact estimates represent the maximum anticipated impacts, and final impacts will be further refined during the permitting process. Prior to construction, a tree survey will be conducted within the BSA to document and mark all trees proposed for removal (**Figure 5**).

### Avoidance and Minimization Efforts

Avoidance and minimization measures **BIO-1** through **BIO-3**, and **BIO-5** described below, will be implemented as part of the Project to reduce impacts on riparian woodland habitat.

**BIO-5:** Native vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes

**BIO-6:** Following the completion of construction, all temporary effects to riparian woodland and oak woodland habitat will be recontoured and re-seeded at a 1:1 ratio, to allow for the habitat to return to its previous function. Tree removal will follow final plans and specifications, and any deviation must be approved by a Project biologist. All temporarily disturbed areas will be seeded with a Project biologist-approved native seed mix.

### Compensatory Mitigation

The Project would result in approximately 0.18 acres of permanent impacts to riparian woodland and temporary impacts will consist of approximately 0.81 acres. Mitigation will be required for all trees removed with a diameter at breast height (DBH) greater than 4 inches. Final mitigation requirements will be determined in coordination with CDFW during the acquisition of the 1602 Lake and Streambed Alteration Agreement and City of Citrus Heights Tree Preservation and Protection Regulations.

Compensatory mitigation measures **BIO-6** and **BIO-4**, listed in the perennial stream channel section, will be implemented to offset permanent impacts to this vegetation community.

Any trees removed from the riparian woodland and oak woodland habitat will be appropriately mitigated for through replanting or other methods in coordination with CDFW and the City of Citrus Heights.

### Cumulative Impacts

The Project will result in temporary and permanent impacts to riparian woodland habitat from trail construction. In combination with previously constructed Arcade-Cripple Creek Trail segments and other planned segments in the area, the Project would contribute to cumulative impacts on the riparian woodland corridor along Arcade Creek. Potential impacts include the removal or trimming of trees and temporary disturbance to understory vegetation. However, standard erosion control, revegetation, and tree protection measures will be implemented, so these cumulative impacts are expected to be minor.

### *Discussion of Oak Woodland*

Oak woodland is a widely distributed upland habitat in California and is characterized by a multilayered structure composed of a dominant overstory of oak species with an understory of grasses, forbs, and scattered shrubs. Oak woodland typically occurs on well-drained soils in foothill and valley settings, often along slopes, ridgelines, and mixed woodland–grassland ecotones. Tree associates in the Central Valley include California sycamore, Northern California black walnut, interior live oak, boxelder, and blue oak. Oak woodland supports high wildlife diversity due to its structural complexity and acorn production. The habitat provides foraging, nesting, and cover for numerous birds, mammals, reptiles, and invertebrates (Mayer & Laudenslayer 1988). Oak woodlands are considered a natural community of special concern as they provide habitat for nesting birds and raptors, including the Swainson's hawk and white-tailed kite as well as cover and foraging habitat for the song sparrow ("Modesto" population). In addition, native oaks measuring 6 inches DBH or more in diameter are protected under the City of Citrus Heights Tree Preservation and Protection Regulations.

### Survey Results

The BSA includes a mature oak woodland habitat that occupies the upland areas of the site. This community is dominated by native oak tree species such as valley oak, interior live oak, and blue oak. The canopy is moderately dense, providing partial shade and contributing to a well-developed litter layer of decomposing oak leaves and twigs. The understory consists primarily of native and non-native grasses and forbs, including wild oat, Italian rye grass, and English plantain. Seasonal herbaceous growth is most abundant in spring, while the summer understory tends to dry and thin considerably. Shrub species such as poison oak were also found in this habitat type. Oak woodland habitat provides important foraging, nesting, and cover opportunities for a variety of wildlife species. Oak woodlands comprise approximately 1.44 acres of the BSA.

### Project Impacts

Paving of the trail will result in approximately 0.02 acres of permanent impacts to oak woodland habitat. An additional 0.17 acres of temporary impacts are anticipated due to construction access. To estimate the area needed for equipment access, a 20-foot temporary impact buffer was applied along the trail alignment. Tree removal within the oak woodland habitat will be required; however, the specific trees to be removed have not yet been identified. Field observations during the site visit conducted on December

18, 2025, indicate that most trees within the oak woodland are likely to be avoided, and impacts would be largely limited to the area around the proposed bridge crossing at the Arcade Creek tributary. Much of the mapped area in **Figure 4** likely represents overstory canopy, and construction would occur within the understory, so major tree removal is not anticipated to be necessary. Some trees may only need to be trimmed to allow equipment access. The temporary and permanent impact estimates represent the maximum anticipated impacts, and final impacts will be further refined during the permitting process. A tree survey will be conducted within the BSA to document and mark all trees proposed for removal (**Figure 5**).

#### Avoidance and Minimization Efforts

Avoidance and minimization measures **BIO-1**, **BIO-3** and **BIO-5** will be implemented as part of the Project to reduce impacts on oak woodland habitat.

#### Compensatory Mitigation

The compensatory mitigation measure **BIO-6** will be implemented to offset permanent impacts to this habitat community. Final mitigation requirements will be determined in coordination with the City of Citrus Heights Tree Preservation and Protection Regulations.

#### Cumulative Impacts

The Project will result in temporary and permanent impacts to oak woodland habitat from trail construction. In combination with previously constructed Arcade-Cripple Creek Trail segments and other planned segments in the area, the Project would contribute to cumulative impacts on the oak woodland habitat along Arcade Creek. Potential impacts include the removal or trimming of trees and temporary disturbance to understory vegetation. However, standard erosion control, revegetation, and tree protection measures will be implemented, so these cumulative impacts are expected to be minor.

### Special Status Plant Species

The plants listed in Table 2 are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special status plants occurring on site. Prior to field surveys, a list of regional special status plant species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, one special status plant species was found to have low potential to occur within the BSA: Sanford's arrowhead.

#### *Discussion of Sanford's Arrowhead*

Sanford's arrowhead is listed under CNPS as a 1B.2, meaning it is rare throughout its range and is moderately threatened in California. Sanford's arrowhead is a perennial rhizomatous herb found in sluggish waterways, swamps, freshwater marshes, ponds,

ditches, and margins of slow flowing streams or sloughs up to 2,132 feet elevation. The blooming season for the species occurs from May–October. The species was once common in irrigation ditches in the Sacramento and San Joaquin valleys. Channelization of natural waterways, changes in seasonal agricultural water use, and water conservation have eliminated much of its previous habitat. Sanford's arrowhead spreads by underground rhizomes and is found preferentially in clay soils.

#### Survey Results

No Sanford's arrowhead individuals were observed within the BSA during the October 2025 biological survey. However, the BSA contains suitable stream channel and water quality/detention basin habitat that could support individuals of this species. There are 15 documented CNDDB occurrences of the species within 10 miles of the BSA, with the nearest approximately 2.2 miles northeast of the BSA within Sunrise Creek (1994). Based on the suitable habitat and nearby occurrences, this species has a low potential to occur within the BSA.

#### Project Impacts

Approximately 0.10 acres of temporary impacts and approximately 0.01 acres of permanent impacts to suitable aquatic habitat (Arcade Creek) are anticipated to occur as a result of the proposed Project. To avoid direct impacts to this species during construction, avoidance and minimization measure **BIO-7** will be implemented to ensure that no Sanford's arrowhead individuals are present within the Project area prior to construction.

#### Avoidance and Minimization Efforts

In addition to avoidance and minimization measure **BIO-1**, the following measure will be incorporated into the Project to avoid and minimize potential Project-related impacts to the species:

**BIO-7:** A focused rare plant survey will be conducted within the Project area prior to the start of construction. If rare plants are discovered during pre-construction surveys but can be reasonably avoided, an Environmentally Sensitive Area (ESA) fence will be installed to protect the specimens in place.

If a special status plant specimen is present within the Project area and cannot be fully avoided, the Project biologist will relocate individual(s) and/or collect seeds to ensure the continued existence of the local population. Area of relocation or re-seeding will be at the discretion of the Project biologist but will be located within suitable habitat and within the same watershed of the Project, preferably at a location that is protected in perpetuity.

#### Compensatory Mitigation

No compensatory mitigation for Sanford's arrowhead is proposed, as no direct impacts to the species, or adverse effects to the population, are expected as a result of the proposed Project, with incorporation of avoidance and minimization measure **BIO-7.**

### Cumulative Impacts

The Project will result in temporary impacts to suitable Sanford's arrowhead habitat due to trail construction. In combination with previously constructed and planned Arcade-Cripple Creek Trail segments in the area, the Project will contribute to minor cumulative impacts on suitable habitat for the species. No permanent impacts to suitable aquatic habitat are anticipated. The Project could also contribute to cumulative impacts on Sanford's arrowhead individuals if any are present within the work area(s) and are disturbed by construction. However, such impacts are unlikely with implementation of Measure **BIO-7**, which requires pre-construction surveys and protection of individuals using high-visibility fencing. If Sanford's arrowhead individuals are present within the Project area and cannot be fully avoided, the Project biologist will relocate individuals and/or collect seeds to ensure the continued existence of the local population. Based on these measures, cumulative impacts on Sanford's arrowhead individuals are anticipated to be minor.

## Special Status Animal Species

Animals are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special status animals occurring on site. Prior to field surveys, a list of regional special status animal species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, the following species were determined to have potential to occur within the BSA: song sparrow ("Modesto" population), Swainson's hawk, white-tailed kite, VELB and NWPT.

### *Discussion of Song Sparrow ("Modesto" Population)*

The song sparrow ("Modesto" Population) is not a state of federally listed species but is a CDFW species of special concern (SSC). The ecological requirements of the species are largely undescribed, but the species is known to have an affinity for emergent freshwater marshes dominated by tules and cattails (Grinnell & Miller 1944). Marshall (1948) described the primary habitat requirements of several subspecies of song sparrow in California as being moderately dense vegetation to supply cover for nest sites, a source of standing or running water, semi-open canopies to allow light, and exposed ground or leaf litter for foraging. Nest sites are usually hidden in grasses or weeds, sometimes placed on the ground and occasionally as high as 15 feet and are often near water. Habitat loss, fragmentation, and degradation are the primary threats to the species. Nesting season for the species usually begins in April, and most nesters in California are nonmigratory, with other migrants coming from the north (Shuford & Gardali 2008).

### Survey Results

No individuals of this species were observed during the October 2025 biological survey. However, the BSA contains suitable nesting and foraging habitat for this species,

including the easterly water quality/detention basin, which supports tules and cattails, as well as areas of low, dense vegetation such as Himalayan blackberry and periwinkle within the riparian woodland habitat. The oak woodland and riparian woodland habitats also provide potential nesting cover and include open grassland understory with leaf litter suitable for foraging. Arcade Creek and the water quality/detention basins provide a source of standing water, making the area suitable for the song sparrow. There is one CNDDB occurrence within 10 miles of the BSA, located approximately 9.2 miles southwest in which a specimen was collected (1990). The CNDDB occurrence notes indicate that development has replaced much of the wetlands and other suitable habitat in the area, so it is unlikely that this species is still present there. Based on the potentially suitable habitat present onsite, this species has a low potential to occur within the BSA.

#### Project Impacts

Permanent and temporary impacts to riparian woodland habitat and oak woodland habitat are anticipated to occur as a result of the proposed Project. Paving of the trail will result in approximately 0.20 acres of permanent impacts to riparian woodland habitat, with approximately 0.89 acres of temporary impacts anticipated due to construction access. Paving of the trail will also result in approximately 0.02 acres of permanent impacts to oak woodland habitat, and approximately 0.17 acres of temporary impacts due to construction access. In addition, tree removal within the oak woodland and riparian woodland habitats will be required. However, the specific trees to be removed have not yet been identified, and major tree removal is not anticipated. A tree survey will be conducted within the BSA to document and mark all trees proposed for removal. To avoid direct impacts to this species during construction, avoidance and minimization measure **BIO-8** will be implemented to ensure that no nesting song sparrows are present within the Project area prior to construction.

#### Avoidance and Minimization Efforts

In addition to avoidance and minimization measure **BIO-1**, the following measure will be incorporated into the Project to avoid and minimize potential Project-related impacts to the species:

**BIO-8:** Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1–September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 1 week of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

An initial 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds

(as determined by the Project Biologist and in coordination with wildlife agencies) in the buffer area until a Project Biologist determines the young have fledged. A reduced no-work buffer can be established if determined appropriate by the Project Biologist, and will consider various factors including species of bird, location of nest, stage of nest, existing environment, and type of active work.

#### Compensatory Mitigation

No compensatory mitigation for the song sparrow is proposed, as no direct impacts to the species are expected as a result of the proposed Project with incorporation of avoidance and minimization measure **BIO-8**.

#### Cumulative Impacts

The Project will result in temporary and permanent impacts to suitable song sparrow nesting and foraging habitat due to trail construction. In combination with previously constructed and planned Arcade-Cripple Creek Trail segments, the Project will contribute to minor cumulative impacts on the species' suitable habitat in riparian woodland and oak woodland areas adjacent to the trail. The Project could also contribute to cumulative impacts on song sparrow individuals if any are present within the work area and are temporarily disturbed by construction. However, such impacts are unlikely with implementation of measure **BIO-8**, which requires pre-construction surveys and protection of nesting individuals through establishment of a no-work buffer around active nests. Based on this measure, cumulative impacts on song sparrow individuals are anticipated to be minor.

### *Discussion of Swainson's Hawk*

Swainson's hawk (*Buteo swainsoni*) is a raptor species listed as threatened under CESA. This species migrates annually from wintering areas in South America to breeding locations in northwestern Canada, the western U.S., and Mexico. In California, Swainson's hawk nest throughout the Sacramento and San Joaquin Valley in large trees in riparian habitats and in isolated trees in or adjacent to agricultural fields. The breeding season extends from late March through late August, with peak activity from late May through July (England et al. 1997). Swainson's hawks forage in large, open agricultural habitats, including alfalfa and hay fields. The breeding population in California has declined by an estimated 91% since 1900; this decline is attributed to the loss of riparian nesting habitats and the conversion of native grassland and woodland habitats into agriculture and urban development (CDFG 1994).

#### Survey Results

No individuals of this species were observed during the October 2025 biological survey. The BSA contains suitable nesting habitat for Swainson's hawk within the riparian woodland and oak woodland areas, which include tall, mature oak trees capable of supporting nests. However, the BSA is surrounded by urban development and lacks the open, undeveloped areas typically required for foraging. Although some annual grassland habitat occurs within the BSA, it does not provide the extensive, open

foraging areas preferred by the species. The nearest suitable foraging habitat is located approximately 0.5 miles north of the proposed trail alignment within an open grassland area, north of Auburn Boulevard. The nearest documented CNDDB occurrence is located approximately 4.8 miles south of the BSA in which a nest was observed in a eucalyptus tree near Ancil Hoffman Park (2004). There is also a nearby iNaturalist occurrence of the species located approximately 2.2 miles southwest of the BSA along Wendal Lane, recorded in August 2025. Based on the potentially suitable nesting habitat present onsite, this species has a low potential to occur within the BSA.

#### Project Impacts

Permanent and temporary impacts to riparian woodland habitat and oak woodland habitat are anticipated to occur as a result of the proposed Project. Paving of the trail will result in approximately 0.20 acres of permanent impacts to riparian woodland habitat, with approximately 0.89 acres of temporary impacts anticipated due to construction access. Paving of the trail will also result in approximately 0.02 acres of permanent impacts to oak woodland habitat, and approximately 0.17 acres of temporary impacts due to construction access. In addition, tree removal within the oak woodland and riparian woodland habitats will be required. However, the specific trees to be removed have not yet been identified, and major tree removal is not anticipated. A tree survey will be conducted within the BSA to document and mark all trees proposed for removal. All trees removed from the riparian woodland and oak woodland habitat will be appropriately mitigated for in coordination with CDFW and the City. To avoid direct impacts to this species during construction, avoidance and minimization measure **BIO-8** will be implemented to ensure that no nesting Swainson's hawks are present within the Project area prior to construction.

#### Avoidance and Minimization Efforts

Avoidance and minimization measures **BIO-1** and **BIO-9** will be incorporated into the Project to avoid and minimize potential Project-related impacts to the species.

**BIO-9:** During the spring/summer season prior to construction the Project biologist must conduct pre-construction Swainson's hawk protocol-level surveys within the Project area plus a 0.25-mile buffer in accordance with California Department of Fish and Wildlife's guide for Swainson's Hawk Technical Advisory Committee. Pre-construction surveys will determine if active nests are present within the Project area or within 0.25 mile of Project activities. If an active nest is discovered within the survey area the Project biologist will determine the appropriate avoidance strategies (e.g., monitoring, no-work buffers, work windows, temporary sound/noise barriers, etc.) to avoid take of the nest and will coordinate with CDFW as needed.

#### Compensatory Mitigation

No compensatory mitigation for the Swainson's hawk is proposed, as no direct impacts to the species are expected as a result of the proposed Project with incorporation of avoidance and minimization measure **BIO-9**.

### Cumulative Impacts

The Project will result in temporary and permanent impacts to suitable Swainson's hawk nesting habitat due to trail construction. In combination with previously constructed and planned Arcade-Cripple Creek Trail segments, the Project will contribute to minor cumulative impacts on the species' suitable nesting habitat in riparian woodland and oak woodland areas adjacent to the trail. The Project could also contribute to cumulative impacts on Swainson's hawk individuals if any are present within the work area and are temporarily disturbed by construction. However, such impacts are unlikely with implementation of measure **BIO-9**, which requires protocol-level pre-construction surveys and protection of nesting individuals through establishment of appropriate avoidance strategies including no-work buffers and/or biological monitoring. Based on this measure, cumulative impacts on Swainson's hawk individuals are anticipated to be minor.

### *Discussion of White-tailed Kite*

The white-tailed kite (*Elanus leucurus*) is not listed as threatened or endangered at the state or federal level but is a fully protected species under CFG Code Section 3511. The white-tailed kite is a year-round resident of California and occurs in coastal and valley lowlands, most often in association with agricultural areas. The white-tailed kite forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands and seldom hunt more than 0.5 miles from nest while breeding. Breeding occurs from February to October, preferably in isolated, dense-topped trees close to open grasslands, meadows or marsh foraging sites (Zeiner et al. 1988–1990).

### Survey Results

No individuals of this species were observed during the October 2025 biological survey. The BSA contains suitable nesting habitat for white-tailed kite within the riparian woodland and oak woodland areas, which include tall, mature oak trees capable of supporting nests. However, the BSA is surrounded by urban development and lacks the open, undeveloped areas typically required for foraging including grasslands, meadows, farmlands and emergent wetlands. Although some annual grassland habitat occurs within the BSA, it does not provide the extensive, open foraging areas preferred by the species. The nearest suitable foraging habitat is located approximately 0.5 miles north of the proposed trail alignment within an open grassland area, north of Auburn Boulevard. The nearest CNDDB occurrence is located approximately 3.5 miles northeast of the BSA at Woodbridge Park in Orangevale in which a pair nested in a large tree south of the pond (1992). There is also a nearby eBird occurrence within the Stock Ranch Nature Preserve, southeast of the BSA recorded in 2012. Based on the potentially suitable nesting habitat present onsite, this species has a low potential to occur within the BSA.

### Project Impacts

Permanent and temporary impacts to riparian woodland habitat and oak woodland habitat are anticipated to occur as a result of the proposed Project. Paving of the trail will result in approximately 0.20 acres of permanent impacts to riparian woodland

habitat, with approximately 0.89 acres of temporary impacts anticipated due to construction access. Paving of the trail will also result in approximately 0.02 acres of permanent impacts to oak woodland habitat, and approximately 0.17 acres of temporary impacts due to construction access. In addition, tree removal within the oak woodland and riparian woodland habitats will be required. However, the specific trees to be removed have not yet been identified, and major tree removal is not anticipated. A tree survey will be conducted within the BSA to document and mark all trees proposed for removal. All trees removed from the riparian woodland and oak woodland habitat will be appropriately mitigated for in coordination with CDFW and the City. To avoid direct impacts to this species during construction, avoidance and minimization measure **BIO-8** will be implemented to ensure that no nesting white-tailed kites are present within the Project area prior to construction.

#### Avoidance and Minimization Efforts

Avoidance and minimization measures **BIO-1** and **BIO-8** will be incorporated into the Project to avoid and minimize potential Project-related impacts to the white-tailed kite.

#### Compensatory Mitigation

No compensatory mitigation for the white-tailed kite is proposed, as no direct impacts to the species are expected as a result of the proposed Project with incorporation of avoidance and minimization measure **BIO-8**.

#### Cumulative Impacts

The Project will result in temporary and permanent impacts to suitable white-tailed kite nesting habitat due to trail construction. In combination with previously constructed and planned Arcade-Cripple Creek Trail segments, the Project will contribute to minor cumulative impacts on the species' suitable nesting habitat in riparian woodland and oak woodland areas adjacent to the trail. The Project could also contribute to cumulative impacts on white-tailed individuals if any are present within the work area and are temporarily disturbed by construction. However, such impacts are unlikely with implementation of measure **BIO-8**, which requires pre-construction surveys and protection of nesting individuals through establishment of a no-work buffer around active nests. Based on this measure, cumulative impacts on white-tailed kite individuals are anticipated to be minor.

### *Discussion of Valley Elderberry Longhorn Beetle*

VELB is a federal listed threatened species. Critical habitat for the species was designated by the USFWS on August 8, 1980 (45 Federal Register [FR] 52803). Elderberry shrubs are obligate hosts for VELB larvae. Elderberry shrubs are often associated with species common to the riparian forests and adjacent uplands in the Central Valley and foothills the elderberry inhabits, such as, cottonwood (*Populu*s spp.), willow, ash (*Fraxinus* spp.), oak (*Quercus* spp.), and walnut (*Juglans* spp.) (Barr 1991). The VELB's range has been reduced and greatly fragmented due to a loss of elderberry inhabited communities, most especially riparian habitat loss. Habitat loss is derived from agricultural development, urbanization, levee maintenance, and pesticide drift where

aerial application or fogging of crops occurs near riparian habitats (USFWS 1984 and Barr 1991).

Adult VELB feed on elderberry foliage and are present from March through early June. During this time, the adults mate within the canopy and females lay their eggs, either singularly or in small clusters, in living elderberry bark crevices or at the junction of stem/trunk or leaf petiole/stem (Barr 1991). After eggs hatch, the first instar larvae burrow into the host elderberry stems to feed on pith for one to two years. As the larvae become ready to pupate, it chews outward from the center of the stem through the bark. After the larvae plugs the newly constructed emergent hole with shavings, it returns to the pupal chamber to metamorphose and will emerge in mid-March through June as adults. Elderberry stems with emergence holes indicate current and/or previous VELB presence. VELB utilize stems greater than 1-inch diameter and produce circular to oval emergent holes 7–10 millimeters in diameter with the majority occurring 4 feet or less above the ground (Barr 1991).

### Survey Results

In accordance with the USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*, the Project area was buffered by 50 meters (≈ 165 feet) to identify elderberry shrubs occurring within the BSA (USFWS 2017). During survey efforts, two elderberry clusters, both with stem diameters over one inch were observed within the riparian woodland habitat within the BSA (**Figure 4**). Exit holes were observed on multiple stems within one of the two clusters, located on the southern bank of Arcade Creek (**Appendix E**). . The elderberry cluster without exit holes is approximately 72 feet south of the proposed trail alignment while the cluster with exit holes is approximately 95 feet south of the proposed trail alignment. The presence of exit holes indicates current or historic occupation by VELB, and therefore they have high potential to occur within the BSA.

### Project Impacts

No direct or indirect impacts to the elderberry shrubs are anticipated as a result of trail construction. The two elderberry shrubs within the BSA may be located within the USFWS framework guidance buffer; however, they are located across Arcade Creek in an area that is unrelated to and far removed from Project activities. This creates a substantial distance and buffer between the Project and the shrub Two elderberry clusters were identified within the BSA, both of which are located within the USFWS framework guidance buffer. One of the clusters is located across Arcade Creek in an area that is unrelated to and physically separated from Project activities. The intervening creek channel provides substantial distance and buffer between the Project and this cluster such that it would not be subject to stressors such as noise, vibration, exhaust, or dust. The second elderberry cluster, while also located within the USFWS buffer, is situated outside the Project impact area and is not anticipated to be affected by Project activities.

Additionally, the nature of Project activities is such that they would not produce any stressors to a level that would affect the species or its host plant. Ground disturbance

and operation of equipment would be minimal within the 165-foot area surrounding the shrub and is not expected to result in any increases of stressors beyond ambient environmental baseline. Furthermore, construction of the new pedestrian crossing would occur well beyond that distance. Therefore, the Project would have *no effect* to VELB.

#### Avoidance and Minimization Efforts

Because effects to VELB are not anticipated, no avoidance or minimization measures are proposed.

#### Compensatory Mitigation

No compensatory mitigation for VELB is proposed, as no effects to the species or its associated habitat are expected as a result of the proposed Project.

#### Cumulative Impacts

Because no effects or impacts to VELB are anticipated, the Project is not expected to contribute to cumulative impacts on the species.

### *Discussion of Northwestern Pond Turtle*

The NWPT is listed as proposed threatened under FESA and is considered a SSC by CDFW. This species is prevalent throughout California west of the Sierra-Cascade crest and certain desert regions. Individuals are subject to desiccation in hot or dry conditions, meaning this species is found around permanent and near-permanent water sources such as ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Individuals are omnivorous and feed on aquatic plants as well as invertebrates, frogs, and fishes. Predators include certain fishes, garter snakes, wading birds, and some mammals, and the NWPT retreats from basking sites to underwater refuges at the sign of danger. This species is known to hibernate underwater beneath a muddy bottom in colder climates and reproduce from March–August. Nests are generally found in flat areas with low vegetation and dry, hard soil (Zeiner et al. 1988–1990).

#### Survey Results

Arcade Creek and the eastern water quality/detention basin within the BSA provide suitable aquatic habitat for the NWPT due to the presence of slow-moving or standing water and available basking sites, including logs, rocks, muddy banks, and emergent vegetation. There is also some adjacent annual grassland habitat that may provide suitable upland nesting habitat for the species. According to the City of Sacramento's "Existing Conditions and Assessment Report and Stream Corridor Management Plan for the Arcade Creek Watershed", NWPTs have been observed in the Arcade Creek stream corridor during spring and summer 2007 field surveys (Jones & Stokes 2007). The nearest CNDDB occurrence is located approximately 6.4 miles northeast of the BSA within the Baldwin Reservoir Wetland and Wildlife Preserve in Granite Bay (1997). Due to the potentially suitable aquatic and upland habitat, this species has a low potential to occur within the BSA.

### Project Impacts

The Project is anticipated to temporarily impact a total of approximately 0.10 acres of suitable aquatic habitat (Arcade Creek mainstem and tributary) and approximately 0.28 acres of suitable upland habitat (annual grassland) due to access during construction. Additionally, the Project is anticipated to permanently impact a total of approximately 0.01 acres of suitable aquatic habitat (Arcade Creek mainstem) and 0.21 acres of suitable upland habitat (annual grassland) due to paving of the trail.

The USFWS is currently not providing conference opinions for northwestern pond turtle (based on the timing of this NES). However, given that northwestern pond turtle is proposed to be listed under the FESA, Section 7 consultation will be required with USFWS upon official listing of the species. Though no determination will be made for purposes of Section 7 at this time, once officially listed under FESA, the determination for northwestern pond turtle is proposed to be *may affect, not likely to adversely affect*. Conservation measures are proposed for the species as a show of good faith, to further the protection and recovery of the species, and in anticipation of any future listings.

### Avoidance and Minimization Efforts

In addition to avoidance and minimization measure **BIO-1**, the following measures will be incorporated into the Project to avoid and minimize potential Project-related impacts to the NWPT:

**BIO-10:** To avoid impacts to western pond turtles, the Project biologist will conduct a pre-construction survey of the aquatic and upland habitats within the Project area. Surveys will be conducted no more than 24 hours prior to onset of construction. If a western pond turtle is spotted within an active work area the Project Biologist will be contacted, and work activities will immediately cease within 100 feet of the turtle. Work will not recommence until the turtle has left the Project site on its own volition. In addition, if western pond turtle nests are detected within or adjacent to the Project area, the Project biologist will mark the nests with high-visibility flagging or fencing and establish a 25-foot no-disturbance buffer around each nest to prevent disturbance until hatching occurs or the biologist determines the nest is no longer at risk.

**BIO-11:** To prevent the inadvertent entrapment of NWPT, all excavated, steep-walled holes or trenches more than 3 inches wide and 1 foot deep will be inspected for NWPT then covered at the close of each working day by plywood or similar materials. If it is not feasible to cover an excavation, one or more escape ramps constructed of earthen fill or wood ≥ 6 inches wide shall be installed. Before such holes or trenches are filled, they must be thoroughly inspected by the biologist for trapped NWPT.

### Compensatory Mitigation

With implementation of species-specific avoidance and minimization measures, impacts to NWPT are not anticipated as a result of the Project. In addition, the Project would not

result in long-term impacts to potentially suitable NWPT aquatic or upland habitat; therefore, compensatory mitigation is not proposed.

### Cumulative Impacts

The Project will result in temporary and permanent impacts to suitable NWPT aquatic and upland habitat due to trail construction. In combination with previously constructed and planned Arcade-Cripple Creek Trail segments in the area, the Project will contribute to minor cumulative impacts on suitable aquatic and upland habitat for the species. The Project could also contribute to cumulative impacts on NWPT individuals if any are present within the work area and are temporarily disturbed by construction. However, such impacts are unlikely with implementation of measures **BIO-10** and **BIO-11**, which require pre-construction surveys, protection of nesting individuals, and entrapment prevention measures. Based on these factors, cumulative impacts on NWPT individuals are anticipated to be minor.

# Chapter 5 – Conclusions and Regulatory Determinations

## Federal Endangered Species Act Consultation Summary

Based on an analysis of species occurrences and habitat requirements, effect determinations were made for each federally listed, candidate or proposed species as shown in **Table 4. Federally Listed Species Determinations** below. Database research conducted through the USFWS and NMFS identified a total of nine federally listed species, two of which have the potential to occur within the BSA: NWPT and VELB.

The NWPT has a low potential to occur within the BSA due to the presence of suitable aquatic and upland habitat, as well as nearby, recent occurrences. Temporary and permanent impacts to Arcade Creek are anticipated as a result of construction, which provide suitable aquatic habitat for the species. In addition, temporary and permanent impacts to annual grassland habitat are expected, which provide suitable upland nesting habitat for the species. Given that NWPT is proposed to be listed under the FESA, Section 7 consultation will be required with USFWS upon official listing of the species. Though no official determination will be made for purposes of Section 7 consultation at this time, once officially listed under FESA, the determination for NWPT is proposed to be *may affect, not likely to adversely affect.*

Two elderberry shrub clusters occur within the BSA and fall within the USFWS framework guidance buffer of 165 feet. One cluster is located across Arcade Creek and well removed from Project activities. The second cluster is located outside the Project impact area and would not be affected by Project activities. Due to the separation distance and minimal ground disturbance in the area, Project-related stressors such as noise, vibration, exhaust, and dust would not affect the shrubs or VELB individuals. No direct or indirect impacts to elderberry shrubs within the BSA are anticipated. Therefore, the Project would have *no effect* on VELB.

**Table 4. Federally Listed Species Determinations**

| Species Name | Federal Status | Potential | Determination |
|---|---|---|---|
| Northwestern pond turtle (*Actinemys marmorata*) | Proposed Threatened | Low | No Determination |
| Western spadefoot (*Spea hammondii*) | Proposed Threatened | Absent | No Effect |
| Monarch butterfly (*Danaus plexippus*) | Proposed Threatened | Absent | No Effect |
| Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) | Threatened | Present | No Effect |
| Vernal pool fairy shrimp (*Branchinecta lynchi*) | Threatened | Absent | No Effect |

| Species Name | Federal Status | Potential | Determination |
|---|---|---|---|
| Vernal pool tadpole shrimp (*Lepidurus packardi*) | Endangered | Absent | No Effect |
| Chinook Salmon Central Valley spring-run ESU (*Oncorhynchus tshawytscha* pop. 11) | Threatened | Absent | No Effect |
| Chinook Salmon Sacramento River winter-run ESU (*Oncorhynchus tshawytscha* pop. 7) | Endangered | Absent | No Effect |
| Steelhead California Central Valley DPS (*Oncorhynchus mykiss irideus* pop. 11) | Threatened | Absent | No Effect |

**Essential Fish Habitat Consultation Summary**

Essential fish habitat (EFH) is defined as waters and substrate necessary for fish spawning, breeding, feeding, and growth to maturity (Magnuson-Stevens Fishery Conservation and Management Act §3). According to the National Oceanic and Atmospheric Administration habitat conservation *Essential Fish Habitat View Tool*, the BSA falls within the Lower American-Below Nimbus Watershed which is considered EFH for Chinook salmon (NOAA 2025). However, there is no documented evidence of listed Chinook salmon populations currently inhabiting Arcade Creek within the City. According to the City of Sacramento's *Existing Conditions and Assessment Report and Stream Corridor Management Plan for the Arcade Creek Watershed*, Chinook salmon and steelhead trout have not been reported in Arcade Creek for over 20 years. This absence is attributed to the lack of suitable rearing and spawning habitats, as well as low summer flows, which are not conducive to supporting these species (Jones & Stokes 2007). Although Arcade Creek ultimately connects to the Sacramento River, Chinook salmon in the Central Valley are more commonly associated with larger rivers that provide optimal spawning conditions, such as cooler water temperatures and uninterrupted flows during migration. Urban development within the City has likely further reduced Arcade Creek’s viability as habitat for Chinook salmon.

Communication with Skyler Burson, CDFW District 2 Fisheries Biologist, indicates that the potential for listed salmonids to occur in Arcade and Cripple creeks is very low, with only occasional, flow-driven straying of primarily hatchery-origin fish observed. Burson indicated that the system lacks suitable spawning and rearing habitat and functions as a dead-end, making successful reproduction and juvenile survival highly unlikely.

Consistent with these observations, the portion of Arcade Creek within the BSA does not support any of the Habitat Areas of Particular Concern (HAPCs) for Chinook salmon EFH. According to the Pacific Fishery Management Council (PFMC), there are five HAPCs including complex channels and floodplain habitat, thermal refugia, spawning

habitat, estuaries, and marine and estuarine submerged aquatic habitat (PFMC 2014). The reach of Arcade Creek within the BSA does not meet any of the criteria of the identified HAPCs. The BSA encompasses a highly urbanized reach of Arcade Creek with limited flow, poor water quality, and degraded habitat, making it unsuitable for salmon spawning or rearing. Therefore, the Project is not expected to adversely affect Chinook salmon EFH, and consultation with NMFS under the Magnuson-Stevens Fishery Conservation and Management Act is not anticipated.

### California Endangered Species Act Consultation Summary

Prior to field surveys, a list of regional state listed plant and animal species was obtained from CDFW on October 1, 2025 (**Appendix B**). The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, Swainson's hawk, listed as threatened under CESA, was determined to have a low potential to occur within the BSA during the bird nesting season (**Table 2**). With inclusion of avoidance, minimization, and mitigation measure **BIO-9**, the Project is not anticipated to result in take of this species and coordination with CDFW under Section 2081 is not anticipated.

### Wetlands and Other Waters Coordination Summary

The Project will result in temporary impacts to a total of 0.10 acres of waters of the U.S. and state (Arcade Creek and its tributary), as well as approximately 0.01 acres of permanent impacts. Prior to work within jurisdictional waters, the City will obtain a Section 401 WQC from the RWQCB, a Section 1602 Streambed Alteration Agreement from CDFW, and a non-notifying Section 404 Nationwide Permit from the USACE.

### Invasive Species

In February 1999, EO 13112 was signed, requiring federal agencies to prevent and control the introduction and spread of invasive species. Measure **BIO-12** will be incorporated into the Project plans to ensure that invasive species are not introduced or spread.

**BIO-12:** Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

### Other

### Best Management Practices

To minimize and avoid potential environmental impacts of construction, measure **BIO-3** has been incorporated into the Project design.

### General Wildlife

To minimize and avoid potential effects to local wildlife, the following measures **BIO-13** through **BIO-15** have been incorporated into the Project design.

**BIO-13:** All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

**BIO-14:** The contractor must not apply rodenticide or herbicide within the Project area during construction.

**BIO-15:** If any wildlife is encountered during the course of construction, said wildlife will be allowed to leave the construction area unharmed.

### Migratory Birds

Native, migratory, and other non-game birds are protected by the MBTA and CFG Code Sections 3513, 3503.5 and 3503. Because habitats such as oak woodland and riparian woodland are present within the BSA, and impacts would occur to these habitats, bird species protected under these regulations could be impacted. The implementation of measure BIO-8 and BIO-9 would avoid all potential impacts to migratory birds.

# Chapter 6 – References


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# Appendix A. USFWS Species List

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 02/02/2026 21:42:33 UTC
Project Code: 2026-0044243
Project Name: Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

**Migratory Birds**: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

# OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office**
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

# PROJECT SUMMARY

Project Code: 2026-0044243

Project Name: Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project

Project Type: Recreation - New Construction

Project Description: The City proposes to construct a 0.5-mile addition to the planned 16-mile CCTP as part of the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project (Project). The Project is funded through the federal Carbon Reduction Program.

The Project is located in Citrus Heights and will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road. The proposed alignment begins south of the Walmart property boundary and would proceed east through the Stock Ranch Nature Preserve, curving south around Walmart's water quality detention basin. The alignment continues north, crossing a tributary of Arcade Creek, and traverses along the south side of the Huntington Square Apartment complex prior to connecting to Sylvan Road. The alignment terminates east of Sylvan Road with a planned future trail extension segment from Sylvan Road to Mariposa Avenue. The Project has independent utility and would function as a stand-alone improvement.

To accommodate construction, right-of-way (ROW) acquisitions will be required from several parcels. These include a permanent and temporary easement from the Sunrise Recreation and Park District, a temporary access easement from Walmart and/or Costco, and a temporary access easement from Huntington Square Apartments. If the existing trail easement across the Huntington Square Apartment property is insufficient to contain the construction activities, an additional temporary construction easement would be needed.

Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary , solar lighting, and an at-grade signalized pedestrian crossing at Sylvan Road. Construction activities will involve grading to achieve ADA-compliant slopes, installing the creek crossing, paving the trail, erecting the solar lighting, and adding pedestrian signal infrastructure with minor utility adjustments as needed. The Project also includes installation of a gabion basket retaining wall along an actively eroding portion of Arcade Creek to stabilize the bank and prevent further erosion.

Construction access will be provided primarily through the Walmart and/or Costco parking lot under a temporary construction easement, with potential supplemental access from the Huntington Square Apartments parcel. These provisions will allow safe and efficient construction of the trail and its associated improvements.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.68898745,-121.294574044786,14z




Counties: Sacramento County, California

# ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## REPTILES

| NAME | STATUS |
|---|---|
| Northwestern Pond Turtle *Actinemys marmorata*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/1111<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/TZS5O3TP3BEZXFPIUZICKRUK7Q/documents/generated/11271.pdf | Proposed Threatened |

## AMPHIBIANS

| NAME | STATUS |
|---|---|
| Western Spadefoot *Spea hammondii*<br>Population: Northern DPS<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/5425<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/TZS5O3TP3BEZXFPIUZICKRUK7Q/documents/generated/11271.pdf | Proposed Threatened |

## INSECTS

| NAME | STATUS |
|---|---|
| Monarch Butterfly *Danaus plexippus*<br>There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/9743<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/TZS5O3TP3BEZXFPIUZICKRUK7Q/documents/generated/11271.pdf | Proposed Threatened |
| Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus*<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/7850 | Threatened |

## CRUSTACEANS

| NAME | STATUS |
|---|---|
| Vernal Pool Fairy Shrimp *Branchinecta lynchi*<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/498<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/TZS5O3TP3BEZXFPIUZICKRUK7Q/documents/generated/11271.pdf | Threatened |
| Vernal Pool Tadpole Shrimp *Lepidurus packardi*<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/2246 | Endangered |

NAME STATUS

General project design guidelines:
https://ipac.ecosphere.fws.gov/project/TZS5O3TP3BEZXFPIUZICKRUK7Q/documents/generated/11271.pdf

# CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

# IPAC USER CONTACT INFORMATION

Agency: Dokken Engineering
Name: Katie Jacobson
Address: 110 Blue Ravine Rd #200
City: Folsom
State: CA
Zip: 95630
Email kjacobson@dokkenengineering.com
Phone: 9168449581

# Appendix B. CNDDB Species List

# Selected Elements by Common Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

**Query Criteria:** Quad IS (Rio Linda (3812164) OR Citrus Heights (3812163) OR Folsom (3812162) OR Sacramento East (3812154) OR Buffalo Creek (3812152) OR Carmichael (3812153) OR Rocklin (3812172) OR Roseville (3812173) OR Pleasant Grove (3812174))

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **Ahart's dwarf rush**<br>*Juncus leiospermus var. ahartii* | PMJUN011L1 | None | None | G2T1 | S1 | 1B.2 |
| **Alkali Meadow**<br>*Alkali Meadow* | CTT45310CA | None | None | G3 | S2.1 | |
| **Alkali Seep**<br>*Alkali Seep* | CTT45320CA | None | None | G3 | S2.1 | |
| **American badger**<br>*Taxidea taxus* | AMAJF04010 | None | None | G5 | S3 | SSC |
| **American bumble bee**<br>*Bombus pensylvanicus* | IIHYM24260 | None | None | G3G4 | S2 | |
| **An andrenid bee**<br>*Andrena subapasta* | IIHYM35210 | None | None | G1G2 | S1S2 | |
| **bank swallow**<br>*Riparia riparia* | ABPAU08010 | None | Threatened | G5 | S3 | |
| **big-scale balsamroot**<br>*Balsamorhiza macrolepis* | PDAST11061 | None | None | G2 | S2 | 1B.2 |
| **Boggs Lake hedge-hyssop**<br>*Gratiola heterosepala* | PDSCR0R060 | None | Endangered | G2G3 | S2 | 1B.2 |
| **Brandegee's clarkia**<br>*Clarkia biloba ssp. brandegeeae* | PDONA05053 | None | None | G4G5T4 | S4 | 4.2 |
| **burrowing owl**<br>*Athene cunicularia* | ABNSB10010 | None | Candidate Endangered | G4 | S2 | SSC |
| **California black rail**<br>*Laterallus jamaicensis coturniculus* | ABNME03041 | None | Threatened | G3T1 | S2 | FP |
| **California linderiella**<br>*Linderiella occidentalis* | ICBRA06010 | None | None | G2G3 | S2S3 | |
| **Cooper's hawk**<br>*Astur cooperii* | ABNKC12040 | None | None | G5 | S4 | WL |
| **Crotch's bumble bee**<br>*Bombus crotchii* | IIHYM24480 | None | Candidate Endangered | G2 | S2 | |
| **double-crested cormorant**<br>*Nannopterum auritum* | ABNFD01020 | None | None | G5 | S4 | WL |
| **dwarf downingia**<br>*Downingia pusilla* | PDCAM060C0 | None | None | GU | S2 | 2B.2 |
| **Elderberry Savanna**<br>*Elderberry Savanna* | CTT63440CA | None | None | G2 | S2.1 | |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **ferruginous hawk**<br>*Buteo regalis* | ABNKC19120 | None | None | G4 | S3S4 | WL |
| **giant gartersnake**<br>*Thamnophis gigas* | ARADB36150 | Threatened | Threatened | G2 | S2 | |
| **golden eagle**<br>*Aquila chrysaetos* | ABNKC22010 | None | None | G5 | S3 | FP |
| **grasshopper sparrow**<br>*Ammodramus savannarum* | ABPBXA0020 | None | None | G5 | S3 | SSC |
| **great blue heron**<br>*Ardea herodias* | ABNGA04010 | None | None | G5 | S4 | |
| **great egret**<br>*Ardea alba* | ABNGA04040 | None | None | G5 | S4 | |
| **hairy water flea**<br>*Dumontia oregonensis* | ICBRA23010 | None | None | G1G3 | S1 | |
| **hispid salty bird's-beak**<br>*Chloropyron molle ssp. hispidum* | PDSCR0J0D1 | None | None | G2T1 | S1 | 1B.1 |
| **legenere**<br>*Legenere limosa* | PDCAM0C010 | None | None | G2 | S2 | 1B.1 |
| **merlin**<br>*Falco columbarius* | ABNKD06030 | None | None | G5 | S3S4 | WL |
| **midvalley fairy shrimp**<br>*Branchinecta mesovallensis* | ICBRA03150 | None | None | G2 | S2S3 | |
| **Northern Claypan Vernal Pool**<br>*Northern Claypan Vernal Pool* | CTT44120CA | None | None | G1 | S1.1 | |
| **Northern Hardpan Vernal Pool**<br>*Northern Hardpan Vernal Pool* | CTT44110CA | None | None | G3 | S3.1 | |
| **Northern Volcanic Mud Flow Vernal Pool**<br>*Northern Volcanic Mud Flow Vernal Pool* | CTT44132CA | None | None | G1 | S1.1 | |
| **northwestern pond turtle**<br>*Actinemys marmorata* | ARAAD02031 | Proposed Threatened | None | G2 | SNR | SSC |
| **osprey**<br>*Pandion haliaetus* | ABNKC01010 | None | None | G5 | S4 | WL |
| **pallid bat**<br>*Antrozous pallidus* | AMACC10010 | None | None | G4 | S3 | SSC |
| **pincushion navarretia**<br>*Navarretia myersii ssp. myersii* | PDPLM0C0X1 | None | None | G2T2 | S2 | 1B.1 |
| **purple martin**<br>*Progne subis* | ABPAU01010 | None | None | G5 | S3 | SSC |
| **Red Bluff dwarf rush**<br>*Juncus leiospermus var. leiospermus* | PMJUN011L2 | None | None | G2T2 | S2 | 1B.1 |
| **Ricksecker's water scavenger beetle**<br>*Hydrochara rickseckeri* | IICOL5V010 | None | None | G2? | S2? | |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **Sacramento Orcutt grass**<br>*Orcuttia viscida* | PMPOA4G070 | Endangered | Endangered | G1 | S1 | 1B.1 |
| **Sanford's arrowhead**<br>*Sagittaria sanfordii* | PMALI040Q0 | None | None | G3 | S3 | 1B.2 |
| **silver-haired bat**<br>*Lasionycteris noctivagans* | AMACC02010 | None | None | G4 | S3S4 | |
| **slender Orcutt grass**<br>*Orcuttia tenuis* | PMPOA4G050 | Threatened | Endangered | G2 | S2 | 1B.1 |
| **song sparrow ("Modesto" population)**<br>*Melospiza melodia pop. 1* | ABPBXA3013 | None | None | G5T3?Q | S3? | SSC |
| **spicate calycadenia**<br>*Calycadenia spicata* | PDAST1P090 | None | None | G3? | S3 | 1B.3 |
| **steelhead - Central Valley DPS**<br>*Oncorhynchus mykiss irideus pop. 11* | AFCHA0209K | Threatened | None | G5T2Q | S2 | SSC |
| **stinkbells**<br>*Fritillaria agrestis* | PMLIL0V010 | None | None | G3 | S3 | 4.2 |
| **Swainson's hawk**<br>*Buteo swainsoni* | ABNKC19070 | None | Threatened | G5 | S4 | |
| **tricolored blackbird**<br>*Agelaius tricolor* | ABPBXB0020 | None | Threatened | G3 | S2 | SSC |
| **valley elderberry longhorn beetle**<br>*Desmocerus californicus dimorphus* | IICOL48011 | Threatened | None | G3T3 | S3 | |
| **Valley Needlegrass Grassland**<br>*Valley Needlegrass Grassland* | CTT42110CA | None | None | G3 | S3.1 | |
| **vernal pool fairy shrimp**<br>*Branchinecta lynchi* | ICBRA03030 | Threatened | None | G3 | S3 | |
| **vernal pool tadpole shrimp**<br>*Lepidurus packardi* | ICBRA10010 | Endangered | None | G3 | S3 | |
| **western ridged mussel**<br>*Gonidea angulata* | IMBIV19010 | None | None | G3 | S2 | |
| **western spadefoot**<br>*Spea hammondii* | AAABF02020 | Proposed Threatened | None | G2G3 | S3S4 | SSC |
| **western yellow-billed cuckoo**<br>*Coccyzus americanus occidentalis* | ABNRB02022 | Threatened | Endangered | G5T2T3 | S1 | |
| **white-tailed kite**<br>*Elanus leucurus* | ABNKC06010 | None | None | G5 | S3S4 | FP |

**Record Count: 57**

# Appendix C. CNPS Species List

CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

## Search Results

**13** matches found. Click on scientific name for details

Search Criteria: , CRPR is one of [**1A:1B:2A:2B:3**] , Quad is one of [**3812164:3812163:3812162:3812172:3812173:3812174:3812154:3812153:3812152**]

| ▲ COMMON NAME | SCIENTIFIC NAME | FAMILY | LIFEFORM | BLOOMING PERIOD | FED LIST | STATE LIST | GLOBAL RANK | STATE RANK | CA RARE PLANT RANK | CA ENDEMIC | DATE ADDED | PHOTO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ahart's dwarf rush | *Juncus leiospermus* var. *ahartii* | Juncaceae | annual herb | Mar-May | None | None | G2T1 | S1 | 1B.2 | Yes | 1984-01-01 |  © 2004 Carol W. Witham |
| big-scale balsamroot | *Balsamorhiza macrolepis* | Asteraceae | perennial herb | Mar-Jun | None | None | G2 | S2 | 1B.2 | Yes | 1974-01-01 |  ©1998 Dean Wm. Taylor |
| Boggs Lake hedge-hyssop | *Gratiola heterosepala* | Plantaginaceae | annual herb | Apr-Aug | None | CE | G2G3 | S2 | 1B.2 | | 1974-01-01 |  ©2004 Carol W. Witham |
| dwarf downingia | *Downingia pusilla* | Campanulaceae | annual herb | Mar-May | None | None | GU | S2 | 2B.2 | | 1980-01-01 |  © 2013 Aaron Arthur |
| hispid salty bird's-beak | *Chloropyron molle* ssp. *hispidum* | Orobanchaceae | annual herb (hemiparasitic) | Jun-Sep | None | None | G2T1 | S1 | 1B.1 | Yes | 1974-01-01 | No Photo Available |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| legenere | *Legenere limosa* | Campanulaceae | annual herb | Apr-Jun | None | None | G2 | S2 | 1B.1 | Yes | 1974-01-01 |  © 2025 Adam Searcy |
| pincushion navarretia | *Navarretia myersii* ssp. *myersii* | Polemoniaceae | annual herb | Apr-May | None | None | G2T2 | S2 | 1B.1 | Yes | 1994-01-01 |  © 2020 Leigh Johnson |
| Red Bluff dwarf rush | *Juncus leiospermus* var. *leiospermus* | Juncaceae | annual herb | Mar-Jun | None | None | G2T2 | S2 | 1B.1 | Yes | 1974-01-01 |  ©2016 Dylan Neubauer |
| Sacramento Orcutt grass | *Orcuttia viscida* | Poaceae | annual herb | Apr-Jul(Sep) | FE | CE | G1 | S1 | 1B.1 | Yes | 1974-01-01 |  © Rick York and CNPS |
| Sanford's arrowhead | *Sagittaria sanfordii* | Alismataceae | perennial rhizomatous herb (emergent) | May-Oct(Nov) | None | None | G3 | S3 | 1B.2 | Yes | 1984-01-01 |  ©2013 Debra L. Cook |
| slender Orcutt grass | *Orcuttia tenuis* | Poaceae | annual herb | May-Sep(Oct) | FT | CE | G2 | S2 | 1B.1 | Yes | 1974-01-01 |  © 2013 Justy Leppert |
| spicate calycadenia | *Calycadenia spicata* | Asteraceae | annual herb | May-Sep | None | None | G3? | S3 | 1B.3 | | 2023-04-05 |  © 2023 Christopher Bronny |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Suisun Marsh aster | *Symphyotrichum lentum* | Asteraceae | perennial rhizomatous herb | (Apr)May-Nov | None | None | G2 | S2 | 1B.2 | Yes | 1974-01-01 | No Photo Available |

Showing 1 to 13 of 13 entries

Go to top

**Suggested Citation:**

California Native Plant Society, Rare Plant Program. 2026. Rare Plant Inventory (online edition, v9.5.1). Website https://www.rareplants.cnps.org [accessed 12 March 2026].

}

# Appendix D. NMFS Species List

**From:** Katie Jacobson
**To:** nmfs.wcrca.specieslist@noaa.gov
**Subject:** Arcade Creek Trail Project NMFS List
**Date:** Thursday, March 12, 2026 1:19:00 PM
**Attachments:** image001.png

---

Quad Name **Citrus Heights**

Quad Number **38121-F3**

## ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - **X**
SRWR Chinook Salmon ESU (E) - **X**
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - **X**
Eulachon (T) -
sDPS Green Sturgeon (T) -

## ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat - **X**
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

## ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

## ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

## ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

**Essential Fish Habitat**

Coho EFH -
Chinook Salmon EFH - **X**
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult Monica DeAngelis**
**monica.deangelis@noaa.gov**
**562-980-3232**

MMPA Cetaceans -
MMPA Pinnipeds -

Thank you,

**Katie Jacobson**
Biologist/Environmental Planner |
Dokken Engineering
**Phone**: 916.858.0642
**Email**: kjacobson@dokkenengineering.com
110 Blue Ravine Road, Suite 200 | Folsom, CA 95630
www.dokkenengineering.com

## Appendix E. Reference Photographs



Photograph 1. Representative of the eastern ephemeral tributary which flows northeast within the BSA with oak woodland vegetation community upland of the channel (facing southwest, October 17, 2025).



Photograph 2. Representative of the western ephemeral tributary which flows northwest within the BSA with oak woodland and annual grassland vegetation communities upland of the channel (facing northwest, October 17, 2025).



Photograph 1. Representative of the western water quality/detention basin, south of Costco. No water was present at the time of the biological survey, and the vegetation within the basin appeared recently trimmed (facing south, October 17, 2025).



Photograph 2. Representative of the eastern water quality/detention basin, southeast of Walmart. Water was present and the cattails and tules appeared recently trimmed (facing southwest, October 17, 2025).



Photograph 3. Representative of the northern portion of the eastern water quality/detention basin. This area is dominated by willows and cottonwood trees (facing southwest, October 17, 2025).



Photograph 4. Representative of the existing informal dirt trail that runs through the oak woodland vegetation community within the BSA (facing east, October 17, 2025).



Photograph 5. Representative of Arcade Creek within the BSA, water was present but not flowing at the time of the survey. Also shows potentially suitable basking habitat for NWPT (facing east, October 17, 2025).



Photograph 6. Representative of Arcade Creek as it passes beneath the pedestrian bridge in the western portion of the BSA. There is existing RSP along the creek at this location (facing south, October 17, 2025).



Photograph 7. Representative of the riparian woodland vegetation community along Arcade Creek within the BSA (facing northwest, October 17, 2025).



Photograph 8. Representative of one of the elderberry shrub clusters observed within the riparian woodland vegetation community within the BSA (facing west, October 17, 2025).



Photograph 9. Representative of one of the elderberry shrub clusters observed within the riparian woodland vegetation community within the BSA (facing northwest, October 17, 2025).



Photograph 10. Representative of an exit hole found on the above elderberry shrub cluster observed within the riparian woodland vegetation community (facing northwest, October 17, 2025).



Photograph 11. Representative of the urban areas within the BSA, showing the apartment complex in the northeastern portion of the BSA as well as landscaped grass and planted trees (facing west, October 17, 2025).



Photograph 12. Representative of the urban areas within the BSA, showing the back parking lot of Walmart (facing east, October 17, 2025).



Photograph 13. Representative of the urban areas within the BSA, showing Sylvan Road (facing southwest, October 17, 2025).



Photograph 14. Representative of Arcade Creek and its riparian woodland vegetation community (facing southeast, October 17, 2025).

# Appendix F. OHWM Datasheet

# Arid West Ephemeral and Intermittent Streams OHWM Datasheet

**Project:** Arcade Crk Trail Extension
**Project Number:** 3907
**Stream:** Arcade Creek
**Investigator(s):** Katie Jacobson, Caroline Clarkson
**Date:** 10/17/25 **Time:** 11am
**Town:** Citrus Heights **State:** CA
**Photo begin file#:** **Photo end file#:**

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

**Location Details:** Arcade Creek within the Stock Ranch Preserve

**Projection:** UTM **Datum:** NAD83
**Coordinates:** 38.687998, -121.295812

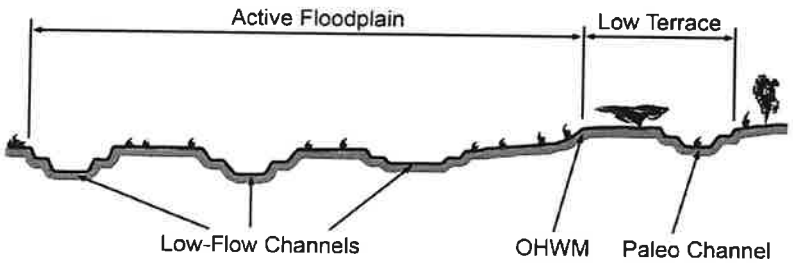
**Potential anthropogenic influences on the channel system:** Trash + homeless encampments along creek bank; existing RSP near ped. bridge, adjacent development (commercial + residential). Adjacent detention basins

**Brief site description:** The stream is within the City of Citrus Heights within the Stock Ranch Preserve. Perennial stream channel (Arcade Creek) w an ephemeral tributary. Riparian woodland habitat on banks of channel (mature + dense)

**Checklist of resources (if available):**

- [X] Aerial photography
  Dates:
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [ ] Soils maps
- [ ] Rainfall/precipitation maps
- [ ] Existing delineation(s) for site
- [X] Global positioning system (GPS)
- [X] Other studies: LIDAR
- [ ] Stream gage data
  Gage number:
  Period of record:
  - [ ] History of recent effective discharges
  - [ ] Results of flood frequency analysis
  - [ ] Most recent shift-adjusted rating
  - [ ] Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

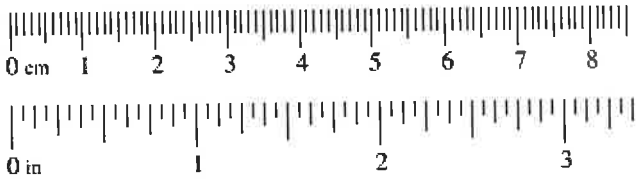



**Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:**

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - [X] Mapping on aerial photograph
   - [X] Digitized on computer
   - [X] GPS
   - [X] Other: LIDAR

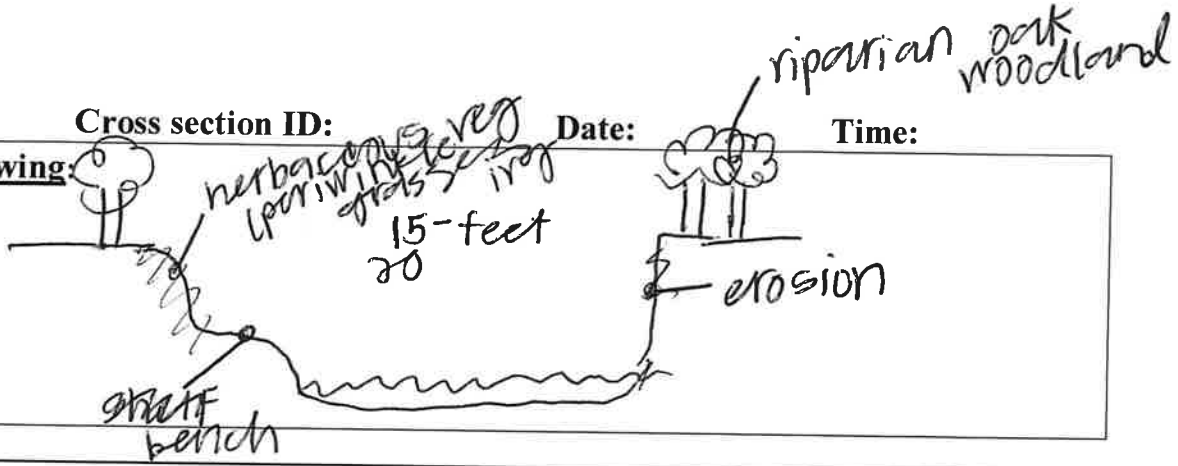
## Wentworth Size Classes

| Inches (in) | Millimeters (mm) | Wentworth size class | |
|---|---|---|---|
| 10.08 | 256 | Boulder | |
| | | Cobble | Gravel |
| 2.56 | 64 | Pebble | |
| 0.157 | 4 | Granule | |
| 0.079 | 2.00 | Very coarse sand | |
| 0.039 | 1.00 | Coarse sand | |
| 0.020 | 0.50 | Medium sand | Sand |
| 1/2 0.0098 | 0.25 | Fine sand | |
| 1/4 0.005 | 0.125 | Very fine sand | |
| 1/8 0.0025 | 0.0625 | Coarse silt | |
| 1/16 0.0012 | 0.031 | Medium silt | |
| 1/32 0.00061 | 0.0156 | Fine silt | Silt |
| 1/64 0.00031 | 0.0078 | Very fine silt | |
| 1/128 0.00015 | 0.0039 | Clay | Mud |



**Project ID:** **Cross section ID:** **Date:** **Time:**

**Cross section drawing:**




## OHWM

**GPS point:** 38.689502°N -121.291716°W

**Indicators:**

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☒ Break in bank slope
- ☐ Other: exposed roots
- ☐ Other: slope erosion

**Comments:** steeply incised banks (up to 90°); evidence of erosion along banks. Water present but not flowing. Mature riparian woodland dominated by oaks. Apprx. 15-20 feet wide @ OHWM but channel gets up to 60 feet wide. One ephemeral tributary splits off Arcade Creek.

## Floodplain unit:

☐ Low-Flow Channel ☒ Active Floodplain ☐ Low Terrace

**GPS point:** 38.689502°N -121.291716°W

**Characteristics of the floodplain unit:**

Average sediment texture: silt

Total veg cover: 85 % Tree: 60 % Shrub: 10 % Herb: 15 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☒ Late (herbaceous, shrubs, mature trees)

**Indicators:**

- ☐ Mudcracks
- ☐ Ripples
- ☒ Drift and/or debris
- ☒ Presence of bed and bank
- ☒ Benches
- ☐ Soil development
- ☒ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

**Comments:** Defined break in bank slope, catalpa trees in bed of channel, periwinkle + blackberry understory on banks + riparian woodland on upper banks.

# Arid West Ephemeral and Intermittent Streams OHWM Datasheet

**Project:** Arcade Creek Trail Extension **Date:** 10/17/25 **Time:** 12pm
**Project Number:** 3407 **Town:** Citrus Heights **State:** CA
**Stream:** Arcade creek tributary **Photo begin file#:** **Photo end file#:**
**Investigator(s):** Katie Jacobson, Caroline Clarkson

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

**Location Details:** Arcade creek tributary within Stock Ranch Preserve

**Projection:** UTM **Datum:** NAD83
**Coordinates:** 36.689164, -121.272972

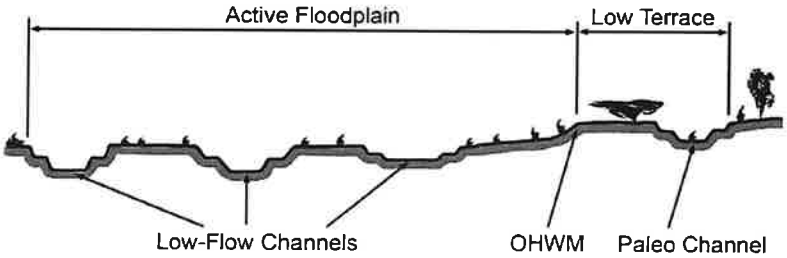
**Potential anthropogenic influences on the channel system:** Adjacent development (residential + commercial); trash in channel + along banks.

**Brief site description:** Within the city of Citrus Heights in highly developed area. Tributary to Arcade creek mainstem = perennial channel.

**Checklist of resources (if available):**

- [X] Aerial photography
  Dates:
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [X] Soils maps
- [ ] Rainfall/precipitation maps
- [ ] Existing delineation(s) for site
- [X] Global positioning system (GPS)
- [X] Other studies: LIDAR
- [ ] Stream gage data
  Gage number:
  Period of record:
  - [ ] History of recent effective discharges
  - [ ] Results of flood frequency analysis
  - [ ] Most recent shift-adjusted rating
  - [ ] Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

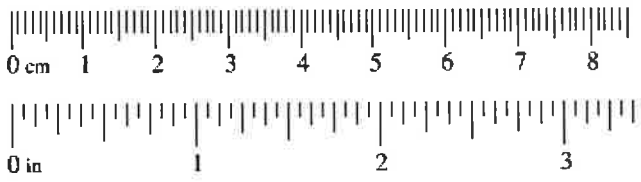



**Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:**

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - [X] Mapping on aerial photograph
   - [X] Digitized on computer
   - [X] GPS
   - [X] Other: LIDAR

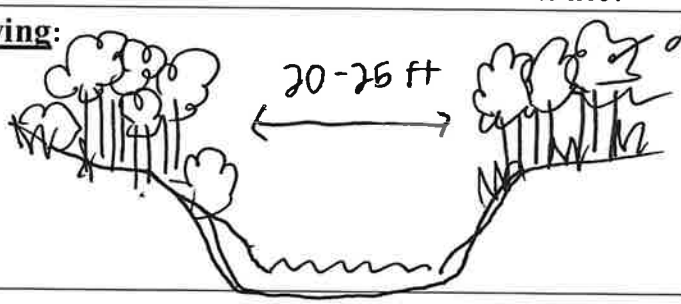
## Wentworth Size Classes

| Inches (in) | Millimeters (mm) | Wentworth size class | |
|---|---|---|---|
| 10.08 | 256 | Boulder | Gravel |
| 2.56 | 64 | Cobble | Gravel |
| 0.157 | 4 | Pebble | Gravel |
| 0.079 | 2.00 | Granule | Gravel |
| 0.039 | 1.00 | Very coarse sand | Sand |
| 0.020 | 0.50 | Coarse sand | Sand |
| 1/2 0.0098 | 0.25 | Medium sand | Sand |
| 1/4 0.005 | 0.125 | Fine sand | Sand |
| 1/8 0.0025 | 0.0625 | Very fine sand | Sand |
| 1/16 0.0012 | 0.031 | Coarse silt | Silt |
| 1/32 0.00061 | 0.0156 | Medium silt | Silt |
| 1/64 0.00031 | 0.0078 | Fine silt | Silt |
| 1/128 0.00015 | 0.0039 | Very fine silt | Silt |
| | | Clay | Mud |



**Project ID:** **Cross section ID:** **Date:** **Time:**

**Cross section drawing:**




## OHWM

**GPS point:** 36.689164, -121.292992

**Indicators:**

- ☐ Change in average sediment texture
- ☒ Change in vegetation species
- ☒ Change in vegetation cover
- ☒ Break in bank slope (75°)
- ☒ Other: exposed roots
- ☒ Other: slope erosion

**Comments:** Steeply incised banks; water present but not flowing; dense, mature oak riparian corridor. Approximately 20-25 ft wide @ OHWM. splits of mainstem Arcade creek + dead ends at residential development to the north.

**Floodplain unit:** ☐ Low-Flow Channel ☒ Active Floodplain ☐ Low Terrace

**GPS point:** ~~[illegible]~~ 36.689164, -121.292992

**Characteristics of the floodplain unit:**

Average sediment texture: silt

Total veg cover: 90 % Tree: 80 % Shrub: 5 % Herb: 5 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☒ Late (herbaceous, shrubs, mature trees)

**Indicators:**

- ☐ Mudcracks
- ☐ Ripples
- ☒ Drift and/or debris
- ☒ Presence of bed and bank
- ☐ Benches
- ☒ Soil development
- ☒ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

**Comments:** Entire tributary ~220 feet long from its confluence w Arcade creek. Defined break in bank slope + dense, mature riparian corridor

# Appendix G. CDFW Region 2 Fisheries Biologist Coordination

| | |
|---|---|
| **From:** | Burson, Skyler@Wildlife |
| **To:** | Katie Jacobson |
| **Cc:** | Dorienne Mendoza; Hanna Nottnagel; Tran, Harvey@Wildlife |
| **Subject:** | RE: Fish Inquiry Sacramento County - Arcade Creek EFH/Presence of Anadromous Fish |
| **Date:** | Friday, January 23, 2026 3:06:15 PM |
| **Attachments:** | image002.png<br>image003.png |

You don't often get email from skyler.burson@wildlife.ca.gov. Learn why this is important

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for looping me into this string Harvey.

Hi Katie,

The potential for listed fish species to occur in this section of Arcade/Cripple Creeks is very low. I've received unverified reports of steelhead (likely hatchery fish) in the lower portions of Arcade Creek as recent as last November following a large flow event. Regarding non-listed salmonid presence, this past November an unknown number of adult fall-run Chinook salmon did enter Cripple Creek (this is the first time many long-term residents of the creek had seen salmon before). In early December 2025, I rescued one adult and collected a head from one adipose fin-clipped carcass, after extracting the CWT it was determined that specific fish was a 2-year old from Coleman National Fish Hatchery.

I do agree with your assessment of this particular system below. Cripple Creek specifcally is a dead-end for any straying salmonids attempting to spawn there. Given the small chance fish were able to spawn successfully in the limited to no availabe habitat, any juveniles would not survive the spring conditions on their way out to the Sacramento River.

I hope this information helps and please feel free to reach out to me directly if you would like to discuss further.

Thank you,
Skyler Burson
Environmental Scientist – District Biologist
North Central Region (Region 2) – Anadromous Fisheries

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

1701 Nimbus Road, Rancho Cordova, CA 95670
Skyler.Burson@wildlife.ca.gov | Phone: 1-916-906-2289

---

**From:** Tran, Harvey@Wildlife <Harvey.Tran@Wildlife.ca.gov>
**Sent:** Friday, January 23, 2026 1:22 PM

**To:** Katie Jacobson <KJacobson@dokkenengineering.com>
**Cc:** Dorienne Mendoza <DMendoza@dokkenengineering.com>; Hanna Nottnagel <HNottnagel@dokkenengineering.com>; Burson, Skyler@Wildlife <Skyler.Burson@wildlife.ca.gov>
**Subject:** RE: Fish Inquiry Sacramento County - Arcade Creek EFH/Presence of Anadromous Fish

Hi Katie,

Thank you for reaching out. Skyler is the District Fisheries Biologist for the area, so he will be able to help you out with your question. I have CCed him on this email and he will reach out to you as his convenience.

Thanks,

**Harvey Tran**
Senior Environmental Scientist (Specialist)
California Department of Fish and Wildlife
Region 2 - North Central Region
1701 Nimbus Road, Rancho Cordova, CA 95670
Habitat Conservation Program
(916) 358-4035
harvey.tran@wildlife.ca.gov

---

**From:** Katie Jacobson <KJacobson@dokkenengineering.com>
**Sent:** Friday, January 23, 2026 12:34 PM
**To:** Tran, Harvey@Wildlife <Harvey.Tran@Wildlife.ca.gov>
**Cc:** Dorienne Mendoza <DMendoza@dokkenengineering.com>; Hanna Nottnagel <HNottnagel@dokkenengineering.com>; Wildlife Fisheries <Fisheries@wildlife.ca.gov>
**Subject:** RE: Fish Inquiry Sacramento County - Arcade Creek EFH/Presence of Anadromous Fish

WARNING: This message is from an external source. Verify the sender and exercise caution when clicking links or opening attachments.

Hey Harvey,

I hope you are doing well.

Dokken Engineering is working with the City of Cirtus Heights on the Arcade–Cripple Creek Trail (Sylvan Road to Stock Ranch Road) Extension Project. We are currently in the environmental approval phase of the project, and we are reaching out to better understand the potential for listed anadromous fish species, such as Central Valley spring-run Chinook salmon ESU and California Central Valley steelhead DPS to occur in this section of Arcade Creek (see attached google earth pin).

Based on our research, including review of the City of Sacramento's Existing Conditions

and Assessment Report and Stream Corridor Management Plan for the Arcade Creek Watershed, CNDDB occurrences, and habitat assessments of the site, it is our understanding that Chinook salmon and steelhead trout have not been reported in Arcade Creek for over 20 years. However, we wanted to connect with local CDFW fisheries biologists to confirm this determination and/or inquire about any more recent data that may be available.

This portion of Arcade Creek is also identified as Essential Fish Habitat (EFH) for Chinook salmon, although it lacks key features such as complex channels, spawning habitat, thermal refugia, etc. However, our overall conclusion regarding potential for occurrence for these species will help determine if any consultations will be required for the project.

Would you be able to direct us to the appropriate local fisheries biologist, or advise on the best point of contact to address this question?

Please let me know if you have questions or need more information.

Thank you for your time and assistance,

**Katie Jacobson**
Biologist/Environmental Planner |
Dokken Engineering
**Phone**: 916.858.0642
**Email**: kjacobson@dokkenengineering.com
110 Blue Ravine Road, Suite 200 | Folsom, CA 95630
www.dokkenengineering.com

---

**From:** MacLeod, Ian@Wildlife <Ian.MacLeod@Wildlife.ca.gov>
**Sent:** Friday, January 23, 2026 11:23 AM
**To:** Katie Jacobson <KJacobson@dokkenengineering.com>; Tran, Harvey@Wildlife <Harvey.Tran@Wildlife.ca.gov>
**Cc:** Dorienne Mendoza <DMendoza@dokkenengineering.com>; Hanna Nottnagel <HNottnagel@dokkenengineering.com>; Wildlife Fisheries <Fisheries@wildlife.ca.gov>
**Subject:** RE: Fish Inquiry Sacramento County - Arcade Creek EFH/Presence of Anadromous Fish

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Hi Katie,
thank you for your inquiry. I'm including Harvey Tran in this email. He is the CDFW staff

person who handles permitting for Sacramento County. My work is focused almost exclusively on Butte County but Harvey should be able to assist you.
Regards,

**Ian MacLeod**, Senior Environmental Scientist
California Department of Fish and Wildlife, Region 2

---

**From:** Katie Jacobson <KJacobson@dokkenengineering.com>
**Sent:** Thursday, January 22, 2026 2:35 PM
**To:** MacLeod, Ian@Wildlife <Ian.MacLeod@Wildlife.ca.gov>
**Cc:** Dorienne Mendoza <DMendoza@dokkenengineering.com>; Hanna Nottnagel <HNottnagel@dokkenengineering.com>; Wildlife Fisheries <Fisheries@wildlife.ca.gov>
**Subject:** Fish Inquiry Sacramento County - Arcade Creek EFH/Presence of Anadromous Fish

Some people who received this message don't often get email from kjacobson@dokkenengineering.com. Learn why this is important

WARNING: This message is from an external source. Verify the sender and exercise caution when clicking links or opening attachments.

Hi Ian,

My name is Katie Jacobson, and I am a biologist working with the City of Citrus Heights on the Arcade–Cripple Creek Trail (Sylvan Road to Stock Ranch Road) Extension Project. We are currently in the environmental approval phase of the project, and we are reaching out to better understand the potential for listed anadromous fish species, such as Central Valley spring-run Chinook salmon ESU and California Central Valley steelhead DPS to occur in this section of Arcade Creek (see attached google earth pin).

Based on our research, including review of the City of Sacramento's Existing Conditions and Assessment Report and Stream Corridor Management Plan for the Arcade Creek Watershed, CNDDB occurrences, and habitat assessments of the site, it is our understanding that Chinook salmon and steelhead trout have not been reported in Arcade Creek for over 20 years. However, we wanted to connect with local CDFW fisheries biologists to confirm this determination and/or inquire about any more recent data that may be available.

This portion of Arcade Creek is also identified as Essential Fish Habitat (EFH) for Chinook salmon, although it lacks key features such as complex channels, spawning habitat, thermal refugia, etc. However, our overall conclusion regarding potential for occurrence for these species will help determine if any consultations will be required for the project.

Would you be able to direct us to the appropriate local fisheries biologist, or advise on the best point of contact to address this question?

For reference, I have attached a Google Earth point showing the project reach of Arcade Creek, which extends from the pedestrian bridge to the east side of Sylvan Road.

Thank you for your time and assistance.

Best regards,

**Katie Jacobson**
Biologist/Environmental Planner |
Dokken Engineering
**Phone**: 916.858.0642
**Email**: kjacobson@dokkenengineering.com
110 Blue Ravine Road, Suite 200 | Folsom, CA 95630
www.dokkenengineering.com

# APPENDIX D: Native American Consultation

**Native American Consultation Log**
**ARCADE-CRIPPLE CREEK TRAIL (SYLVAN TO STOCK RANCH) EXTENSION PROJECT**

| Affiliation | Name | Contact Date | Contact Type | Response/Information |
|---|---|---|---|---|
| Native American Heritage Commission | *Pricilla Torres-Fuentes, Cultural Resource Analyst* | 10.24.2025 | Email | Requested a Sacred Lands File (SLF) search and a list of contacts to consult with for the Project area. |
| | | 10.27.2025 | Email | Pricilla Torres-Fuentes, NAHC Cultural Resource Analyst, responded to the inquiry and indicated that the SLF was negative. A list of Native American individuals or groups in the area was also provided. |
| Buena Vista Rancheria of Me-Wuk Indians | *Rhonda Morningstar, Chairperson* | 01.07.2026 | Mail | Joint AB52 and Section 106 Project Notification Letter mailed. |
| | | 03.03.2026 | Email | Follow-up sent. |
| Colfax-Todds Valley Consolidated Tribe | *Clyde Prout, Chairperson, Pamela Cubbler, Vice Chairperson, and Preservation Cultural Department* | 01.07.2026 | Mail | Joint AB52 and Section 106 Project Notification Letter mailed. |
| | | 03.03.2026 | Email | Follow-up sent. |
| Ione Band of Miwok Indians | *Sara D. Setshwaelo, Chairperson* | 01.07.2026 | Mail | Joint AB52 and Section 106 Project Notification Letter mailed. |
| | | 03.03.2026 | Email | Follow-up sent. |
| Nashville Enterprise Miwok-Maidu-Nishinam Tribe | *Cosme A. Valdez, Chairperson* | 01.07.2026 | Mail | Joint AB52 and Section 106 Project Notification Letter mailed. |
| | | 03.03.2026 | Email | Follow-up sent. |
| Shingle Springs Band of Miwok Indians | *Kara Perry, Director of Site Protection and Mariah Mayberry, Site Protection Coordinator.* | 01.07.2026 | Mail | Joint AB52 and Section 106 Project Notification Letter mailed. |
| | | 03.03.2026 | Email | Follow-up sent. |
| | | 3.04.2026 | Email | On March 4, 2026, Ms. Perry responded that consultation had been requested and a site visit was scheduled. Daniel Kehrer, City of Citrus Heights Engineer, responded on March 5, 2026 that two trail segments are in the environmental process for the City and that the current segment was different from the segment that the tribe had previously requested consultation and a site visit for. Additional correspondence clarified that the tribe could visit both trail segments during the scheduled visit. On March 12, 2026, the tribe surveyed the project site. |

**Native American Consultation Log**
**ARCADE-CRIPPLE CREEK TRAIL (SYLVAN TO STOCK RANCH) EXTENSION PROJECT**

| Affiliation | Name | Contact Date | Contact Type | Response/Information |
|---|---|---|---|---|
| TSI-AKIM Maidu of the Taylorsville Rancheria | *Ben Cunningham, Tribal Council Member and Ben Cunningham-Summerfield, Cultural Advisor.* | 01.07.2026 | Mail | Joint AB52 and Section 106 Project Notification Letter mailed. |
| | | 03.03.2026 | Email | Follow-up sent. |
| United Auburn Indian Community of the Auburn Rancheria | *Josef Fore, Tribal Historic Preservation Officer* | 01.07.2026 | Online | Joint AB52 and Section 106 Project Notification Letter sent via online portal at https://www.auburnrancheria.com/programs-services/tribal-preservation/ |
| | *Anna Starkey, Cultural Regulatory Manager* | 01.23.2026 | Email | Anna Starkey, Cultural Regulatory Manager UAIC, sent an email to Daniel Kehrer, City of Citrus Heights Principle Civil Engineer, replying to the Project Notification letter. Ms. Starkey indicated the UAIC had identified the project area as potentially culturally sensitive and would like to formally consult on the project under AB52. As part of consultation, the Tribe requested to conduct a survey for the identification of Tribal Cultural Resources (TCRs). Ms. Starkey indicated once the identification of TCRs was complete, the Tribe would provide their recommendations and mitigation measures.<br><br>Mr. Kehrer replied acknowledging the receipt of the consultation request, provided additional information on access to the project area, and indicated that the City was free for meeting if the Tribe identified additional coordination was required during identification of the TCRs. |
| | *Luz Salazar, Cultural Regulatory Coordinator* | 01.26.2026 & 01.27.2026 | Email | On Monday, 01.26.2026, Luz Salazar, Cultural Regulatory Coordinator at UAIC, reached out via email to Mr. Kehrer to coordinate a tribal survey. Mr. Salazar indicated the Tribe would like to conduct their survey on February 3rd and asked if that day was reasonable.<br><br>On Tuesday, 01.27.2026, Mr. Kehrer replied indicating that there was no issue with the proposed date of survey. Mr. Kehrer asked if the Tribe would like him to schedule the consultant archaeologist to join the Tribe on the survey. Mr. Salazar replied that the Tribe had staff archaeologists available to join him on survey, and therefore the Tribe did not require the consultant archaeologists to be present. Mr. Kehrer replied indicating his understanding and reiterating that the City was available for a meeting after the survey if needed. |

**Native American Consultation Log**
**ARCADE-CRIPPLE CREEK TRAIL (SYLVAN TO STOCK RANCH) EXTENSION PROJECT**

| Affiliation | Name | Contact Date | Contact Type | Response/Information |
|---|---|---|---|---|
| | *Anna Starkey, Cultural Regulatory Manager* | 03.04.2026 | Email | Ms. Starkey emailed Mr. Kehrer on March 4, 2026 and conveyed that the tribal survey was negative for Tribal Cultural Resources (TCR). The tribe also provided language, including background, methods and results, and mitigation measures, to be included in the CEQA TCR section and stated that consultation could be considered closed. Mr. Kehrer responded on March 9, 2026 agreeing to incorporate the tribe's language and stated that the City could provide the opportunity for the tribe to monitor initial ground disturbance but could not offer compensation for such work. |
| | | 03.10.2026 | Email | Mr. Kehrer emailed Ms. Starkey to state the City is in agreement regarding the language of proposed TCR measures 2 and 3 and will incorporate into their CEQA document. Mr. Kehrer stated that compensated Tribal monitoring, as proposed in TCR measure 1, was not possible as the City considered monitoring without identified resources as consultation, which is not compensated by the City. Mr. Kehrer provided the City's standard CEQA measures and letter explaining compensation. |
| | | 03.11.2026 | Email | Ms. Starkey emailed Mr. Kehrer to state that the UAIC does not consider Tribal monitoring as consultation but instead sees it as mitigation under CEQA. Ms. Starkey also stated that the City standard measures, specifically TCR measure 2, needed to be revised to acknowledge that Tribal, and not just archaeological, values should be utilized for determining TCR significance of discoveries.<br><br>Ms. Starkey requested a meeting to discuss further. |
| | | 03.11.2026 | Email | Mr. Kehrer responded that the UAIC provided language for TCR measure 2 would be utilized in place of the City's standard measures. Mr. Kehrer also stated that he would respond soon with meeting availability.<br><br>Consultation regarding CEQA TCR measures is ongoing between the City, who is the CEQA lead agency, and the UAIC. |

**Native American Consultation Log**
**ARCADE-CRIPPLE CREEK TRAIL (SYLVAN TO STOCK RANCH) EXTENSION PROJECT**

| Affiliation | Name | Contact Date | Contact Type | Response/Information |
|---|---|---|---|---|
| Wilton Rancheria | *Steven Hutchason, Tribal Historic Preservation Officer, Michelle St. Clair, Executive Director of Cultural Preservation, and Cultural Preservation Department* | 01.07.2026 | Mail | Joint AB52 and Section 106 Project Notification Letter mailed. |
| | *Michelle St. Clair, Executive Director of Cultural Preservation* | 02.03.2026 | Email | Michelle St. Clair, Executive Director of Cultural Preservation, Wilton, replied to Daniel Kehrer, City of Citrus Heights Principle Civil Engineer via email and attached response letter indicating that the tribe would like to open formal consultation for the project.<br><br>The attached response letter included a general overview of the United States Government to Government Consultation Process with The Tribe and included a request for any cultural resources assessments or other assessments that have been completed on all or part of the project's area of potential effect (APE), and area surrounding the APE. Tribal requests of note include the Tribe's request to be present at any field investigation survey conducted on the Applicant's behalf and the request to be notified prior to any geotechnical testing. Please see entire letter further in this Appendix for full details of the Tribe's requests.<br><br>Mr. Kehrer replied indicating that the Tribe's comments and requests were recorded and would be incorporated in the project mitigation measures. Mr. Kehrer indicated that the City would like to schedule a field survey or virtual consultation meeting and inquired about the Tribe's preferred timing of the meeting relative to the preparation of the cultural documents. Mr. Kehrer stated that the City has time to meet in the next week or two if the Tribe was interested. Mr. Kehrer also indicated that Geotechnical testing is planned in the next couple weeks, and once the date of testing was scheduled the tribe would be notified.<br><br>Koshua, Wilton Rancheria Cultural Preservation Department replied to Mr. Kehrer stating that if the cultural resource surveys had not been |

**Native American Consultation Log**
**ARCADE-CRIPPLE CREEK TRAIL (SYLVAN TO STOCK RANCH) EXTENSION PROJECT**

| Affiliation | Name | Contact Date | Contact Type | Response/Information |
|---|---|---|---|---|
| | | | | completed the Tribe would like to join. The Tribe indicated that they would also like to review the cultural report once it is completed and then set up a virtual meeting. Mr. Kehrer replied that surveys had not been conducted, and looped in Amy Baker, Dokken Engineering, to help coordinate a survey time with the consultant archaeologists. |
| | *Kosha, Cultural Preservation Department* | 02.04.2026 – 02.13.2026 | Email | Via several emails between the City of Citrus Heights, the consultant archaeologists, and members of the Tribe, February 23rd was chosen as the survey date. Individuals joining the survey include Michelle Campbell, consultant archaeologist, Steffanie Lui, City of Citrus Heights Planning Department, and Venesa Kremer, Wilton Rancheria. For full details of the planning related communication, please see email chain later this this Appendix. |
| | *Venesa Kremer, Wilton Rancheria* | 02.23.2026 | Field Survey | Michelle Campbell, consultant archaeologist, Steffanie Lui, City of Citrus Heights Planning Department, and Venesa Kremer, Wilton Rancheria conducted a survey of the project area. No concerns from the Wilton Rancheria were expressed at this time. |

# APPENDIX E: Hazardous Waste Initial Site Assessment

# INITIAL SITE ASSESSMENT REPORT



## Arcade Cripple Creek Trail
## Sylvan to Stock Ranch Extension Project
## Citrus Heights, California

***PREPARED FOR:***

**DOKKEN ENGINEERING**
**110 BLUE RAVINE ROAD, SUITE 200**
**FOLSOM, CALIFORNIA 95630**

***ON BEHALF OF:***

**THE CITY OF CITRUS HEIGHTS**
**6360 FOUNTAIN SQUARE DRIVE**
**CITRUS HEIGHTS, CALIFORNIA 95621**

***PREPARED BY:***

**GEOCON CONSULTANTS, INC.**
**3160 GOLD VALLEY DRIVE, SUITE 800**
**RANCHO CORDOVA, CALIFORNIA 95742**

**GEOCON PROJECT NO. S3208-05-01**

**MARCH 2026**

GEOCON
CONSULTANTS, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. S3208-05-01
February 26, 2026
*Revised March 17, 2026*

City of Citrus Heights
6360 Fountain Square Drive
Citrus Heights, California 95621

Attn: Daniel Kehrer, Principal Civil Engineer

Subject: INITIAL SITE ASSESSMENT REPORT
ARCADE CRIPPLE CREEK TRAIL - SYLVAN TO STOCK RANCH EXTENSION PROJECT
CITRUS HEIGHTS, SACRAMENTO COUNTY, CALIFORNIA

Mr. Kehrer:

In accordance with the *Standard Agreement for Professional Services,* executed on December 31, 2025, between Dokken Engineering (Dokken, the Client) and Geocon Consultants, Inc. (Geocon), we performed an Initial Site Assessment (ISA) of the proposed Arcade Cripple Creek Trail (ACCT) - Sylvan to Stock Ranch Extension Project (the Project Area) in Citrus Heights, California. The enclosed report describes the ISA and presents our findings, opinions, and conclusions.

We performed the ISA for Dokken on behalf of the City of Citrus Heights (the City), to assess the Project Area for the potential presence of recognized environmental conditions as defined by the American Society for Testing and Materials *Designation E 1527-21, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*.

We appreciate the opportunity to have performed this ISA for Dokken on behalf of the City of Citrus Heights. Please contact us if you have any questions concerning the report and our findings or if we may be of further service.

Sincerely,

**GEOCON CONSULTANTS, INC.**

Lauren Fordyce Pitner

Lauren Fordyce-Pitner
Staff Scientist

Josh Ewert, PG
Senior Geologist

# TABLE OF CONTENTS

INITIAL SITE ASSESSMENT REPORT PAGE

1.0 INTRODUCTION ..... 1
1.1 Purpose and Definitions ..... 1
1.2 Scope of Services ..... 4
1.3 Report Limitations ..... 5
2.0 PROJECT AREA DESCRIPTION ..... 6
2.1 Location and Legal Description ..... 6
2.2 Project Area and Vicinity General Characteristics ..... 6
2.2.1 Topography ..... 6
2.2.2 Geologic Conditions ..... 6
2.2.3 Soil Conditions ..... 7
2.2.4 Hydrologic and Hydrogeologic Conditions ..... 7
2.3 Current and Planned Uses of the Project Area ..... 7
2.4 Current Uses of Adjoining Properties ..... 8
3.0 RECORDS REVIEW ..... 9
3.1 Standard Environmental Record Sources ..... 9
3.1.1 Project Area ..... 10
3.1.2 Offsite Properties ..... 10
3.2 Orphan Summary ..... 10
3.3 Other Environmental Record Sources ..... 10
3.3.1 GeoTracker and EnviroStor ..... 10
3.3.2 California Geologic Energy Management Division ..... 11
3.3.3 National Pipeline Mapping System ..... 11
4.0 HISTORICAL USE ..... 11
4.1 Aerial Photographs ..... 11
4.2 Topographic Maps ..... 13
4.3 City Directories ..... 14
5.0 SITE RECONNAISSANCE ..... 15
5.1 Methodology and Limiting Conditions ..... 15
5.2 Project Area Setting ..... 15
5.3 Onsite Survey ..... 15
5.4 Offsite Survey ..... 16
5.5 Features, Activities, Uses, and Conditions Not Observed to Be Present ..... 16
6.0 FINDINGS AND CONCLUSIONS ..... 18
7.0 REFERENCES ..... 19
8.0 QUALIFICATIONS ..... 20

FIGURES

1. Project Area Location Map
2. Project Area Plan

PHOTOGRAPHS (1 through 20)

# TABLE OF CONTENTS (CONTINUED)

APPENDICES
A. Project Plan
B. EDR Radius Map
C. EDR Historical Aerial Photographs
D. EDR Historical Topographic Maps
E. EDR City Directories

# INITIAL SITE ASSESSMENT REPORT

## 1.0 INTRODUCTION

Geocon Consultants, Inc. (Geocon) has performed an Initial Site Assessment (ISA) of the proposed Arcade Cripple Creek Trail (ACCT) - Sylvan to Stock Ranch Extension Project (the Project Area) in Citrus Heights, California. We performed the ISA for Dokken Engineering (Dokken, the Client) on behalf of the City of Citrus Heights (the City) to assess the Project Area for the potential presence of recognized environmental conditions (REC), as defined by the American Society for Testing and Materials (ASTM) *Designation E 1527-21 – Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* prior to proceeding with construction of the ACCT.

This report describes the ISA methodology and presents our findings, opinions, and conclusions. The report is organized as follows:

- Section 1.0 provides a description of the purpose and objectives of the ISA, defines terms, and describes the ISA services, limitations, and identified data gaps;
- Section 2.0 describes the Project Area's physical setting and conditions;
- Section 3.0 summarizes readily available records for the Project Area and surrounding properties that we obtained from regulatory and administrative agencies and other sources;
- Section 4.0 describes the historical use of the Project Area and surrounding area ascertained from historical records and information sources;
- Section 5.0 describes the Project Area and surrounding properties and facilities from our observations during the Project Area reconnaissance;
- Section 6.0 presents our findings and conclusions regarding RECs and recommendations for further environmental assessment, if any;
- Section 7.0 lists the references cited in this ISA report; and
- Section 8.0 provides a qualifications statement from the environmental professional responsible for the ISA and report.

### 1.1 Purpose and Definitions

Dokken requested this ISA to determine the potential presence of environmental concerns and contaminated properties within or in the vicinity of the Project Area that may impact construction of the proposed trail improvements. The ISA was performed in general accordance with *Caltrans Initial Site Assessment Guidance Document* (Geomatrix, 2006) and project-specific scoping.

The purpose of the ISA was to identify evidence or indications of RECs, or other qualified RECs, at the Project Area as defined by the ASTM *Designation E 1527-21*. ASTM *Designation E 1527-21* defines an REC as "(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A de minimis condition is not a recognized environmental condition." De minimis conditions are further described as "a condition related to a release that generally does not present a threat to human health or the environment and generally would not be the subject of the enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a de minimis condition is not a recognized environmental condition nor a controlled recognized environmental condition."

"Release" refers to an unauthorized release of a petroleum product or hazardous substance to the environment - i.e., the ground surface, soil, soil vapor, groundwater, or surface water on the site. De minimis conditions are further described as "a condition related to a release that generally does not present a threat to human health or the environment and generally would not be the subject of the enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a de minimis condition is not a recognized environmental condition nor a controlled recognized environmental condition."

ASTM *Designation E1527-21* also defines "historical" and "controlled" RECs (HREC and CREC, respectively). An HREC is defined as "a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations)." A CREC is defined as "recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations)." An HREC is generally not an REC if a property meets current standards for unrestricted residential use. A CREC remains an REC by definition when a property does not meet the unrestricted residential use requirement unconditionally.

We define a "potential environmental concern" as a past use of the Project Area or adjoining or adjacent property that may have involved the use, storage, and/or release of hazardous substances or petroleum products that could have impacted the Project Area, but for which there are no records or other information to confirm that use, storage, or release. An example would be the possible application of pesticides to an agricultural field (i.e., irrigated row crop or orchard), but for which there are no records of such application or confirmation from a knowledgeable person (i.e., Project Area owner/occupant/operator) that pesticides were used.

As of July 8, 2024, the United States Environmental Protection Agency (EPA) has designated two types of per- and polyfluoroalkyl substances (PFAS) as hazardous substances under CERCLA. PFAS has been used since the 1940s for use in or manufacturing of a wide range of industrial and consumer products, including but not limited to clothing, carpets, fabrics, food packaging, cookware, and firefighting foams. Due to their persistent and versatile properties, PFAS have become so widespread that they are now commonly found in a broad array of products and environmental settings. The EPA's PFAS Enforcement and Compliance History Online (ECHO) database, one of the PFAS databases that we reviewed as part of this assessment, tracks industry sectors that potentially handle or release PFAS. Enforcement is designed to target those entities that are significantly contributing to PFAS pollution, such as manufacturers, industrial users, and federal facilities. Given the pervasive presence of PFAS, consultants could identify PFAS-related RECs in nearly every Phase I ESA. This practice would undoubtedly raise concerns for lenders, buyers, and sellers, potentially complicating or even terminating real estate transactions. Additionally, it presents challenges for consultants in recommending, conducting, and evaluating PFAS-related assessments (i.e., Phase II ESAs) that may not be necessary or required. Therefore, for purposes of this assessment, we will rely on cited resources (such as federal, state, and local regulatory databases and records and Client-provided and site owner[s] information about site use) to evaluate whether the site and/or a nearby property has been involved in the manufacturing, use, storage, treatment, transportation, or disposal of PFAS.

The Code of Federal Regulations (CFR) *Standards and Practices for All Appropriate Inquiries* (AAI; CFR Title 40, Part 312) identifies ASTM *Designation E 1527-21* as an acceptable guidance document for performing a Phase I ESA (and updates) that satisfies the federal requirements for AAI under Sections 101(35)(B)(ii) and (iii) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The purpose of AAI is to meet some of the requirements to qualify for certain landowner liability protections under CERCLA.

The following principles are an integral part of ASTM *Designation E 1527-21*:

- "**Uncertainty Not Eliminated** - No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a subject property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a subject property, and this practice recognizes reasonable limits of time and cost."

- "**Not Exhaustive** - All Appropriate Inquiries does not mean an exhaustive assessment of a property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an environmental site assessment and the reduction of uncertainty about unknown conditions resulting from additional information."

- "**Level of Inquiry is Variable** - Not every property will warrant the same level of assessment. Consistent with good commercial and customary standards and practices as defined at 42 U.S.C. § 9601(35)(B), the appropriate level of environmental site assessment will be guided by the type of property subject to assessment, the expertise and risk tolerance of the user, future intended uses of the subject property disclosed to the environmental professional, and the information developed in the course of the inquiry."

- **"Comparison with Subsequent Inquiry** - It should not be concluded or assumed that an inquiry was not all appropriate inquiries merely because the inquiry did not identify recognized environmental conditions in connection with a subject property. Environmental site assessments must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent environmental site assessments should not be considered valid standards to judge the appropriateness of any prior assessment based on hindsight, new information, use of developing technology or analytical techniques, or other factors."

- **"Point in Time** - The environmental site assessment is based upon conditions at the time of completion of the individual environmental site assessment elements."

## 1.2 Scope of Services

Geocon's Proposal SA-25-0350-P-GT, dated May 13, 2025 (revised May 18, 2025), describes our ISA services. We performed the scope of services outlined in the proposal. The main components of the ISA and their objectives, as specified by the referenced standards, include the following:

- **Physical Setting:** We reviewed various references to obtain information concerning the topographic, geologic, and hydrologic/hydrogeologic characteristics of the Project Area and vicinity. Such information may be indicative of the direction and/or extent that a contaminant could be transported in the event of a spill or release on or near the Project Area.

- **Records Review:** We reviewed publicly available federal, state, and local regulatory agency records to obtain information that could potentially help identify RECs at or potentially affecting the Project Area.

- **Project Area History:** We reviewed historical information sources to assess previous uses of the Project Area and surrounding area and identify those that could have led to RECs on the Project Area. Those information sources included historical aerial photographs and topographic maps, and city directories.

- **Project Area Reconnaissance:** We performed a reconnaissance to observe Project Area uses and conditions for evidence or indications of RECs. We viewed adjoining and adjacent offsite properties and features solely from the vantage of the Project Area and public thoroughfares.

## 1.3 Report Limitations

We prepared this ISA report exclusively for Dokken and the City. The information obtained is only relevant for the latest of the dates of the records reviewed, the latest Project Area visit, and completion of interviews with governmental officials and/or Project Area owner(s), occupant(s), and/or operator(s) as cited in Section 1.2.

Dokken and the City should recognize that an ISA is not a comprehensive Project Area characterization and should not be construed as such. The findings and conclusions presented in this report are predicated on the Project Area reconnaissance, information in the specified regulatory records, and information regarding the historical usage of the Project Area, as presented in this report. Dokken and the City should also understand that we did not assess the Project Area for wetlands or perform testing (sample collection and analysis) for asbestos-containing building materials, lead-containing paint, lead in drinking water, radon, mercury, methane, mold, or potential naturally occurring hazards such as asbestos and arsenic as part of this ISA. The ISA did not include sample collection and laboratory analysis, nor did it include the evaluation of regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, air quality, or geologic hazards.

The information provided in this report is not meant to eliminate the risk involved in property transactions. No guarantee or warranty of the results of the ISA is implied within the intent of this report or any subsequent reports, correspondence, or consultation, either express or implied. We strived to conduct the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

# 2.0 PROJECT AREA DESCRIPTION

This section describes the location and physical characteristics of the Project Area including its size, topography, and geologic, soil, hydrologic, and hydrogeologic conditions.

## 2.1 Location and Legal Description

The Project Area is located approximately 2,000 feet south of the intersection of Auburn Boulevard and Sylvan Road in Citrus Heights, California (Figure 1).

Within the Public Land Survey System of California, the Project Area is in the southwest quarter of Section 26, Township 10 North, Range 6 East, Mount Diablo Base and Meridian.

## 2.2 Project Area and Vicinity General Characteristics

The Project Area is in a suburban area surrounded by residential and commercial properties. The Project Area includes portions of the Stock Ranch Nature Preserve, Huntington Square Apartments, Sylvan Road, and Stock Ranch Commercial Center (Figure 2).

### 2.2.1 Topography

The topography of the Project Area is relatively flat-lying with an overall gentle downward slope toward Arcade Creek. Elevations at the Project Area range from approximately 125 feet above mean sea level (MSL) to 140 feet above MSL (USGS, 2023).

### 2.2.2 Geologic Conditions

We obtained geologic information regarding the Project Area from a variety of sources including:

- *California Geology* (Harden, 2003),
- *Note 36, California Geomorphic Provinces* (California Geological Survey [CGS], 2002), and
- *Preliminary Geologic Map of the Sacramento 30' x 60' Quadrangle, California* (CGS, 2011).

Following are summaries of pertinent information obtained.

#### *2.2.2.1 Geomorphic Region*

The Project Area is located in the Great Valley geomorphic province of California. The Great Valley is a sedimentary basin between the Sierra Nevada mountains and Cascade Range to the east and the Coast Ranges to the west. The Great Valley is filled with a thick sequence of Jurassic- to Recent-age sedimentary deposits of both continental and marine origin (CGS, 2002 and Harden, 2003).

#### *2.2.2.2 Geologic Formations/Stratigraphy*

The Project Area is underlain by the Turlock Lake Formation (Pleistocene; Map ID= Qtl) which consists of arkosic alluvium with some silt and minor gravel (CGS, 2011).

### 2.2.3 Soil Conditions

The United States Department of Agriculture – Natural Resources Conservation Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx) indicates that surficial soil at the Project Area is classified as Fiddyment-Orangevale complex which is fine sandy loam to loam to sandy clay loam weathered from alluvium derived from igneous and metamorphic rock.

### 2.2.4 Hydrologic and Hydrogeologic Conditions

Arcade Creek is present along the southern portion of the Project Area and flows southeast, towards Lake Natoma.

The California Department of Water Resources (DWR) Sustainable Groundwater Management Act *Data Viewer* website (https://sgma.water.ca.gov) shows no wells within the Project Area or vicinity. The *Data Viewer* groundwater depth contour map for Spring 2025 indicates that depth to groundwater is likely between 120 and 140 feet, and that groundwater flow is to the southeast.

## 2.3 Current and Planned Uses of the Project Area

The Project Area is primarily used for outdoor recreation with numerous paved and unpaved trails along the Arcade Creek riparian area.

The city proposes to construct a 0.5-mile addition to the planned 16-mile Creek Corridor Trail Project (CCTP) as part of the Arcade-Cripple Creek Trail - Sylvan to Stock Ranch Extension Project. The Project Area will extend east from the existing Stock Ranch Trail behind the

Costco/Walmart shopping center to Sylvan Road. The proposed alignment begins south of the Walmart property boundary and proceeds east through the Stock Ranch Nature Preserve, curving south around Walmart's water quality detention basin. The alignment continues north, crossing a tributary of Arcade Creek, and traverses along the south side of the Huntington Square Apartments complex prior to connecting to Sylvan Road. The alignment terminates east of Sylvan Road at the location of a planned future trail extension segment from Sylvan Road to Mariposa Avenue. The project has independent utility and would function as a stand-alone improvement.

Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, bank protection along a segment of Arcade Creek, and an at-grade signalized pedestrian crossing at Sylvan Road. Construction activities will involve grading to achieve ADA-compliant slopes, installing the creek crossing, paving the trail, erecting the solar lighting, constructing bank protection, and adding pedestrian signal infrastructure with minor utility adjustments as needed.

The Project Area and proposed improvements will be constructed within portions of the following Sacramento County assessor's parcel numbers (APNs): 211-0870-001, 211-0870-002, 211-0870-013, 211-0270-008, 211-0280-004, 211-0870-014, and 211-0850-039.

To accommodate construction, right-of-way (ROW) acquisitions will be required from several parcels. These include a permanent easement and permit to enter (PTE) from the Sunrise Recreation & Park District and a temporary construction easement (TCE) from Walmart. An existing trail easement exists across the Huntington Square Apartments property and there is potential for this permanent easement to be modified to best incorporate the trail alignment with the physical site features.

Construction access will be provided primarily through the Walmart parking lot under a TCE, as well as a PTE for access from the Huntington Square Apartments parcel. These provisions will allow safe and efficient construction of the trail and its associated improvements. A copy of the project plan is in Appendix A.

## 2.4 Current Uses of Adjoining Properties

Stock Ranch Commercial Center, including Costco and Walmart, is located on the north adjoining property. Residential neighborhoods are present on the north, east, south, and west adjoining properties. The south adjoining property includes Stock Ranch Nature Preserve and recreational trails.

# 3.0 RECORDS REVIEW

This section summarizes information we obtained from readily available agency records pertaining to the Project Area and properties and facilities in the vicinity of the Project Area.

## 3.1 Standard Environmental Record Sources

EDR searched federal, state, and local environmental databases for the Project Area and properties/facilities within one mile of the Project Area. The following table shows the databases that list the Project Area and/or offsite properties/facilities and the total number of listed properties/facilities for each database. Databases that list no properties/facilities within one mile of the Project Area are not included in the table. A copy of *The EDR Radius Map Report with GeoCheck*, (radius report) dated January 14, 2026, is in Appendix B.

| Database Name | Search Radius (Miles) | Number of Listings |
|---|---|---|
| **FEDERAL DATABASES** | | |
| Resource Conservation and Recovery Act [RCRA] – Small Quantity Generator (RCRA-SQG) | 0.25 | 2 |
| **STATE, LOCAL, AND TRIBAL DATABASES** | | |
| Department of Toxic Substances Control [DTSC] Site Mitigation and Brownfields Reuse Program (ENVIROSTOR) | 1.0 | 2 |
| Underground Storage Tank (UST) | 0.25 | 1 |
| Leaking Underground Storage Tank (LUST) | 0.5 | 1 |
| Sacramento County Contaminated Sites (Sacramento Co. CS) | 0.5 | 1 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | |
| California Environmental Reporting System [CERS] for AST/UST regulatory program (CERS TANKS) | 0.25 | 1 |
| California Environmental Reporting System (CERS HAZ WASTE) | 0.25 | 3 |
| RCRA - Non-Generators/No Longer Regulated (RCRA NonGen/NLR) | 0.25 | 8 |
| Hazardous Waste and Substances Site List (CORTESE) | 0.5 | 1 |
| Historical Hazardous Waste & Substance Site List (HIST CORTESE) | 0.5 | 1 |
| Master Hazardous Materials Facility List (Sacramento Co. ML) | 0.25 | 5 |
| National Pollutant Discharge Elimination System (NPDES) | TP | 1 |
| Proposition 65 Records (Notify 65) | 1.0 | 1 |
| California Integrated Water Quality System (CIWQS) | TP | 1 |
| EPA Hazardous Waste Electronic Manifest System (E MANIFEST) | 0.25 | 5 |
| UST Finder Database (UST FINDER) | 0.25 | 1 |
| UST Finder Releases Database (UST FINDER RELEASE) | 0.5 | 1 |

TP = target property

### 3.1.1 Project Area

The Project Area is listed on two non-release-related databases[1] for a construction project that was terminated in 2024. These listings do not indicate the release or storage of hazardous materials and therefore, are unlikely to have caused an REC within the Project Area.

### 3.1.2 Offsite Properties

Three properties within $^1/_8$ mile of the Project Area are listed on various non-release-related databases. No properties within ¼ mile of the Project Area are listed on release-related databases, however two properties within approximately 300 feet of the Project Area are listed as hazardous waste generators (Walmart #3712) and Costco (#771). The UST Finder database indicates that four USTs are present (three 20,000-gallon tanks and one 1,500-gallon tank) at the Costco Gas Station upgradient of the Project Area. Since no releases have been reported, these two properties are unlikely to have caused an REC within the Project Area.

## 3.2 Orphan Summary

EDR's Orphan Summary identifies properties and facilities that have incomplete address information and therefore could not be accurately plotted. The Orphan Summary does not list any properties or facilities.

## 3.3 Other Environmental Record Sources

### 3.3.1 GeoTracker and EnviroStor

We reviewed information available on the California State Water Resources Control Board's (SWRCB) GeoTracker (http://geotracker.waterboards.ca.gov) and the California Department of Toxic Substances Control's (DTSC) EnviroStor (http://www.envirostor.dtsc.ca.gov/public/) online data management systems for information regarding documented environmental assessment and cleanup at the Project Area and/or properties/facilities within 1/8 mile of the Project Area. No information pertaining to the Project Area or properties/facilities within the vicinity of the Project Area is available on GeoTracker or EnviroStor.

[1] "Release" refers to an unauthorized release of a petroleum product or hazardous substance to the environment - i.e. the ground surface, soil, soil vapor, groundwater, or surface water on a property. "Release-related database" refers to those which provide information regarding an unauthorized release. "Non-release-related database" refers to those that may report use, storage, or disposal of hazardous substances and/or petroleum products or other environmental conditions, but do not report releases of such.

### 3.3.2 California Geologic Energy Management Division

The California Geologic Energy Management Division's (CalGEM) Well Finder, (https://maps.conservation.ca.gov/doggr/wellfinder/#openModal) an online petroleum (oil and natural gas) field and well mapping system, does not depict any oil or natural gas wells within the Project Area or its vicinity.

### 3.3.3 National Pipeline Mapping System

The United States Department of Transportation's (USDOT) National Pipeline Mapping System Public Map Viewer (https://pvnpms.phmsa.dot.gov/PublicViewer/), an online pipeline mapping system, does not depict any natural gas or liquid petroleum pipelines on or within ¼ mile of the Project Area (USDOT, 2025).

# 4.0 HISTORICAL USE

We evaluated the historical use of the Project Area and adjoining and adjacent properties through review of historical aerial photographs, topographic maps, and city directories provided by EDR. This section summarizes information obtained from these sources.

## 4.1 Aerial Photographs

We reviewed historical aerial photographs for the years listed in the following table for indications of past land uses that had the potential to have impacted the Project Area through the use, storage or disposal of hazardous substances and/or petroleum. The following table summarizes our observations of the Project Area and adjacent properties on the historical aerial photographs. Copies of historical aerial photographs provided by EDR are in Appendix C.

| Year | Observations | |
|---|---|---|
| | Project Area | Adjoining and Adjacent Properties |
| 1937 (1" = 500') | The Project Area was predominantly used for dry farming. A creek extended into the eastern portion of the Project Area. A road extended north to south through the eastern portion of the Project Area. | The north and west adjoining properties were mostly used for dry farming. A highway extended northeast to southwest on the north adjoining property. Rural residences, roads, and orchards were present on the northeast, east, and south adjoining properties. A creek extended east to west along the south adjoining property. |
| 1947 (1" = 500') | Conditions depicted were similar to those observed in the 1937 photograph. | Conditions depicted were similar to those observed in the 1937 photograph. |

| Year | Observations | |
|---|---|---|
| | Project Area | Adjoining and Adjacent Properties |
| 1952 (1" = 500') | Conditions depicted were similar to those observed in the 1947 photograph, except that a trail was present throughout the Project Area. | Conditions depicted were similar to those observed in the 1947 photograph, except additional rural residences were developed on the east adjoining property. |
| 1957 (1" = 500') | Conditions depicted were similar to those observed in the 1952 photograph, except that the trail was no longer present. | Conditions depicted were similar to those observed in the 1952 photograph, except that the south adjoining property was dry farmed and residential development continued on the east adjoining property. |
| 1964 (1" = 500') | Conditions depicted were similar to those observed in the 1957 photograph, except that a drainage channel flowed north to south through the western portion of the Project Area. | Conditions depicted were similar to those observed in the 1957 photograph, except that two drainage channels extended from the highway on the north adjoining property to the creek on the south adjoining property. |
| 1966, 1972, and 1984 | Conditions depicted were similar to those observed in the 1964 photograph, except that trails were present throughout the Project Area. | Conditions depicted were similar to those observed in the 1964 photograph, except that the west adjoining property and a portion of the north adjoining property, was developed with residential neighborhoods. |
| 1993 (1" = 500') | Conditions depicted were similar to those observed in the 1984 photograph, except that trees appear to have been cleared near the creek, in the southern portion of the Project Area. | Conditions depicted were similar to those observed in the 1984 photograph, except that additional residential neighborhoods were built on a portion of the north and south adjoining properties. |
| 1998 (1" = 500') | Conditions depicted were similar to those observed in the 1993 photograph, except that additional trails were present throughout the Project Area. | Conditions depicted were similar to those observed in the 1993 photograph, except that the north adjoining property appears to have been used as a park with a network of trails leading from the highway to the north, to the creek and adjoining neighborhoods. A neighborhood of residential homes was developed on the south adjoining property. |
| 2005 (1" = 500') | A trail was present east to west through the central portion of the Project Area. A drainage channel was present in the central portion of the Project Area, leading to a retention pond on the southwest adjoining property. The western portion of the Project Area was paved to create a parking lot. | A large structure and paved parking lot were present on the northwest adjoining property. The south adjoining property was developed with neighborhoods of residential homes. Retention ponds were present on the southwest and west adjoining properties. |
| 2009 (1" = 500') | The drainage channel was no longer present in the central portion of the Project Area. The western and northwestern portions of the Project Area were paved and a structure was present. | Conditions depicted were similar to those observed on the 2005 photograph. |

| Year | Observations | |
|---|---|---|
| | Project Area | Adjoining and Adjacent Properties |
| 2012, 2016, 2020, and 2024 (1" = 500') | Conditions depicted were similar to those observed on the 2009 photograph. | Conditions depicted were similar to those observed on the 2009 photograph. |

Dry farmed fields were present across the western portion of the Project Area from as early as 1937 until likely sometime in the 1950s. This type of crop cultivation suggests that pesticides were not likely applied and persistent pesticides and associated metals are not likely to be present in soil in this area. The DTSC's *Interim Guidance for Sampling Agricultural Properties (Third Revision)* dated August 7, 2008, states that "many dry-land farming fields are not treated with pesticides or infrequently treated, since the lack of water does not provide a desirable habitat for most agricultural pests. Properties that clearly qualify as dry-land farming do not need further investigation for pesticides or metals." The aerial photographs do not show features or land uses that directly suggest the presence of conditions or features within the Project Area or on adjoining and adjacent properties likely to have caused an REC within the Project Area.

### 4.2 Topographic Maps

We reviewed historical topographic maps provided by EDR for the years listed in the following table. The following table summarizes our observations of the Project Area and adjacent properties on the historical topographic maps. Copies of the historical topographic maps provided by EDR are in Appendix D.

| Year | Observations | |
|---|---|---|
| | Project Area | Adjoining and Adjacent Properties |
| 1891 (1:125,000) | A road is depicted extending north to south through the central portion of the Project Area. | A creek is depicted flowing northwest to southeast on the south adjoining property and a road is depicted extending northeast to southwest on the north adjoining property. |
| 1892-1893 (1:125,000) | Conditions depicted are similar to those on the 1891 map. | Conditions depicted are similar to those on the 1891 map. |
| 1902 (1:62,500) | Conditions depicted are similar to those on the 1893 map except the road that extends north to south is now depicted in the eastern portion of the Project Area. An unimproved road is depicted extending north to south through the western portion of the Project Area. A creek is depicted flowing throughout the Project Area. | Conditions depicted are similar to those on the 1893 map, except that two structures are present on the north adjoining property, along the road that extends northeast to southwest. Another structure is present on the south adjoining property. |

| Year | Observations | |
|---|---|---|
| | Project Area | Adjoining and Adjacent Properties |
| 1911 (1:31,680) | Conditions depicted are similar to those on the 1902 map. | Conditions depicted are similar to those on the 1902 map. |
| 1951 (1:24,000) | Conditions depicted are similar to those on the 1947 map except the road in the eastern portion of the Project Area is labeled Sylvan Road and a structure is depicted in the eastern portion of the Project Area. | Numerous structures are depicted on the east and south adjoining properties. Auburn Boulevard is labeled as the road extending northeast to southwest on the north adjoining property. The creek on the south adjoining property is labeled as Arcade Creek. |
| 1954 (1:62,500) 1967 and 1980 (1:24,000) | Conditions depicted are similar to those on the 1951 map. | Conditions depicted are similar to those on the 1951 map, except that structures part of residential neighborhoods continue to be developed on the east and west adjoining properties. |
| 1992 (1:24,000) | Conditions depicted are similar to those on the 1980 map, except that the structure in the eastern portion of the Project Area is no longer depicted. | Conditions depicted are similar to those on the 1980 map, except that roads are depicted north and south of the eastern portion of the Project Area. |
| 2012 (1:24,000) | Conditions depicted are similar to those on the 1992 map. | Conditions depicted are similar to those on the 1992 map, except that additional roads are present surrounding the Project Area. |
| 2015, 2018, 2021, and 2023 (1:24,000) | Conditions depicted are similar to those on the 2012 map. | Conditions depicted are similar to those on the 2012 map. |

The topographic maps do not depict features or land uses that directly suggest the presence of conditions or features within the Project Area or on adjoining and adjacent properties likely to have caused an REC within the Project Area

## 4.3 City Directories

EDR prepared an abstract of city directories including city, cross-reference, and telephone directory listings (Appendix E). EDR included information from directories at approximately 5-year intervals, if available, from 1963 to 2022. The city directories list commercial businesses and individual homeowners for the Project Area and adjoining and adjacent properties, none of which suggest the storage or use of large quantities of hazardous substances or petroleum products sufficient to have caused an REC within the Project Area.

# 5.0 SITE RECONNAISSANCE

This section summarizes our observations of the Project Area and surrounding properties made during the reconnaissance.

## 5.1 Methodology and Limiting Conditions

Lauren Fordyce-Pitner, Staff Scientist, with Geocon, performed the Project Area reconnaissance on January 19, 2026, by walking unaccompanied throughout the Project Area and along the boundaries to observe Project Area features and conditions. She observed adjoining and adjacent properties from the Project Area and public roads. Weather on the day of the Project Area reconnaissance was sunny with temperatures in the mid-50s°F. Photographs of various Project Area features and offsite properties are appended.

## 5.2 Project Area Setting

The Project Area is situated in an area of residential, commercial, and recreational properties.

## 5.3 Onsite Survey

The Project Area includes the southern and eastern portions of the Stock Ranch Commercial Center (behind Walmart and Costco). We observed loading docks, packing materials such as pallets, paved parking areas with staining, several shipping containers with unknown contents, a locked propane storage area, machinery, and various utilities such as irrigation, electric, and stormwater (Photos 1 through 5). While hazardous materials may be present inside the shipping containers and were observed in the propane storage tank area, we observed no evidence of spills or leaks and the shipping containers were secured and located on pavement. Therefore, it is unlikely that hazardous materials would have contaminated the surrounding soil.

The southern portion of the Project Area, beyond the Stock Ranch Commercial Center, includes the Stock Ranch Nature Preserve which is comprised of various unimproved trails (i.e., gravel, mulch, dirt) and paved trails through the Arcade Creek riparian area (Photos 6 through 8). We observed picnic tables, park benches, informational signs, art installations, debris and trash, and homeless encampments along the creek (Photos 9 and 10).

The Project Area crosses Arcade Creek, east of the Stock Ranch Commercial Center and adjacent to a pond (Photo 11). We were unable to cross the creek at this location, and a retaining wall and fence prevented access around the creek crossing (Photo 12). We drove to Huntington Square Apartments to access the northeastern portion of the Project Area. A paved trail was present behind the leasing office building and continued east towards Sylvan Road (Photos 13 and 14). We observed caution tape blocking off the area west of Sylvan Road where a fence was knocked over (Photo 15). The Project Area crosses Sylvan Road, north of the Arcade Creek Bridge (Photo 16). We observed no evidence of RECs within the Project Area.

### 5.4 Offsite Survey

Adjoining and nearby properties include residential homes, Stock Ranch Commercial Center, Stock Ranch Nature Preserve, Arcade Creek, and Sylvan Road (Photos 17 through 19). We observed no evidence of RECs on adjoining or adjacent properties.

### 5.5 Features, Activities, Uses, and Conditions Not Observed to Be Present

*ASTM Designation E1527-21* states "During the site visit, the environmental professional (or the person under the supervision or responsible charge of the environmental professional) shall look for and identify the features, activities, uses, and conditions specified in 9.4.1 through 9.4.28. Any of the specified features, activities, uses, and conditions identified in, on, or at the subject property shall be described in the report. If any of the specified features, activities, uses, or conditions are not found to be present in, on, or at the subject property, the environmental professional shall document as such in the report." The features, activities, uses and conditions that were present during our site reconnaissance are described in Sections 6.2 through 6.4. The following are features, activities, uses and conditions that were not observed to be present during the site reconnaissance:

- Past use of site;
- Past uses of adjoining properties;
- Past uses of surrounding area;
- Geologic, hydrogeologic, hydrologic, and topographic conditions that would contribute to an REC for the site from an adjoining property;
- Sewage disposal system;
- Strong, pungent, or noxious odors;

- Standing surface water and pools or sumps containing liquids likely to be hazardous substances or petroleum products;
- Drums or totes;
- Hazardous substance and petroleum product containers not in connection with identified uses;
- Polychlorinated biphenyls (PCB)-containing items;
- Heating/cooling;
- Stains or corrosion on floors, walls, or ceilings;
- Sumps;
- Pits;
- Stained soil;
- Stressed vegetation;
- Wastewater;
- Wells; and
- Septic systems or cesspools.

# 6.0 FINDINGS AND CONCLUSIONS

We have performed an ISA in general conformance with the scope and limitations of ASTM *Designation E 1527-21* and *Caltrans Initial Site Assessment Guidance* of the proposed Arcade Cripple Creek Trail - Sylvan to Stock Ranch Extension Project in Citrus Heights, California. Exceptions to, or deletions from, this practice are described in Section 1.3 (limitations). The ISA has revealed no evidence of RECs, CRECs, or significant data gaps in relation to the Project Area.

Yellow thermoplastic and paint striping that is removed during planned roadway improvements may require special handling and disposal requirements, as those applied before 2005 potentially contained lead chromate pigment (Caltrans, 2019). Given that there is no assurance that striping and markings applied before 2005 have been completely removed or worn away, traffic striping and pavement markings observed within the Project Area generally have the potential to contain lead or chromium. Traffic striping and pavement marking waste generated by this project should be managed during construction. All striping paints should be treated as lead-containing for purposes of determining the applicability of the Division of Occupational Safety and Health, Cal/OSHA, lead standard during removal activities. Used sandblasting materials or ground asphalt waste streams containing striping paint should be properly containerized and characterized to develop a waste profile prior to disposal.

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# 8.0 QUALIFICATIONS

This Phase I ESA report was prepared by Lauren Fordyce-Pitner and Josh Ewert, PG. Mrs. Fordyce-Pitner is a Staff Scientist with a BS degree in Environmental Science and has worked on a variety of environmental assessment projects.

Mr. Ewert has a BS degree in Geology and 18 years of experience in environmental investigation and remediation, including implementation of Remedial Investigation/Feasibility Study programs and soil and groundwater remedial actions for private industrial and government clients. He has managed a wide variety of projects for clients in the manufacturing, transportation, automobile, and real estate industries including Environmental Protection Agency and DTSC Superfund sites. Mr. Ewert has extensive experience in the performance of Phase II ESAs of commercial, industrial, and agricultural properties throughout California.

I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in §312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries investigation in conformance with the standards and practices set forth in 40 CFR Part 312.

Josh Ewert, PG
Senior Geologist




GEOCON
CONSULTANTS, INC.
3160 GOLD VALLEY DR - SUITE 800 - RANCHO CORDOVA, CA 95742
PHONE 916.852.9118 - FAX 916.852.9132

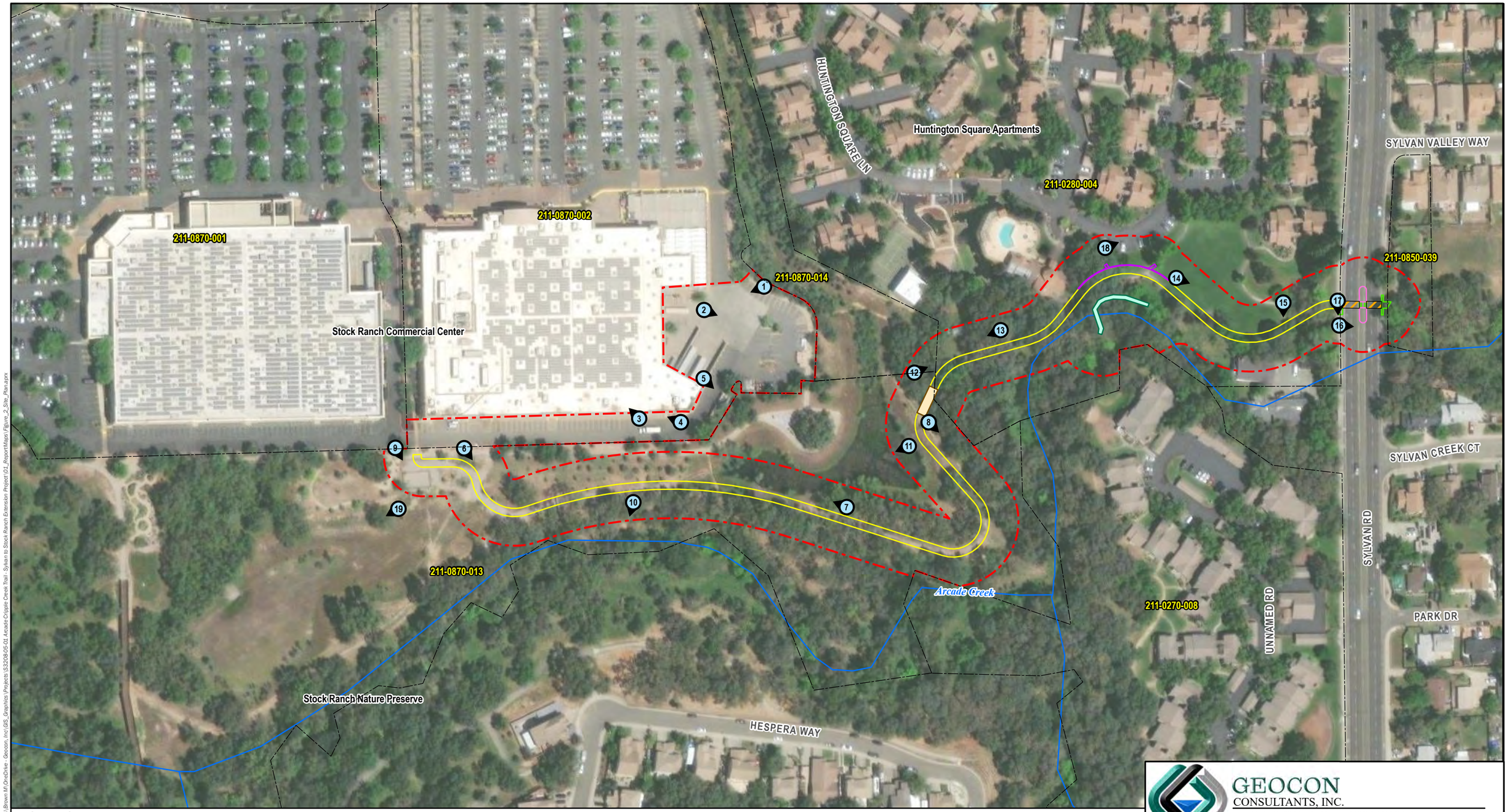
Arcade Cripple Creek Trail -
Sylvan to Stock Ranch Extension Project

Citrus Heights, Sacramento County, California

**PROJECT AREA LOCATION MAP**

| S3208-05-01 | March 2026 | Figure 1 |
|---|---|---|

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**Legend**

- Site Photograph Location and Orientation
- 211-0850-039 Assessor's Parcel Number
- Parcel Boundary
- Creeks and Streams
- Approximate Project Study Area

Project Features

- Trail Improvements
- Bridge
- Retaining Wall
- Curb Ramp
- Gabion Basket
- Pedestrian Refugee
- Pavement Marking

N

0 160

Scale in Feet

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PHONE 916.852.9118 - FAX 916.852.9132

Arcade Cripple Creek Trail-
Sylvan to Stock Ranch Extension Project
Citrus Heights, Sacramento County, California

**PROJECT AREA PLAN**

| S3208-05-01 | March 2026 | Figure 2 |
|---|---|---|

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Photo 1 — Loading docks and shipping containers located in the eastern portion of the Stock Ranch Commercial Center and northeastern portion of the Project Area.



Photo 2 — Parking lot and pallet storage area east of the loading docks.



Photo 3 — Staining on pavement in the parking lot located in the southern portion of the Stock Ranch Commercial Center and northern portion of the Project Area.



Photo 4 — View to the west of the paved area in the southern portion of the Stock Ranch Commercial Center and northern portion of the Project Area.



Photo 5 — Locked storage area which included propane tanks and pallets in the eastern portion of the Stock Ranch Commercial Center and northeastern portion of the Project Area.



Photo 6 — View to the southeast, south of the Stock Ranch Commercial Center, of a gravel trail in the southwestern portion of the Project Area.



Photo 7 — View to the west of a dirt trail in the central portion of the Project Area.



Photo 8 — View to the southeast of a dirt trail in the eastern portion of the Project Area.



Photo 9 – Picnic tables, garbage cans, educational signs, a light post, and art installation in the western portion of the Project Area, adjacent to the proposed trailhead.



Photo 10 — View to the south of Arcade Creek from the western portion of the Project Area. Trash and debris are present, and residential homes are present beyond the creek .



Photo 11 – View to the southwest of a pond. The Stock Ranch Commercial Center is present beyond the pond.



Photo 12 — View to the east where the Project Area crosses Arcade Creek and enters Huntington Square Apartments beyond the fenceline.



Photo 13 — View to the southwest of a paved trail and the fenceline along Arcade Creek from Huntington Square Apartments in the eastern portion of the Project Area.



Photo 14 — View to the southeast from Huntington Square Apartments where a paved trail extends towards Sylvan Road in the eastern portion of the Project Area.



Photo 15 — View to the south of residential homes on the adjoining property and caution tape hung from trees in the eastern portion of the Project Area.



Photo 16 — View to the east, across Sylvan Road, of the eastern portion of the Project Area and proposed location of a signalized pedestrian crossing at Arcade Creek Bridge.



Photo 17 — View to the south, from the eastern portion of the Project Area, of the Arcade Creek Bridge, Sylvan Road, and residential homes.



Photo 18 — View to the northeast of the Huntington Square Apartments on the adjoining property from the eastern portion of the Project Area.



Photo 19 — View to the southwest of the adjoining Stock Ranch Nature Preserve from the western portion of the Project Area.

# APPENDIX F: Water Quality Technical Memorandum

# Water Quality Technical Memorandum

# Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project



City of Citrus Heights, Sacramento County, California

District 3-SAC

CRP 5475(053)

March 2026

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

# Water Quality Technical Memorandum

Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project

City of Citrus Heights, California

District 3-SAC

CRP 5475(053)

**March 2026**

STATE OF CALIFORNIA

Department of Transportation

Prepared By: _____ Date: 3/5/26
Amy Bakker/Senior Environmental Planner
916-858-0642
Dokken Engineering
110 Blue Ravine Road, Suite 200
Folsom, CA 95630

Approved By:_____ Date: _____
Daniel Kehrer, Principal Civil Engineer
(916) 727-4770
City of Citrus Heights General Services Department
6360 Fountain Square Drive
Citrus Heights CA 95621

Approved By:_____ Date: _____
Caitlin Greenwood, Associate Environmental Planner
530-682-2984
Local Assistance–Environmental Support
Caltrans, District 3

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Dennis Keaton, Public Information Officer, 703 B Street Marysville, CA 95901; (916) 825-5252 (Voice) or use the California Relay Service (800) 735-2929 (TTY to Voice), (800) 735-2922 (Voice to TTY) or 711.

# EXECUTIVE SUMMARY

The City of Citrus Heights (City) proposes to construct the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project (Project), a 0.5-mile addition to the planned 16-mile Creek Corridor Trail Project (CCTP). The purpose of this Project is to close a gap in the existing trail system by replacing dirt and narrow concrete paths with an Americans with Disabilities Act (ADA) compliant Class I multi-use trail. This trail extension is needed to enhance pedestrian and bicycle connectivity, provide a safe recreational facility, and improve access through the Arcade Creek greenbelt.

The Biological Study Area (BSA) includes two aquatic features: Arcade Creek and Arcade Creek tributary (perennial stream channel) and two water quality/detention basins. Arcade Creek is the main surface water feature within the Project area that will be permanently impacted by the Project. Arcade Creek within the Project area is 303(d) listed and considerations for Total Maximum Daily Loads (TMDLs) (Caltrans 2025) for the following:

- Bifenthrin
- Copper
- Fipronil Sulfone
- Malathion
- Permethrin
- Pyrethroids
- Toxicity

Arcade Creek and the Arcade Creek tributary are also jurisdictional waters of both the U.S. and the state, whereas the associated water quality/detention basins are considered waters of the state only. These surface waters are regulated under Section 401 of the Clean Water Act (CWA), as administered by the Regional Water Quality Control Board (RWQCB), and Arcade Creek and its tributary are additionally subject to Section 404 permitting. The California Department of Fish and Wildlife (CDFW) also asserts jurisdiction over the bed, bank, and channel of these waters, as well as any associated riparian vegetation. The following permits will be obtained for the proposed Project prior to construction: Section 401 Water Quality Certification from the RWQCB, non-reporting Section 404 Nationwide Permit 14, and a Section 1602 Streambed Alteration Agreement from CDFW.

The Project would result in an increase of approximately 0.47 acre of new impervious surface, which would contribute to an increase in the volume of storm water runoff from the multi-use trail surface that could enter the drainage system and eventually the waterways within the Project. Impacts to water quality may result from sediment-laden storm water discharged into these waterways. With the inclusion of permanent treatment control Best Management Practices (BMPs), Project impacts to water quality would not be substantial.

# TABLE OF CONTENTS

**1 INTRODUCTION ..... 1**
1.1 Approach to Water Quality Assessment ..... 1
1.2 Project Description ..... 1
1.3 Project Purpose ..... 2
**2 REGULATORY SETTING ..... 6**
2.1 Federal Laws and Requirements ..... 6
2.2 State Laws and Requirements ..... 7
2.3 Regional and Local Requirements ..... 10
**3 AFFECTED ENVIRONMENT ..... 11**
3.1 General Environmental Setting ..... 11
3.2 Water Quality Objectives/Standards and Beneficial Uses ..... 16
**4 ENVIRONMENTAL CONSEQUENCES ..... 22**
4.1 Potential Impacts to Water Quality ..... 22
4.1.1 Long Term Impacts and Anticipated Changes to the Physical/Chemical Characteristics of the Aquatic Environment ..... 22
4.1.2 Anticipated Changes to the Biological Characteristics of the Aquatic Environment ..... 23
4.1.3 Anticipated Changes to the Human Use Characteristics of the Aquatic Environment ..... 23
4.1.4 Short Term Impacts During Construction ..... 25
4.2 Cumulative Impacts ..... 25
**5 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES ..... 27**
**6 REFERENCES ..... 28**
6.1 Works Cited ..... 28
6.2 Preparer(s) Qualifications ..... 30

# List of Figures

Figure 1: Project Vicinity ..... 3
Figure 2: Project Location ..... 4
Figure 3: Project Features ..... 5
Figure 4: Waters and Vegetation Communities ..... 12
Figure 5: Project Impacts ..... 24

# List of Tables

Table 1. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters . 16
Table 2. Existing and Potential Beneficial Uses ..... 19
Table 3. Arcade Creek 303(d) List ..... 21

**LIST OF APPENDICES**

Appendix A - NRCS Soil Survey

Appendix B – FEMA FIRMETTE Map

## ACRONYMS LIST

| | |
|---|---|
| ADA | Americans with Disabilities Act |
| ASBS | Areas of Special Biological Significance |
| Basin Plan | Water Quality Control Plan |
| BMPs | Best Management Practices |
| BSA | Biological Study Area |
| Caltrans | California Department of Transportation |
| CCTP | City's Creek Corridor Trail Project |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CGP | Construction General Permit |
| CIP | California Improvement Plan |
| City | City of Citrus Heights |
| COI | Change of Information |
| CWA | Clean Water Act |
| DSA | Disturbed Soil Area |
| DMP | Drainage Master Plan |
| EFH | Essential Fish Habitat |
| ESA | Environmentally Sensitive Areas |
| °F | Fahrenheit |
| FEMA | Federal Emergency Management Agency |
| General Plan | City of Citrus Heights General Plan |
| HAPC | Habitat Areas of Particular Concern |
| LEDPA | Least Environmentally Damaging Practicable Alternative |
| MS4s | Municipal Separate Storm Sewer Systems |
| msl | Mean Sea Level |
| NAL | Numeric Action Level |
| NELs | Numeric Effluent Limits |
| NEPA | National Environmental Policy Act |
| NES | Natural Environment Study |
| NOAA | National Oceanic and Atmospheric Administration |
| NOI | Notice of Intent |
| NOT | Notice of Termination |
| NPDES | National Pollutant Discharge Elimination System |
| NRCS | Natural Resources Conservation Services |
| NWPT | Northwestern Pond Turtle |
| PFMC | Pacific Fishery Management Council |
| PRDs | Permit Registration Documents |
| Project | Arcade-Cripple Creek Trail (Sylvan Road to Stock Ranch) Extension Project |
| QPEs | Qualifying Precipitation Events |
| QSD | Qualified Stormwater Developer |
| QSP | Qualified Stormwater Practitioner |
| R factor | Rainfall-runoff erosivity factor |
| RL | Risk Level |

| | |
|---|---|
| ROW | Right-of-Way |
| RUSLE | Revised Universal Soil Loss Equation |
| RWQCB | Regional Water Quality Control Board |
| SMARTS | Stormwater Multiple Application and Report Tracking System |
| SWMP | Stormwater Management Plan |
| SWPPP | Stormwater Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TMDLs | Total Maximum Daily Loads |
| U.S. EPA | United States Environmental Protection Agency |
| USACE | United States Army Corps of Engineers |
| USGS | United States Geological Survey |
| VELB | Valley Elderberry Longhorn Beetle |
| WDID | Waste Discharge Identification Number |
| WDRs | Waste Discharge Requirements |
| WPCP | Water Pollution Control Plan (or Program) |
| WQAR | Water Quality Assessment Report |

# 1 INTRODUCTION

## 1.1 Approach to Water Quality Assessment

The purpose of the Water Quality Assessment Technical Memorandum (WQAR) is to fulfill the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and to provide information for National Pollutant Discharge Elimination System (NPDES) permitting. The document includes a discussion of the proposed Project, the general environmental setting of the Project area, and the regulatory framework with respect to water quality. It also provides data on surface water and groundwater resources within the Project area and the water quality of these waters, describes water quality impairments and beneficial uses, identifies potential water quality impacts/benefits associated with the proposed Project, and recommends avoidance and/or minimization measures for potentially adverse impacts.

## 1.2 Project Description

The City of Citrus Heights proposes to construct a 0.5-mile addition to the planned 16-mile CCTP as part of the Project (Figure 1. Project Location; Figure 2. Project Vicinity). The Project is funded through the federal Carbon Reduction Program and therefore requires compliance with both NEPA and CEQA. The lead agency for CEQA compliance is the City of Citrus Heights and the federal lead agency for NEPA compliance is the California Department of Transportation (Caltrans).

The Project is located in the City of Citrus Heights and will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road. The proposed alignment begins south of the Walmart property boundary and proceeds east through the Stock Ranch Nature Preserve, curving south around Walmart's water quality detention basin. The alignment continues north, crossing a tributary of Arcade Creek, and traverses along the south side of the Huntington Square Apartments complex prior to connecting to Sylvan Road. The alignment terminates east of Sylvan Road at the location of a planned future trail extension segment from Sylvan Road to Mariposa Avenue. The Project has independent utility and would function as a stand-alone improvement.

Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, bank protection along a segment of Arcade Creek, and an at-grade signalized pedestrian crossing at Sylvan Road (Figure 3. Project Features). Construction activities will involve grading to achieve ADA-compliant slopes, installing the creek crossing, paving the trail, erecting the solar lighting, constructing bank protection, and adding pedestrian signal infrastructure with minor utility adjustments as needed.

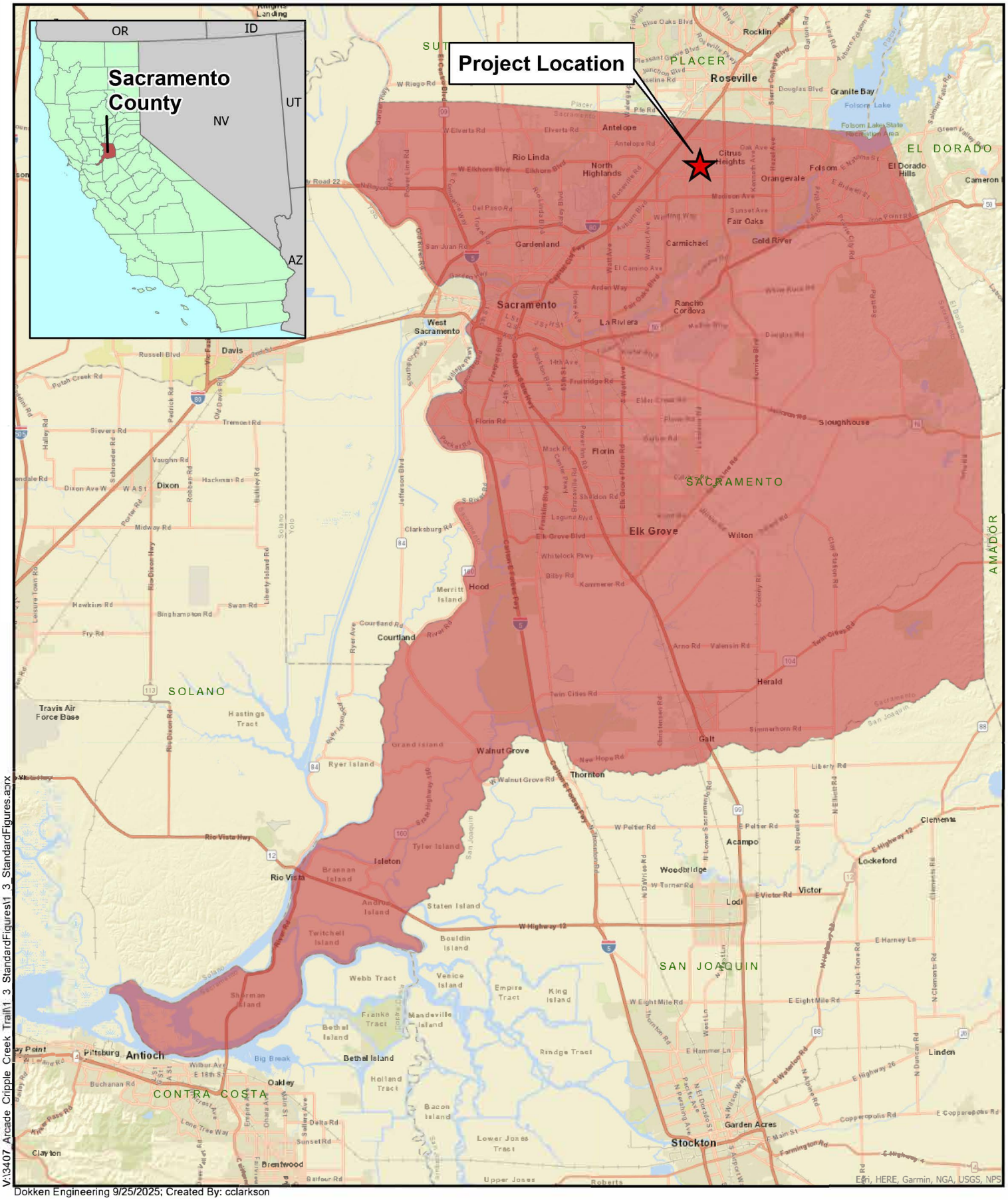
To accommodate construction, right-of-way (ROW) acquisitions will be required from several parcels. These include a permanent easement and permit to enter (PTE) from the Sunrise Recreation & Park District and a TCE from Walmart. An existing trail easement exists across the Huntington Square Apartments property and there is potential for this permanent easement to be modified to best incorporate the trail alignment with the physical site features.

Construction access will be provided primarily through the Walmart parking lot under a TCE, as well as a permit to enter for access from the Huntington Square Apartments

parcel. These provisions will allow safe and efficient construction of the trail and its associated improvements.

## 1.3 Project Purpose

The purpose of this Project is to close a gap in the existing trail system by replacing dirt and narrow concrete paths with an Americans with Disabilities Act (ADA) compliant Class I multi-use trail. This trail extension is needed to enhance pedestrian and bicycle connectivity, provide a safe recreational facility, and improve access through the Arcade Creek greenbelt.



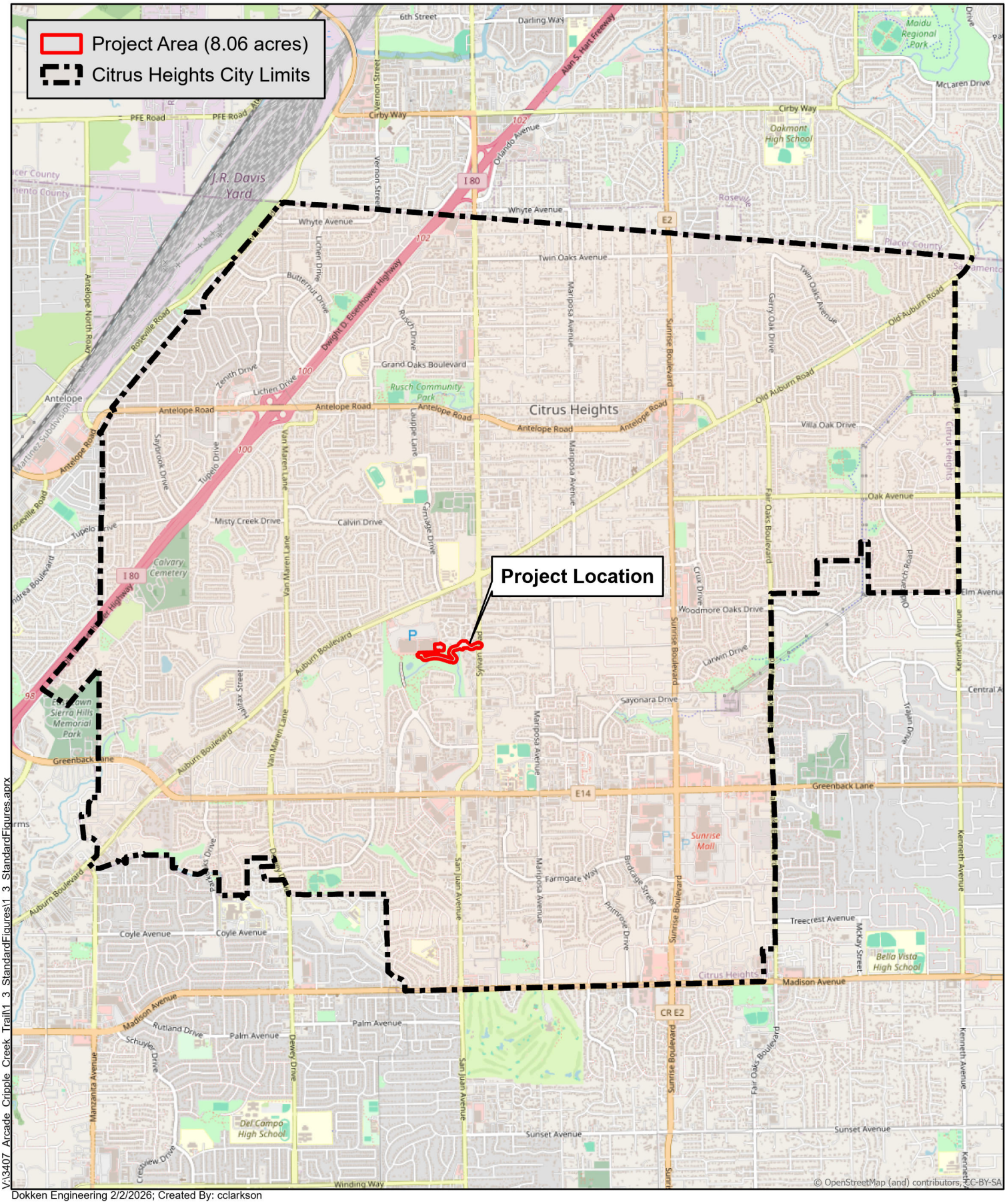

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Dokken Engineering 9/25/2025; Created By: cclarkson

0 3.5 7 Miles

**Figure 1**
**Project Vicinity**

Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Dokken Engineering 2/2/2026; Created By: cclarkson

0 1,750 3,500

Feet

**Figure 2**
**Project Location**

Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Source: Dokken Engineering 2/4/2026; Created By: kjacobson

0 75 150 Feet

**Figure 3**
**Project Features**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

# 2 REGULATORY SETTING

## 2.1 Federal Laws and Requirements

### Clean Water Act

In 1972 Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the U.S. from any point source unlawful unless the discharge is in compliance with a NPDES permit. Known today as the CWA, Congress has amended it several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. Important CWA sections are:

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S., to obtain certification from the State that the discharge would comply with other provisions of the act. (Most frequently required in tandem with a Section 404 permit request. See below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. The RWQCBs administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and MS4s.
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the USACE.

The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

### Section 404 Permitting

USACE issues two types of 404 permits: General and Standard permits. For General permits there are two types: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to authorize a variety of minor project activities with no more than minimal effects.

There are also two types of Standard permits: Individual permits and Letters of Permission. Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE’s Standard permits. For Standard permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s (EPA) Section 404 (b)(1) Guidelines (U.S. EPA CFR 40 Part 230), and whether permit approval is in the public interest. The 404(b)(1) Guidelines were developed by the U.S. EPA in conjunction with USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative that would

have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative, to the proposed discharge that would have less effects on waters of the U.S., and not have any other significant adverse environmental consequences. Per Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4.

## 2.2 State Laws and Requirements

### Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne) is the principal law governing water quality regulation in California. This statute established the State Water Resources Control Board (SWRCB) and the nine RWQCBs, which are charged with implementing its provisions. Porter-Cologne establishes a comprehensive program for the protection of water quality and the beneficial uses of water. It applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources. Porter-Cologne is found in the California Water Code beginning with Section 13000. In addition, Title 23 of the California Code of Regulations (CCR) contains administrative and regulatory elements of water quality and quantity management in California. The SWRCB was formed in 1967 when the State Water Rights Board and the SWQCB were merged by the State Legislature, based on the realization that decisions affecting water quality and water rights are inseparable. Under its dual legal authority, the SWRCB allocates rights to the use of surface water and, together with the nine RWQCBs, protects water quality in all waters of the state. The project area is located within Region 5 — the Central Valley RWQCB. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. The RWQCBs have responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. Porter-Cologne also incorporates many provisions of the CWA such as delegation to the SWRCB and RWQCBs of the National Pollutant Discharge Elimination System (NPDES) permitting program.

### State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB adjudicates water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

### National Pollutant Discharge Elimination System (NPDES) Program

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of stormwater dischargers, including MS4s. The City of Citrus Heights along with the Cities of Elk Grove, Folsom, Galt, Rancho Cordova, and Sacramento, and the County of Sacramento operate under a MS4 permit to discharge urban runoff from in their municipal jurisdictions (Order No. R5-2016-0040 with the Citrus Heights-specific General Order No. as R5-2016-0040-004 and NPDES Permit No. CAS0085324) (Central Valley RWQCB 2016). The permit covers requirements for management of hydromodification and requires that the City prepare a SWMP (also known as Stormwater Quality Improvement Plans) and impose water quality and watershed protection measures for all development projects. The intent of the WDRs in the NPDES Permit is to attain water quality standards and protection of beneficial uses consistent with the Water Quality Control Plan (Basin Plan). The NPDES permit prohibits discharges from causing violations of applicable water quality standards or resulting in conditions that create a nuisance or water quality impairment in receiving waters. The NPDES also requires every new construction project to secure a permit that implements the following measures:

- Eliminate or reduce non-stormwater discharges to stormwater systems and other waters of the nation.
- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP).
- Perform inspections of stormwater control structures and pollution prevention measures.

Stormwater quality control measures within the City of Citrus Heights are guided by the Sacramento Region Stormwater Quality Design Manual (City of Sacramento 2018). The manual outlines planning tools and requirements to reduce urban runoff pollution to the maximum extent practicable from new development and redevelopment projects, including the use of porous surfaces on roadways.

### Construction General Permit

The Construction General Permit (NPDES No. CAS000002, SWRCB Order No. 2022-0057-DWQ) and effective on September 1, 2023. The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. For all projects subject to the CGP, applicants are required to develop and implement an effective SWPPP.

By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre must comply with the provisions of the CGP. Construction activity that results in soil disturbances of less than one acre is subject to this CGP if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop SWPPPs; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the CGP.

The CGP separates projects into Risk Levels 1, 2, or 3. Risk Levels are determined during the planning and design phases and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and pre- and post-construction aquatic biological assessments during specified seasonal windows. Based on preliminary analysis, the Risk Level for this project is estimated to be a Level 1. Additional hydraulic analysis will take place prior to final design to confirm the ultimate Risk Level and extent of BMP implementation for the project.

**Section 401 Permitting**

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project would be in compliance with State water quality standards. The most common federal permit triggering 401 Certification is a CWA Section 404 permit, issued by USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

**Section 1602: Streambed Alteration Agreement**

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Preliminary notification and project review generally occurs during the environmental process. When an existing fish or wildlife resource within CDFW jurisdiction may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project

## 2.3 Regional and Local Requirements

### Regional Water Quality Control Board (RWQCB) Basin Plan

The Project is under the jurisdiction of the Central Valley RWQCB. The Central Valley RWQCB implements the Basin Plan for the California Regional Water Quality Control Board Central Valley Region: The Sacramento River Basin and the San Joaquin River Basin (Central Valley RWQCB 2019) to regulate surface and groundwater quality in the region. The Basin Plan lists beneficial uses and water quality objectives to protect resources within its jurisdiction.

### Stormwater Management Plan

In 2007, Sacramento County and the cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Roseville, and Sacramento created the Stormwater Quality Design Manual for the Sacramento and South Placer Regions. The manual describes selection measures for source pollution and stormwater treatment for new development. In 2018, the partnership updated the manual to include information from the original as well as hydromodification management and low-impact development design standards (City of Sacramento 2018).

### City of Citrus Heights Drainage Master Plan

In 2010 the City of Citrus Heights adopted a comprehensive Drainage Master Plan (DMP) to guide improvements to the existing storm drainage and flood control system. The DMP provides a range of drainage concepts intended to upgrade the City's drainage infrastructure and address identified deficiencies. Between 2012 and 2016, the City completed five phases of the DMP, prioritizing areas that lacked a defined drainage system. Six additional phases remain to be completed (DMP 2025). The DMP identifies and evaluates drainage deficiencies throughout the City and was developed to reduce or eliminate localized flooding and drainage problems. Implementation of the DMP falls within the City's Capital Improvement Program (CIP), which outlines long-term investments in infrastructure and projects designed to enhance community services and facilities. The CIP serves as a five-year budgeting and planning tool, is reviewed by the Planning Commission for consistency with the City of Citrus Heights General Plan (General Plan) and is adopted by the City Council. The Project will comply with the adopted DMP and any future updates approved prior to construction.

### City of Citrus Heights General Plan

The policies below are excerpted from the City's General Plan (City of Citrus Heights 2011a). These policies are designed to ensure that the water supply is clean and safe within the City's jurisdiction.

> **Policy 49.1**: Continue to implement floodplain zoning and undertake other actions required to comply with State and federal floodplain development requirements and maintain the City's eligibility under the National Flood Insurance Program.
>
> **Policy 49.2**: Integrate sustainable stormwater management techniques in site design to reduce stormwater runoff and control erosion.
>
> **Policy 49.3**: Require evaluation of potential flood hazards prior to approval of development projects.

**Policy 49.8**: Reduce pollutants being discharged into the drainage system to the maximum extent feasible to meet required federal National Pollution Discharge Elimination System standards.

# 3 AFFECTED ENVIRONMENT

This affected environment section describes the environmental characteristics within the proposed Project area. Population, land use, topography, regional and local hydrology, groundwater hydrology, geology/soils, biological communities, water quality standards, and beneficial uses are discussed.

## 3.1 General Environmental Setting

The Project is centrally located in the City of Citrus Heights, within Section 26, Township 10 North, Range 6 East. It is within the USGS Citrus Heights 7.5-minute topographic quadrangle. The Project area runs through the Arcade Creek greenbelt within the Sunrise Recreation and Parks District in the Stock Ranch Nature Preserve, adjacent to Van Maren Park. The proposed segment is from Sylvan Road to Stock Ranch, connecting to existing trails. The Project area includes Arcade Creek. Arcade Creek is a natural riverine corridor that flows east to west through northern Sacramento County.

### Population and Land Use

According to the U.S. Census, the City of Citrus Heights has a total population of 86,909 as of 2024 (U.S. Census 2024). The population has decreased approximately 0.8% since 2020. Land uses within the Project area are a mixture of General Commercial, Low and Medium Density Residential, and Open Space (City of Citrus Heights 2020). The undeveloped area within the Project area containing Arcade Creek is designated as Open Space and is in the Stock Ranch Nature Preserve. This preserve functions as a park for the community and includes floodways and manmade stormwater detention basins.

### Topography

The topography within the Project is flat and the elevation ranges between approximately 125 feet to 140 feet above mean sea level (msl). Appendix A. Natural Resources Conservation Service (NRCS) Custom Soil Resource Report (**Appendix A**; **NRCS 2025**) was queried for the Project, and the soil types within the BSA include Fiddyment-Orangevale complex, 2 to 8 percent slopes (95.5% of the BSA) and Fiddyment-Orangevale-Urban land complex, 2 to 8 percent slopes (4.5% of the BSA) (NRCS 2025).

### Hydrology

#### *Regional and Local Hydrology*

The Project is located within Sacramento County. The mainstem of Arcade Creek, which originates in Orangevale and flows into the Natomas East Main Drainage Canal, is approximately 16.2 miles long with a watershed area of about 29.7 square miles. It ultimately discharges to the Sacramento River. Within the BSA, the Arcade Creek channel also includes a perennial tributary which splits off from the mainstem south of Huntington Square Lane (Figure 4. Waters and Vegetation Communities). Historic aerial imagery indicates that the tributary once flowed south from Auburn Boulevard, but over time




V:\3407 Arcade_Cripple_Creek_Trail\Biology\Biology.aprx

Dokken Engineering 2/2/2026; Created By: cclarkson

0 75 150 Feet

**Figure 4**
**Waters and Vegetation Communities**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

residential development shortened the channel, leaving only a remnant of the original tributary. The Arcade Creek channel and its tributary are part of the Arcade Creek watershed, a small, urbanized watershed covering approximately 38 square miles. Surrounding land use in the Arcade Creek watershed is primarily residential and commercial with transportation infrastructure such as roads, trails and parking lots. Historically, Arcade Creek functioned as a seasonal stream that carried water predominantly during the winter and spring months. In some years, portions of the creek and its tributaries would completely dry out during the summer. With increasing urbanization, the creek transitioned to a perennial system, likely beginning around 60 years ago. Today, dry-weather flows are sustained by inputs such as landscape irrigation runoff, car washing, industrial discharges, and other non-stormwater sources, resulting in Arcade Creek maintaining continuous flow throughout the year. Most surface water within Arcade Creek is urban runoff (City of Sacramento 2003). Arcade Creek is the main surface hydrological feature in the City of Citrus Heights.

Precipitation and Climate

Sacramento County experiences a mediterranean climate consisting of hot, dry summers and cool, wet winters. The average annual high temperature is approximately 75 degrees Fahrenheit (°F), and the average annual low temperature is approximately 49°F. The region averages 18.14 inches of precipitation annually (U.S. Climate Data 2025).

Surface Water

Two aquatic feature types were observed within the BSA during the October 2025 biological survey: Arcade Creek (perennial stream channel), which was discussed above, and two manmade water quality/detention basins.

*Water Quality/Detention Basins*

During the October 2025 field survey, two water quality/detention basins were documented within the BSA. These areas are gently sloping, engineered depressions designed to capture and temporarily detain stormwater runoff.

The western basin was completely dry at the time of the survey. However, recent aerial imagery (from November 2023) indicates that the area becomes inundated with water during heavy rain events caused by stormwater runoff from the adjacent commercial and residential areas. The basin supports annual grassland habitat dominated by spikeweed (*Centromadia fitchii*) and wild oat (*Avena fatua*) which appeared to have been recently trimmed.

The eastern basin was full of water at the time of the survey. This basin is supplied by a small stream channel to the north, which collects stormwater runoff from adjacent residential homes to the east and the paved parking lot to the west. The connected stream channel originates at the homes along Gallant Circle and flows south and southeast before reaching the basin. According to historic aerial imagery, this basin tends to hold water longer than the western basin, allowing it to grow hydrophytic vegetation species such as broadleaf cattail (*Typha latifolia*), tule (*Schoenoplectus acutus* var. *occidentalis*), cottonwoods (*Populus fremontii*) and willow trees (*Salix lasiolepis, Salix gooddingii*). At the time of the survey, the cattails and tules in the channel appeared to be in poor health

and recently trimmed. The BSA contains approximately 1.89 acres (5%) of water quality/detention basins.

Because these basins are artificial ponds constructed in dry land for stormwater treatment and detention, they fall under the exclusion at 40 CFR § 120.2(b)(5) and therefore do not meet the current definition of waters of the U.S. In addition, permitting under Section 401 of the CWA is not warranted as there is little to no risk of discharge to another water body and there is no potential for the Project improvements to encroach on these features.

Areas of Special Biological Significance (ASBS)

Areas of Special Biological Significance (ASBS) are ocean areas monitored and maintained for water quality by the State Water Resources Control Board. ASBS cover much of the length of California's coastal waters. They support an unusual variety of aquatic life, and often host unique individual species. ASBS are basic building blocks for a sustainable, resilient coastal environment and economy. According to the map provided by the State Water Resources Control Board (SWRCB 2017), there are no Areas of Special Biological Significance sites within the BSA.

Floodplains

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map designates the Project area within three zones: Zone X, Zone AE, and Regulatory Floodway. Zone X signifies a minimal flood hazard area with a 0.2% annual chance of flooding. Zone AE designates areas that are within the 100-year base flood zone and have a 1% annual chance of flooding. The Regulatory Floodway is designated as a special flood hazard area within the 100-year base flood zone and a 1% annual chance of flooding (**Appendix B. FEMA FIRMette Map**).

Municipal Supply

According to the City of Citrus Heights Background Report, water supply in the City consists of both surface water and groundwater sources. Urban runoff from residential and commercial irrigation, driveway and parking lot cleaning, swimming pool draining, precipitation events, and snowmelt from the Sierra Nevada are the main sources of surface water supply in the City. However, a majority of the City's water supply comes from groundwater (City of Citrus Heights 2020b). The Sacramento County Water Agency is the water service provider within the Project area. There are no water recharge facilities within the Project area.

### *Groundwater Hydrology*

The City of Citrus Heights is located on the Fair Oaks Geologic Formation (City of Citrus Heights 2020b). This geologic formation is comprised of relatively thick deposits of silt and clay with thinner deposits of sand and gravel. The Fair Oaks Formation can yield moderate to high quantities of water, primarily dependent upon whether fine grained or coarse material is present (City of Citrus Heights 2020b). Wells to depths greater than 300 feet may encounter the underlying Mehrten Formation, with water yields roughly equivalent to the Fair Oaks Formation. Groundwater in the vicinity of Citrus Heights

generally flows to the west and ranges in depth from approximately 80 feet above msl in the east to 20 feet below msl in the west (County of Sacramento 1996).

### *Geology/Soils*

The soil types within the Project area include Fiddyment-Orangevale complex, 2 to 8 percent slopes and Fiddyment-Orangevaile-Urban land complex, 2 to 8 percent slopes (NRCS 2025). The erodibility factor (K-factor) for this area is 0.43, indicating that soils are moderately susceptible to particle detachment, and that it produces runoff at moderate rates (Caltrans 2025). The Project area is also categorized as hydrologic soil group type 'B' which consists of moderately deep and well drained soils with moderately fine to course textures (Appendix A).

## Biological Communities

### *Aquatic Habitat*

Aquatic habitat in the Project area includes Arcade Creek (perennial stream channel) and two manmade water quality/detention basins.

Special Status Species

Literature research, habitat assessments, and biological surveys determined that the Project area was potentially suitable for the following special status species: chinook Salmon Central Valley spring-run ESU (*Oncorhynchus tshawytscha* pop. 11), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus* [VELB]), song sparrow ("Modesto" population) (*Melospiza melodia* pop. 1), Swainson's hawk (*Buteo swainsoni),* northwestern pond turtle (*Actinemys marmorata* [NWPT]), and Sanford's arrowhead (*Sagittaria sanfordii*).

Stream/Riparian Habitats

The BSA contains approximately 4,465 linear feet of Arcade Creek and it's tributary (Figure 4) This segment of Arcade Creek within the BSA is bordered by riparian, annual grasslands, and urban habitat communities and flows northeast to southwest. Dominant vegetation observed within the bed and banks of Arcade Creek and its tributary includes southern catalpa trees (*Catalpa speciosa*), common knotweed (*Persicaria lapathifolia*), interior live oak trees (*Quercus wislizeni*) and Himalayan blackberry (*Rubus armeniacus*). Arcade Creek and its tributary comprise approximately 2.69 acres (7%) of the BSA.

Wetlands

Jurisdictional delineations were conducted by Dokken Engineering biologists, Caroline Clarkson and Katie Jacobson on October 17, 2025 to identify jurisdictional resources present within the BSA. No wetlands were identified during the jurisdictional delineation survey (Figure 4). Wetland delineations were conducted in accordance with technical methods outlined in the Corps of Engineers Wetlands Delineation Manual (USACE 1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008), and A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States (Lichvar 2008).

Arcade Creek is the main surface hydrological feature in the City Citrus Heights. Two aquatic feature types were observed within the BSA during the October 2025 biological survey: Arcade Creek (perennial stream channel) and two water quality/detention basins (Figure 4).

## 3.2 Water Quality Objectives/Standards and Beneficial Uses

### *Surface Waters*

Water quality is most affected by land development, agriculture, grazing, and urban runoff. Constituents found in urban runoff vary during a storm event, from event to event within a given area, and from area to area within a given watershed. Variances can be the result of differences in rainfall intensity and occurrence, geographic features, and the land use of the area, as well as vehicle traffic and the percentage of impervious surface. Furthermore, sediment runoff from construction sites without adequate erosion control measures can contribute to sediments, pesticides, fertilizers, and other pollutants to receiving waters.

As required by the Porter-Cologne Act, the Central Valley RWQCB has developed water quality objectives for waters within their jurisdiction to protect the beneficial uses of those waters and published them in their Basin Plan. The Basin Plan also establishes implementation programs to achieve these water quality objectives and requires monitoring to evaluate the effectiveness of these programs. Water quality objectives must comply with the state antidegradation policy (SWRCB 1968), which generally restricts the reduction of water quality of surface or ground waters even though such a reduction in water quality might still allow the protection of the beneficial uses associated with the water prior to the quality reduction. The Central Valley RWQCB intends to maintain this quality with enforcement of the water quality objectives summarized in Table 2. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters (Central Valley RWQCB 2019).

**Table 1. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters**

| Constituent | Water Quality Objective |
|---|---|
| Bacteria | In waters designated REC-1, the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 mL, nor shall more than 10 percent of the total number of samples taken during any 30-day period exceed 400/100 mL. |
| Biostimulatory Substances | Water shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses. |
| Chemical Constituents | Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. At a minimum, water designated MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section Consumer Acceptance Limits) and |

| Constituent | Water Quality Objective |
|---|---|
| | 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/l. (See below for specific chemical constituent objectives for specific water bodies. |
| *Cryptosporidium* and *Giardia* | Waters shall not *contain Cryptosporidium* and *Giardia* in concentrations that adversely affect the public water system component[1] of the MUN beneficial use. This narrative water quality objective for *Cryptosporidium* and *Giardia* shall be applied within the Sacramento-San Joaquin Delta and its tributaries below the first major dams and should be implemented as specified in Chapter 4 of the Basin Plan. Compliance with this objective will be assessed at existing and new public water system intakes.<br>[1] Public water system as defined in Health and Safety Code, section 116275, subdivision (h) |
| Color | Water shall be free of discoloration that causes nuisance or adversely affects beneficial uses. |
| Dissolved Oxygen | For surface water bodies outside the legal boundaries of the Delta, the monthly median of the mean daily dissolved oxygen concentration shall not fall below 85 percent of saturation in the main water mass, and the 95 percentile concentration shall not fall below 75 percent of saturation. The dissolved oxygen concentrations shall not be reduced below the following minimum levels at any time:<br>• Waters designated WARM 5.0 mg/l<br>• Waters designated COLD 7.0 mg/l<br>• Waters designated SPWN 7.0 mg/l |
| Floating Material | Water shall not contain floating material in amounts that cause nuisance or adversely affect beneficial uses. |
| Oil and Grease | Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses. |
| pH | The pH shall not be depressed below 6.5 nor raised above 8.5. |
| Pesticides | • No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.<br>• Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses.<br>• Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the Executive Officer.<br>• Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 CFR Section 131.12.).<br>• Pesticide concentrations shall not exceed the lowest levels technically and economically achievable.<br>• Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California CFR, Title 22, Division 4, Chapter 15. |

| Constituent | Water Quality Objective |
|---|---|
| | • Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of thiobencarb in excess of 1.0 µg/l.<br>For the purposes of this objective, the term pesticide shall include: (1) any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever, or (2) any spray adjuvant, or (3) any breakdown products of these materials that threaten beneficial uses. Note that discharges of "inert" ingredients included in pesticide formulations must comply with all applicable water quality objectives. |
| Radioactivity | Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life, nor which result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. At a minimum, waters designated MUN shall not contain concentrations of radionuclides in excess of the maximum contaminant levels specified in Table 4 (MCL Radioactivity) of Section 64443 of Title 22, California Code of Regulations. |
| Salinity | Electrical Conductivity (at 25°C) shall not exceed 150 micromhos/cm (90 percentile) in well-mixed waters of the Feather River. |
| Sediment | The suspended sediment load and suspended sediment discharge rate of waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. |
| Settleable Material | Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. |
| Suspended Material | Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. |
| Tastes and Odors | Waters shall not contain taste- or odor-producing substances in concentrations that cause nuisance, adversely affect beneficial uses, or impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to domestic or municipal water supplies. |
| Temperature | Elevated temperature wastes shall not cause the temperature of waters designated COLD or WARM to increase by more than 5 degrees Fahrenheit above natural receiving water temperature. In determining compliance with the above limits, the Central Valley Regional Water Quality Control Board may prescribe appropriate averaging periods provided that beneficial uses will be fully protected. |
| Toxicity | All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. Compliance with this objective will be determined by analyses of indicator organisms, species diversity, population density, growth anomalies, biotoxicity tests of appropriate duration, or other methods as specified by the Central Valley Regional Water Quality Control Board. |
| Turbidity | Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits: |

| Constituent | Water Quality Objective |
|---|---|
| | Where natural turbidity is less than 1 Nephelometric Turbidity Unit (NTU), controllable factors shall not cause downstream turbidity to exceed 2<br><br>Where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU.<br><br>• Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent.<br>• Where natural turbidity is equal to or between 50 and 100 NTUs, increases shall not exceed 10 NTUs.<br>• Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.<br>In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. |
| Source: Central Valley RWQCB 2019 | |

Under the Porter-Cologne Water Quality Control Act, the RWQCB is required to consider beneficial uses when instituting water quality objectives and described these beneficial uses as follows:

"Beneficial uses of the waters of the State that may be protected against quality degradation include, but are not necessarily limited to, domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves."

The RWQCB separates beneficial uses into two categories: consumptive uses corresponding to reduction and/or depletion of water supply and non-consumptive uses not associated with significantly depleting water supplies. The RWQCB assigns beneficial uses for tributary streams based on the uses assigned to the named waterbody that the tributary connects with.

. Existing beneficial uses of surface waters within the “Colusa Basin Drain to I Street Bridge” which includes Arcade Creek and its associated tributaries are defined in Table 2 below:

**Table 2. Existing and Potential Beneficial Uses**

| Beneficial Use | Definition |
|---|---|
| MUN | Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply. |
| AGR | Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation (including leaching of salts), stock watering, or support of vegetation for range grazing. |
| REC-1 | Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs. |
| REC-2 | Uses of water for recreational activities involving proximity to water, but where there is generally no body contact with water, nor any likelihood of ingestion of water. These |

| Beneficial Use | Definition |
|---|---|
| | uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities. |
| WARM | Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates. |
| COLD | Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates |
| MIGR | Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish. |
| SPWN | Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish. |
| WILD | Uses of water that support terrestrial or wetland ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats or wetlands, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources. |
| NAV | Uses of water for shipping, travel, or other transportation by private,<br>military, or commercial vessels. |
| Source: Central Valley RWQCB 2019 | |

### *List of Impaired Waters*

303(d) listed waters are a State's list of impaired and threatened waters (e.g. stream/river segments, lakes). States are required to submit their list for EPA approval every two years. For each water on the list, the State identifies the pollutant causing the impairment, when known. In addition, the state assigns a priority for development of Total Maximum Daily Loads (TMDL) based on the severity of the pollution and the sensitivity of the uses to be made of the waters. Arcade Creek within the Project area is 303(d) listed and considerations for TMDLs (Caltrans Water Quality Planning Tool, 2024) for the following:

- Bifenthrin
- Copper
- Fipronil Sulfone
- Malathion
- Permethrin
- Pyrethroids
- Toxicity

Total Maximum Daily Loads (TMDL)

The Central Valley RWQCB assessed all readily available data for waters in the Central Valley Region. The 2020-2022 Integrated Report was adopted by the SWRCB on January 19, 2022, and approved by U.S. EPA on May 11, 2022 (SWRCB 2022). According to the 2020-2022 Integrated Report, Arcade Creek, which is located within the Project area, is included in the 303(d) list and considered a Category 5 waterbody. The criteria for Category 5 are the following: a water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment. The pollutants listed for this segment, along with additional information, are included in Table 3. Arcade Creek 2020-2022 303(d) List below.

**Table 3. Arcade Creek 303(d) List**

| **Pollutant**<br>**Potential sources** | **Estimated Area Assessed** | **First Year Listed** | **TMDL Requirement Status*** | **Date**** |
|---|---|---|---|---|
| Chlorpyrifos<br>Urban Runoff/Storm Sewers | 9.9 miles | 1998 | 5B | 2004 |
| Copper<br>A Source Unknown | 9.9 miles | 2002 | 5A | 2021 |
| Diazinon<br>Agriculture, Urban Runoff/Storm Sewers | 9.9 miles | 1998 | 5B | 2004 |
| Malathion<br>Agriculture, Urban Runoff/Storm Sewers | 9.9 miles | 2010 | 5A | 2021 |
| Pyrethroids<br>Urban Runoff/Storm Sewers | 9.9 miles | 2010 | 5A | 2021 |
| Sediment Toxicity<br>A Source Unknown | 9.9 miles | 2010 | 5A | 2021 |

*TMDL requirement status definitions for listed pollutants are: A= TMDL still required

**Dates relate to the TMDL requirement status, so a date for A= TMDL scheduled completion date, B= Date USEPA approved TMDL, and C= Completion date for action other than a TMDL

Source: SWRCB 2022

### *Groundwater Quality Objectives/Standards and Beneficial Uses*

The key groundwater quality objective for the region is minimizing the contaminants reaching any groundwater basin. The goals are to control taste and odors, keep bacteriological, radioactive, chemical quality below the regulatory limits, and prohibit discharges of toxic wastes. Beneficial uses of groundwater in the Sacramento and San Joaquin River Basin Plan are considered as suitable or potentially suitable, at a minimum, for municipal and domestic supply (MUN), industrial service supply (IND), agriculture supply (AGR) and industrial process supply (PRO) (Central Valley RWQCB 2019).

# 4 ENVIRONMENTAL CONSEQUENCES

## 4.1 Potential Impacts to Water Quality

Project activities such as construction of the multi-use trail would create new impervious surfaces. This would result in an incremental reduction in the amount of natural soil surfaces available for infiltration of rainfall and runoff, potentially generating additional sediment runoff during storm events which could degrade the quality of receiving waters. During storm events, sediment is transported via runoff to stormwater drainage systems. Absent controls, contaminated runoff waters could flow into the stormwater drainage systems that discharge into rivers, agricultural ditches, sloughs, and channels and ultimately could degrade the water quality of any of these water bodies.

The project would result in an increase of approximately 0.47 acre of paved surface area, which would contribute to an increase in the volume of storm water runoff from the multi-use trail surface that could enter the drainage system and eventually the waterways within the project area. Impacts to water quality may result from sediment-laden storm water discharged into these waterways. Although the proposed trail would potentially increase storm water runoff as a result of additional impervious surfaces, the project would adhere to all applicable Phase I MS4 NPDES requirements regarding hydromodification. With the inclusion of permanent treatment control BMPs, as specified by Avoidance and Minimization Measure **WQ-1** through **WQ-4**, long-term project impacts to water quality are anticipated to be minimal.

Construction of the project would necessitate permanent impacts of 0.01 acres and temporary impacts of 0.10 acre of jurisdictional waters of the U.S. and State to facilitate the installation of the gabion baskets to reinforce the bank of Arcade Creek (Figure 5). The project anticipates acquiring a non-notifying USACE Nationwide 14 permit and a RWQCB Section 401 Water Quality Certification prior to the start of construction. A Section 1602 Streambed Alteration Agreement would also be acquired from the CDFW. There is the potential for a negligible increase in drainage discharge into Arcade Creek which is 303(d) listed for pesticides and heavy metals, due to increased impervious surfaces from the multi-use trail. Avoidance and Minimization Measures **WQ-1** through **WQ-5** would be implemented to minimize potential impacts to water quality.

### 4.1.1 Long Term Impacts and Anticipated Changes to the Physical/Chemical Characteristics of the Aquatic Environment

***Suspended Particulates (Turbidity)***

The project is anticipated to include permanent treatment control BMPs per Avoidance and Minimization Measures **WQ-1** through **WQ-4**. As a result, the project is not anticipated to produce long-term turbidity.

***Oil, Grease and Chemical Pollutants***

The proposed project is a multi-use trail for pedestrians and bicyclists. Runoff generated from increased impervious surfaces due to construction of the bike trail would primarily

consist of sediment from erosion and is not anticipated to contain oil, grease, or chemical pollutants. Further, with the inclusion of permanent treatment control BMPs, as specified by Avoidance and Minimization Measure **WQ-1**, project impacts to water quality would not be substantial.

***Flood Control Functions***

The proposed project is located within three zones: Zone X and Zone AE. Zone X signifies a minimal flood hazard area with a 0.2% annual chance of flooding. Zone AE designates areas that are within the 100-year base flood zone and have a 1% annual chance of flooding. A Location Hydraulic Study will be prepared to ensure the design of the crossing addresses flood control function.

### 4.1.2 Anticipated Changes to the Biological Characteristics of the Aquatic Environment

Project features adjacent to the wetland and drainage features are not anticipated to change the biological characteristics of the aquatic environment. Construction of the project would necessitate permanent impacts of 0.01 acres and temporary impacts of 0.10 acre of jurisdictional waters of the U.S. and State to facilitate the installation of the gabion baskets to reinforce the bank of Arcade Creek (Figure 5). The project anticipates acquiring a non-notifying USACE Nationwide 14 permit and a RWQCB Section 401 Water Quality Certification prior to the start of construction. A Section 1602 Streambed Alteration Agreement would also be acquired from the CDFW. Avoidance and Minimization

Measures **WQ-2** through **WQ-4** are anticipated to minimize change to the biological characteristics of the aquatic environment.

### 4.1.3 Anticipated Changes to the Human Use Characteristics of the Aquatic Environment

Human uses, such as recreation navigation or conservation are not primary functions of the aquatic features within the study area. No changes to human uses would occur and the waterways would continue to convey water through the region.

Given the characteristics of this project, and the existing conditions of the waterways present, existing and potential water supplies, water conservation, recreation, navigation, and aesthetics are not likely to be negatively impacted as a result of the project.

Biological Study Area (28.85 acres)
Elderberry Shrubs
Bridge
Trail Improvements
Gabion Basket
Retaining Wall
Curb Ramp
Pavement Marking
Pedestrian Refuge

**Permanent Impacts**
Annual Grassland (0.20 acre)
Oak Woodland (0.02 acre)
Perennial Stream Channel (0.01 acre)
Riparian Woodland (0.20 acre)

**Temporary Impacts**
Annual Grassland (0.28 acre)
Oak Woodland (0.17 acre)
Perennial Stream Channel (0.10 acre)
Riparian (0.89 acre)

**Waters and Vegetation Communities**
Annual Grassland (2.36 acres)
Water Quality/Detention Basin (1.20 acres)
Oak Woodland (0.51 acre)
Perennial Stream Channel (1.91 acres)
Riparian Woodland (8.88 acres)
Urban (13.99 acres)

Costco Wholesale
Walmart Supercenter
Arcade Creek Tributary
Community Drive
Sylvan Valley Way
Sylvan Road
Sylvan Creek Court
Park Drive
Arcade Creek
Arcade Creek Mainstem
Hespera Way

V:\3407_Arcade_Cripple_Creek_Trail\Biology\Biology.aprx
Dokken Engineering 2/2/2026; Created By: cclarkson
Source: Microsoft, Vantor

N

0 75 150 Feet

**Figure 5**
**Project Impacts**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

### 4.1.4 Short Term Impacts During Construction

Construction-related earth-disturbing activities of the proposed project would introduce the potential for increased erosion and sedimentation, with subsequent effects on water quality and storm drain capacity. During site grading, trenching, and other construction activities, areas of bare soil would be exposed to erosive forces during rainfall events. Bare soils are much more likely to erode than vegetated areas because bare areas lack dispersion, infiltration, and retention properties covering vegetation provides. Absent actions to minimize erosion, the extent of the impacts would be dependent on soil erosion potential, type of construction practice, extent of disturbed area, timing of precipitation events, and topography and proximity to drainage channels. In addition, construction equipment and activities would have the potential to leak hazardous materials, such as oil and gasoline, and potentially affect surface water or groundwater quality. Improper use or accidental spills of fuels, oils, and other construction-related hazardous materials, such as pipe sealant, solvents, and paints, could also pose a threat to the water quality of local water bodies. These potential leaks or spills, if not contained, would be considered a potentially significant impact on ground and surface water quality. Without precautions to contain or capture sediments or accidental hazardous spills, construction activities could produce substantial pollutants in stormwater runoff and result in a significant impact on the existing surface water quality. The proposed project would implement **WQ-1** through **WQ-4** to minimize construction-related impacts.

## 4.2 Cumulative Impacts

The Project would not result in a cumulatively considerable contribution to water quality impacts. The multi-use trail segment was previously planned and programmatically evaluated as part of the City's 2015 Bikeway Master Plan, which anticipated incremental trail improvements throughout the City, including trail upgrades within greenbelt corridors such as Arcade Creek. As such, the Project represents an implementation-level component of an adopted planning framework rather than a new or unanticipated source of water quality effects.

Although construction would introduce approximately 0.47 acre of new impervious surface and involve temporary ground disturbance and vegetation removal, these effects would be short-term and localized. Standard construction activities have the potential to generate sediment during rainfall events; however, these effects are common to many public infrastructure projects and are adequately controlled through compliance with applicable City and state stormwater regulations.

The Project includes a gabion basket retaining wall along an actively eroding reach of Arcade Creek, which would stabilize the bank and reduce existing sediment inputs to the creek. Permanent impacts associated with the gabion baskets would be limited to approximately 0.01 acre, with temporary impacts of approximately 0.10 acre related to construction access. The prefabricated bridge crossing would be installed without dewatering or in-channel work, and all abutments would be located outside the ordinary

high water mark of the Arcade Creek tributary, avoiding direct disturbance to aquatic resources.

The Project would be required to comply with standardized City and state water quality and stormwater best management practices as well as project-specific avoidance and minimization measures (**WQ-1** through **WQ-4**). These measures include erosion and sediment controls, stabilization of exposed soils, and debris management, which collectively ensure that sedimentation and pollutant discharges are minimized during construction and operation.

When considered in combination with other past, present, and reasonably foreseeable projects in the Arcade Creek watershed, the Project's contribution to cumulative water quality impacts would be minimal. The limited extent of new impervious surface, absence of in-channel work, incorporation of bank stabilization, and adherence to regulatory BMPs ensure that any incremental effects would not be cumulatively considerable.

# 5 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

**WQ-1:** The proposed project will require a National Pollution Discharge Elimination System (NPDES) General Construction Permit for Discharges of storm water associated with construction activities (Construction General Permit 2022-0057-DWQ). As part of this Permit requirement, a SWPPP shall be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

**WQ-2:** To conform with water quality requirements, the SWPPP must include the following:

- Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 50 feet from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters.
- The project specifications will require the contractor to operate under an approved spill prevention and clean-up plan;
- Construction equipment will not be operated in flowing water;
- Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life must be prevented from contaminating the soil or entering surface waters;
- Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and,
- Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site.

**WQ-3:** Prior to the start of construction activities, the project limits in proximity to jurisdictional waters must be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into jurisdictional waters.

**WQ-4:** Contract specifications will include the following Best Management Practices (BMPs), where applicable, to reduce erosion during construction:

- Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control;
- As a permanent BMP, slope roughening by equipment tracking will be implemented to create unevenness on bare soil. Surface roughening reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing water infiltration.

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## 6.2 Preparer(s) Qualifications

Amy Bakker, B.S. in Environmental Science, 15 years of experience in environmental analysis.

Dorienne Mendoza, B.S. in Conservation and Resource Studies, Area of Interest in Sustainable Land Development, 8 years of experience in environmental analysis.

# APPENDIX A NRCS SOIL SURVEY

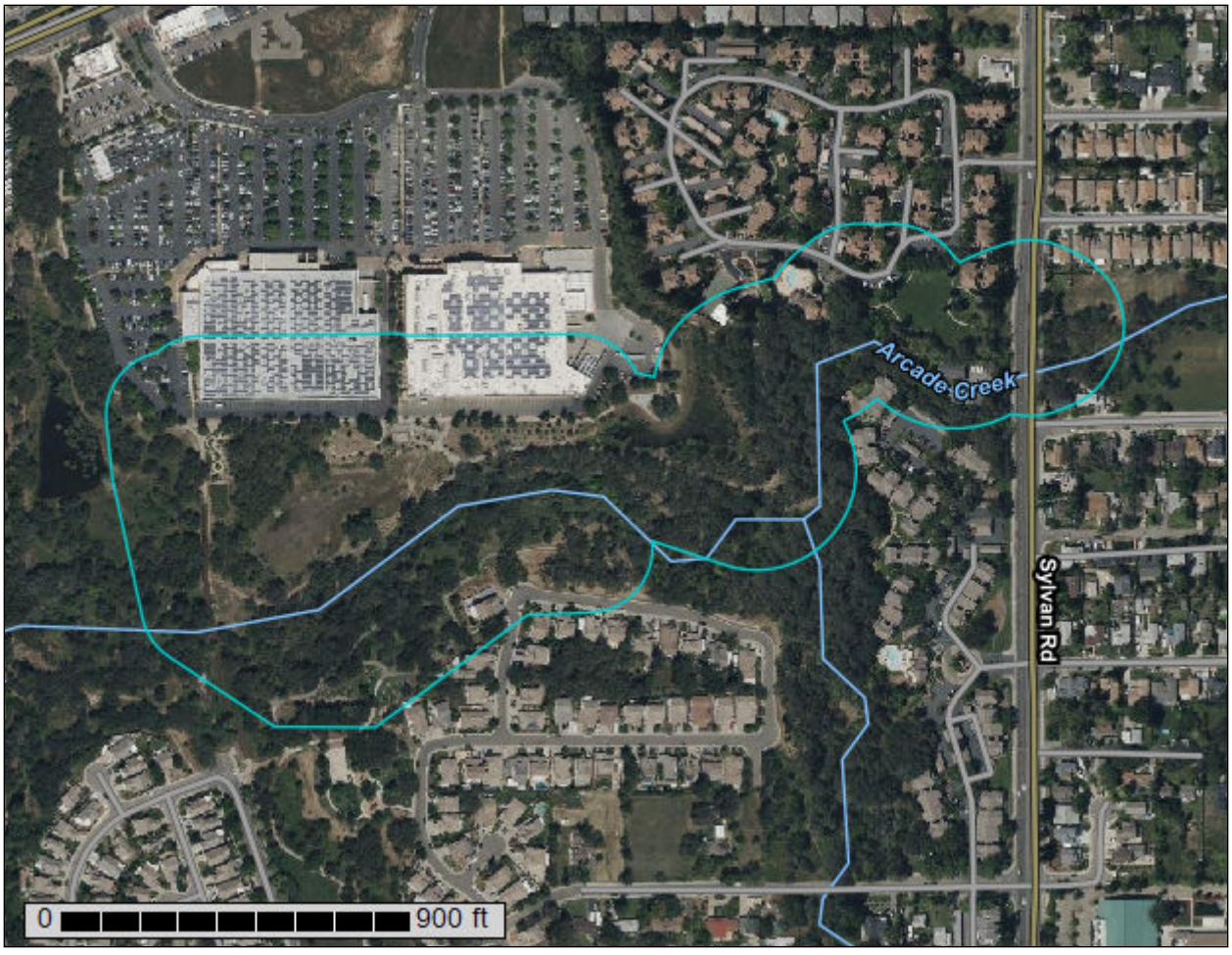
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Sacramento County, California




October 10, 2025

# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# Contents

**Preface**.....2
**How Soil Surveys Are Made**.....5
**Soil Map**.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Sacramento County, California.....13
147—Fiddyment-Orangevale complex, 2 to 8 percent slopes.....13
148—Fiddyment-Orangevale-Urban land complex, 2 to 8 percent slopes..15
**References**.....19

# How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report
## Soil Map



## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**
- Streams and Canals

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sacramento County, California
Survey Area Data: Version 26, Sep 2, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 23, 2022—Apr 24, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 147 | Fiddyment-Orangevale complex, 2 to 8 percent slopes | 39.8 | 95.5% |
| 148 | Fiddyment-Orangevale-Urban land complex, 2 to 8 percent slopes | 1.9 | 4.5% |
| **Totals for Area of Interest** | | **41.7** | **100.0%** |

# Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Sacramento County, California

## 147—Fiddyment-Orangevale complex, 2 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* hhmq
*Elevation:* 50 to 280 feet
*Mean annual precipitation:* 19 to 22 inches
*Mean annual air temperature:* 61 degrees F
*Frost-free period:* 230 to 300 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Fiddyment and similar soils:* 55 percent
*Orangevale and similar soils:* 30 percent
*Minor components:* 15 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Fiddyment

#### Setting

*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit, backslope
*Landform position (three-dimensional):* Tread, riser
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Alluvium derived from igneous and metamorphic rock over dense alluvium derived from igneous and metamorphic rock

#### Typical profile

*H1 - 0 to 8 inches:* fine sandy loam
*H2 - 8 to 15 inches:* loam
*H3 - 15 to 28 inches:* sandy clay loam
*H4 - 28 to 40 inches:* indurated
*H5 - 40 to 44 inches:* material

#### Properties and qualities

*Slope:* 2 to 8 percent
*Depth to restrictive feature:* 28 to 40 inches to duripan; 40 to 44 inches to densic material
*Drainage class:* Well drained
*Runoff class:* Very high
*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 to 0.00 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Very low (about 2.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 4e
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* D
*Ecological site:* R017XY902CA - Duripan Vernal Pools
*Hydric soil rating:* No

## Description of Orangevale

### Setting

*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit, backslope
*Landform position (three-dimensional):* Tread, riser
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Alluvium derived from granite

### Typical profile

*H1 - 0 to 15 inches:* coarse sandy loam
*H2 - 15 to 20 inches:* coarse sandy loam
*H3 - 20 to 72 inches:* sandy clay loam
*H4 - 72 to 80 inches:* coarse sandy loam

### Properties and qualities

*Slope:* 2 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Low (about 5.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* B
*Ecological site:* R017XY904CA - Subirrigated Deep Alluvial Fans
*Hydric soil rating:* No

## Minor Components

### Kaseberg

*Percent of map unit:* 4 percent
*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Hydric soil rating:* No

### Xerarents

*Percent of map unit:* 4 percent
*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit, backslope
*Landform position (three-dimensional):* Tread, riser
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Hydric soil rating:* No

### Urban land

*Percent of map unit:* 3 percent

*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit, backslope
*Landform position (three-dimensional):* Tread, riser
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Hydric soil rating:* No

**Unnamed, deeper**

*Percent of map unit:* 2 percent
*Landform:* Fan remnants
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Linear
*Across-slope shape:* Concave
*Hydric soil rating:* No

**Unnamed, steeper slopes**

*Percent of map unit:* 2 percent
*Landform:* Fan remnants
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Linear
*Across-slope shape:* Concave
*Hydric soil rating:* No

## 148—Fiddyment-Orangevale-Urban land complex, 2 to 8 percent slopes

**Map Unit Setting**

*National map unit symbol:* hhmr
*Elevation:* 50 to 280 feet
*Mean annual precipitation:* 19 to 22 inches
*Mean annual air temperature:* 61 degrees F
*Frost-free period:* 230 to 300 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Fiddyment and similar soils:* 40 percent
*Orangevale and similar soils:* 25 percent
*Urban land:* 20 percent
*Minor components:* 15 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Fiddyment**

**Setting**

*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit, backslope
*Landform position (three-dimensional):* Riser, tread
*Down-slope shape:* Linear

*Across-slope shape:* Linear
*Parent material:* Alluvium derived from igneous and metamorphic rock over dense alluvium derived from igneous and metamorphic rock

**Typical profile**

*H1 - 0 to 8 inches:* fine sandy loam
*H2 - 8 to 15 inches:* loam
*H3 - 15 to 28 inches:* sandy clay loam
*H4 - 28 to 40 inches:* indurated
*H5 - 40 to 44 inches:* material

**Properties and qualities**

*Slope:* 2 to 8 percent
*Depth to restrictive feature:* 28 to 40 inches to duripan; 40 to 44 inches to densic material
*Drainage class:* Well drained
*Runoff class:* Very high
*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 to 0.00 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Very low (about 2.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* D
*Ecological site:* R017XY902CA - Duripan Vernal Pools
*Hydric soil rating:* No

## Description of Orangevale

**Setting**

*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit, backslope
*Landform position (three-dimensional):* Riser, tread
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Alluvium derived from granite

**Typical profile**

*H1 - 0 to 15 inches:* coarse sandy loam
*H2 - 15 to 20 inches:* coarse sandy loam
*H3 - 20 to 72 inches:* sandy clay loam
*H4 - 72 to 80 inches:* coarse sandy loam

**Properties and qualities**

*Slope:* 2 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Low (about 5.8 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* B
*Ecological site:* R017XY904CA - Subirrigated Deep Alluvial Fans
*Hydric soil rating:* No

## Description of Urban Land

**Setting**

*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit, backslope
*Landform position (three-dimensional):* Riser, tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear

**Typical profile**

*H1 - 0 to 6 inches:* variable

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 8
*Hydrologic Soil Group:* D
*Hydric soil rating:* No

## Minor Components

**Kaseberg**

*Percent of map unit:* 6 percent
*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Hydric soil rating:* No

**Xerarents**

*Percent of map unit:* 6 percent
*Landform:* Fan remnants
*Landform position (two-dimensional):* Summit, backslope
*Landform position (three-dimensional):* Riser, tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Hydric soil rating:* No

**Unnamed, steeper slopes**

*Percent of map unit:* 3 percent
*Landform:* Fan remnants
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Linear
*Across-slope shape:* Concave
*Hydric soil rating:* No

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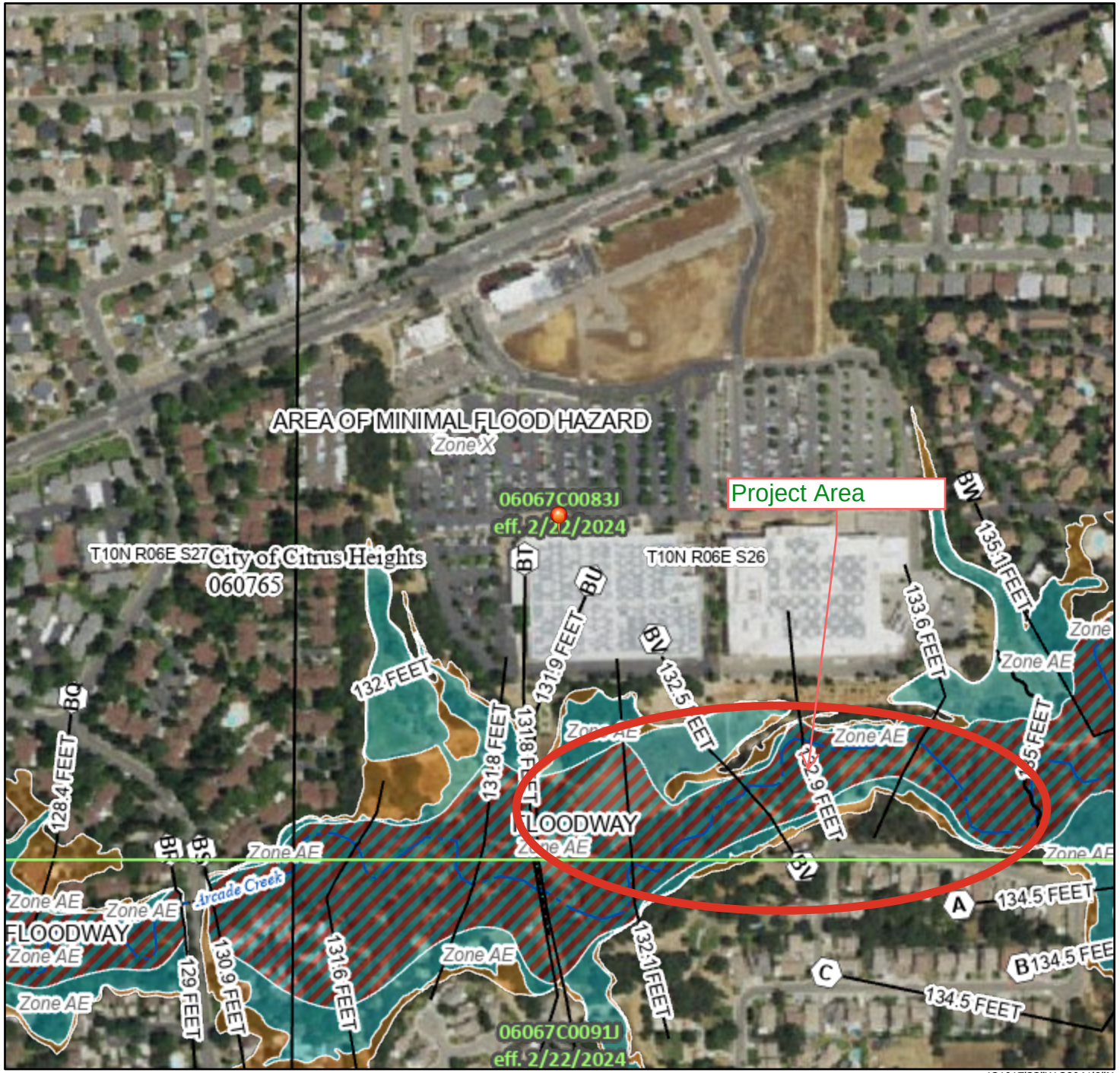
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# APPENDIX B FEMA FIRMETTE MAP

# National Flood Hazard Layer FIRMette

FEMA

121°18'10"W 38°41'38"N




121°17'32"W 38°41'9"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

*Basemap Imagery Source: USGS National Map 2023*

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

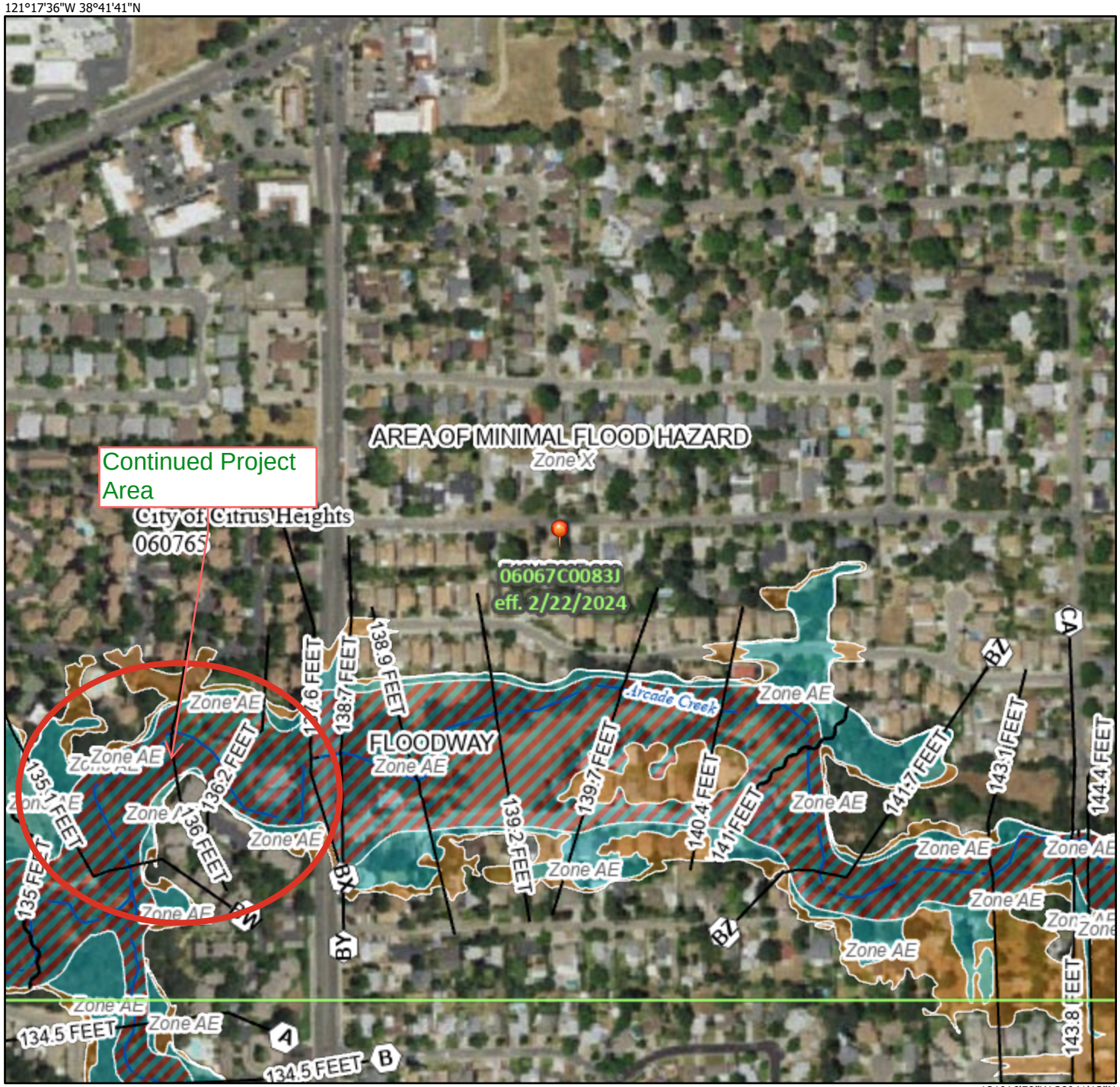
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/23/2025 at 12:30 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

# National Flood Hazard Layer FIRMette

FEMA

121°17'36"W 38°41'41"N




121°16'59"W 38°41'13"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

*Basemap Imagery Source: USGS National Map 2023*

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/23/2025 at 12:33 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

# APPENDIX G: Community Impact Assessment Memorandum

**Arcade-Cripple Creek Trail** **CIA**
**(Sylvan Road to Stock Ranch) Extension Project**



# Community Impact Assessment Memorandum

Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project

City of Citrus Heights, Sacramento County, California

District 3–SAC

CRP 5475 (053)

**March 2026**

STATE OF CALIFORNIA

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

# Community Impact Assessment Memorandum

## Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project

City of Citrus Heights, Sacramento County, California

District 3–SAC

CRP 5475 (053)

**March 2026**

STATE OF CALIFORNIA

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

Prepared By: _____ Date: 3/24/26

Amy Bakker, Senior Environmental Planner
Dokken Engineering
110 Blue Ravine Rd, 200
Folsom, CA, 95630
(916) 858-0642

Reviewed By: _____ Date: _____

Daniel Kehrer, Principal Civil Engineer
(916) 727-4770
City of Citrus Heights General Services Department
6360 Fountain Square Drive
Citrus Heights CA 95621

Approved By: _____ Date: _____

Caitlin Greenwood, Associate Environmental Planner
District 3 North Region Local Assistance

Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

## INTRODUCTION

This memorandum discusses land use and community impacts from implementation of the proposed Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project (Project) in the City of Citrus Heights, Sacramento County, California. This memorandum considers how the proposed Project will affect the people, institutions, neighborhoods, communities, organizations, and larger social and economic systems.

## PROJECT DESCRIPTION

The City of Citrus Heights proposes to construct a 0.5-mile addition to the planned 16-mile Creek Corridor Trail Project (CCTP) as part of the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project (Project) (**Appendix A. Figure 1. Project Location; Figure 2. Project Vicinity**). The Project is funded through the federal Carbon Reduction Program and therefore requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for CEQA compliance is the City of Citrus Heights and the federal lead agency for NEPA compliance is the California Department of Transportation (Caltrans).

The Project is located in the City of Citrus Heights and will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center to Sylvan Road. The proposed alignment begins south of the Walmart property boundary and proceeds east through the Stock Ranch Nature Preserve, curving south around Walmart's water quality detention basin. The alignment continues north, crossing a tributary of Arcade Creek, and traverses along the south side of the Huntington Square Apartments complex prior to connecting to Sylvan Road. The alignment terminates east of Sylvan Road at the location of a planned future trail extension segment from Sylvan Road to Mariposa Avenue. The Project has independent utility and would function as a stand-alone improvement.

Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, bank protection along a segment of Arcade Creek, and an at-grade signalized pedestrian crossing at Sylvan Road (**Appendix A. Figure 3. Project Features**). Construction activities will involve grading to achieve ADA-compliant slopes, installing the creek crossing, paving the trail, erecting the solar lighting, constructing bank protection, and adding pedestrian signal infrastructure with minor utility adjustments as needed.

To accommodate construction, right-of-way (ROW) acquisitions will be required from several parcels. These include a permanent easement and permit to enter (PTE) from the Sunrise Recreation & Park District and a TCE from Walmart. An existing trail easement exists across the Huntington Square Apartments property and there is potential for this permanent easement to be modified to best incorporate the trail alignment with the physical site features.

Construction access will be provided primarily through the Walmart parking lot under a TCE, as well as a permit to enter for access from the Huntington Square Apartments parcel. These provisions will allow safe and efficient construction of the trail and its associated improvements.

## AFFECTED ENVIRONMENT

The Arcade-Cripple Creek Trail is part of a 16-mile trail network identified in the City of Citrus Heights' CCTP. Planned since 2012, the Creek Corridor Trail is being built segment by segment, starting with 4.2 miles of Priority 1 trails identified in the *Creek Corridor Trail Project Feasibility Study*. To advance the vision of using the natural Arcade Creek greenbelt as a recreational resource and to enhance connectivity between communities, the City of Citrus Heights, in partnership with the Sunrise Recreation & Park District, is proposing to construct the 0.5-mile Priority 1 trail segment from Sylvan Road to Stock Ranch. Currently, the trail includes dirt paths through the Stock Ranch Nature Preserve and narrow concrete paths through the Huntington Square apartments. This Project will upgrade these sections to a paved, ADA-compliant Class I multi-use trail, bringing the Priority 1 trail network over 10% closer to completion and providing safe, accessible connections between communities.

The Project is located west of Sylvan Road within the City of Citrus Heights in Sacramento County, California, within the Citrus Heights 7.5-minute U. S. Geological Survey (USGS) quadrangle. Sylvan Road is a north-south arterial from Sylvan Corners (e.g., the Auburn Boulevard/Old Auburn Road/Sylvan Road intersection) to Greenback Lane and has a posted 40 mph speed limit with two lanes in each direction separated by a center left-turn lane.

Existing land use designations include General Commercial (Costco and Walmart), Open Space (Arcade Creek and Stock Ranch Nature Preserve), low density residential, and medium density residential. (**Appendix A. Figure 4. Land Use Designations and Figure 5. Zoning Districts**) (City of Citrus Heights 2022). Additionally, according to Title 106.20 of the City of Citrus Heights Zoning Code, the Project area occurs within several different zoning districts including "RD-5" Low Density Residential, "RD-20" Medium Density Residential, "SPA" Special Planning Area (City of Citrus Heights 2025a and City of Citrus Heights 2025b). **Table 1. Zoning Designation within the Project Area** below provides an overview of the zoning designations applicable to the parcels within the Project area, along with corresponding descriptions for each.

**Table 1. Zoning Designations within the Project Area**

| Zoning District Symbol | Zoning District / General Plan Land Use Designation | Zoning Descriptions |
|---|---|---|
| RD-5 | Low Density Residential | The RD-5 district is applied to areas appropriate for detached single dwellings, duplexes in specified circumstances, and related, compatible uses. The RD-5 zoning district is consistent with and implement the Low Density Residential land use designation of the City of Citrus Heights General Plan (General Plan). |
| RD-20 | Medium Density Residential | The RD-20 district is applied to areas appropriate for a variety of housing types, including small-lot single dwellings, and various types of multi-unit housing (for example, duplexes, triplexes, and apartments). The RD-20 |

| | | |
|---|---|---|
| | | zoning district is consistent with and implements the Medium Density Residential land use designation of the General Plan. |
| SPA | Special Planning Area | The SPA zoning district is intended to provide for flexibility in the application of Zoning Code standards to proposed development under limited and unique circumstances. The purpose is to allow consideration of innovation in site planning and other aspects of project design, and more effective design responses to site features, uses on adjoining properties, and environmental impacts than the Zoning Code standards would produce without adjustment. The City of Citrus Heights expects each project within a Special Planning Area to be of obvious, significantly higher quality than would be achieved through conventional design practices and standards. |

Source: City of Citrus Heights 2025b

The Project is located in Census Tract 81.36 (west of Sylvan Road) and 81.41 (east of Sylvan Road). The following table provides a comparison of key demographic data, including age, economic status, and race, between Census Tracts 81.6 and 81.41, City of Citrus Heights, and Sacramento County. The City of Citrus Heights and Sacramento County have a notably higher percentage of residents aged 65 and older compared to Census Tracts 81.36 and 81.41. The same trend can be seen in terms of income, both for the median and average household incomes. Additionally, there are no clear trends regarding the proportion of minority populations when comparing the demographic information in the two census tracts with the City of Citrus Heights and Sacramento County.

**Table 2. Demographics**

| Subject | Census Tract 81.36 | Census Tract 81.41 | City of Citrus Heights | Sacramento County |
|---|---|---|---|---|
| 65 years and over | 16.8% | 11.0% | 18.2% | 18.2% |
| Median Household Income | $70,648 | $63,537 | $91,036 | $94,087 |
| Mean Household Income | $77,291 | $75,279 | $104,046 | $119,881 |
| **Race** | | | | |
| White | 81.5% | 62.7% | 71.7% | 59.6% |
| Black or African American | 0.8% | 6.7% | 3.0% | 10.6% |
| American Indian and Alaska Native | 0.8% | 1.1% | 0.9% | 1.6% |
| Asian | 4.7% | 2.6% | 4.4% | 19.4% |
| Native Hawaiian or Other Pacific Islander | 1.1% | 0.0% | 0.4% | 1.4% |
| Some Other Race | 3.7% | 21.0% | 8.3% | 0.0% |
| Two or More Races | 7.5% | 5.9% | 11.3% | 7.4% |

Source: U.S. Census Bureau 2024

Income in the Past 12 Months (in 2024 Inflation-Adjusted dollars); 2023 ACS 5-year Estimates

There will be impacts to up to four parcels within / adjacent to the Project area. The impacts include permanent easements, PTEs, and TCEs which are identified in **Table 3**. **Property Ownership and Right-of-way Parcel Needs with the Project Area** below.

A permanent easement and PTE will be needed from Sunrise Recreation & Park District. The City of Citrus Heights currently has a permanent easement at the Huntington Square

Apartments, which may need to be modified for construction of the proposed trail. A TCE will be needed from Walmart to allow for construction access through their property. **Appendix A. Figure 6. Potential Right-of-Way.**

**Table 3. Property Ownership and Right-of-Way Parcel Needs within the Project Area**

| Assessor Parcel Number | Property Owner | Property Address | Property Needs |
|---|---|---|---|
| 211-0280-004-0000 | Hunting Square Limited LP | 7311 Huntington Square Lane, Citrus Heights, CA 95621 | Modification to an existing Permanent Easement and permit to enter (PTE) |
| 211-0870-002-0000 | Wal Mart Real Estate BSNS Trust | 7010 Auburn Blvd. Citrus Heights, CA 95621 | Temporary Construction Easement (TCE) |
| 211-0870-013-0000 | Sunrise Recreation & Park District | Auburn Blvd. Citrus Heights, CA 95621 | Permanent Easement and PTE |
| 211-0870-014-0000 | Sunrise Recreation & Park District | Auburn Blvd. Citrus Heights, CA 95621 | Permanent Easement and PTE |

During construction, partial road closures may be required, and a traffic management plan will be prepared. Utility coordination may be required from some utilities; however, the service will not be disrupted.

## ENVIRONMENTAL CONSEQUENCES

*Community Character and Cohesion*

The proposed Project is not expected to result in any significant long-term adverse effects on the community. Community cohesion would remain similar to the existing as the Project does not create a barrier that divides the neighborhood or limits access. A portion of Stock Ranch Nature Preserve is within the Project area; however, it will not be impacted by Project activities and access to the nature preserve will remain open throughout construction. The addition of the trail along Arcade Creek will enhance connectivity and mobility for residents who walk or bike to the nature preserve and connect with other trails within the City of Citrus Heights. Additional community facilities, such as schools, bus stops, community centers, or religious institutions, are not in the Project area and would not be affected. The Project is not anticipated to impact growth, economics, affordable housing, or crime in the Project area. There is potential for security concerns among residents of the Huntington Square Apartments, and to minimize concerns, an outreach and engagement plan (see Measure **LU-1**) will be prepared by the City of Citrus Heights to ensure community needs and concerns are addressed.

The proposed Project is anticipated to benefit the community by enhancing pedestrian and bicycle infrastructure. The Project addresses the current lack of accessible pedestrian and bicycle facilities, which limits multi-modal transportation and access to key recreational and commercial areas. The region experiences traffic due to commercial businesses (Costco and Walmart) and recreational activities associated with the Stock

Ranch Nature Preserve, creating a need for enhanced infrastructure to improve mobility for non-motorized users. Completing the overall CCTP will allow multi-modal transportation access throughout the City of Citrus Heights. The proposed Project will meet this need by providing a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, and an at-grade signalized pedestrian crossing at Sylvan Road.

Census data indicates that Census Tracts 81.36 and 81.41 have lower income levels compared to the City of Citrus Heights and Sacramento County as a whole. The addition of the trail will provide bicyclists and pedestrians from across the City of Citrus Heights with access along Arcade Creek. By improving pedestrian and bicycle connectivity, the Project is designed to align with the region's long-term vision to provide multi-modal access to key commercial and recreational facilities, improving overall mobility within the area.

Partial road closures will be required during construction of the Project. Given the short-term and intermittent nature of the construction activities, the impact on the community is expected to be minimal. As part of the Project, Measure **LU-2** will be implemented, and a traffic management plan will be developed prior to construction to minimize any disruption to local traffic.

The proposed Project will require permanent easements, PTEs, and TCEs from properties where the trail passes through. No full acquisitions are anticipated. All work will remain within City ROW and no private parcels will require any acquisition or TCE.

*Land Use*

The proposed Project is consistent with the General Plan as the existing roadway classification for Sylvan Road will remain unchanged and the zoning and/or land use designations for adjacent areas will not be changed. After the City of Citrus Heights' incorporation on January 1, 1997, the City of Citrus Heights Bikeway Master Plan includes this area as a proposed Class I bike lane, with the CCTP identifying 16 miles of feasible trail segments throughout the City of Citrus Heights including Arcade Creek, Brooktree Creek, Cripple Creek, and the SMUD utility Corridor (City of Citrus Heights 2015). The creek corridors are adjacent to residential and commercial areas which allow for increased connections and mobility options, including through natural areas. One of the goals of the General Plan is to "establish a system of creek side trails, passive open space and parks for public use." CCTP will allow for a framework to meet this goal and create multi-use trails within the creek and SMUD utility corridors (City of Citrus Heights 2025c).

There is also no prime farmland within or adjacent to the Project area that could be impacted by the Project (California Department of Conservation 2025). The Project would not result in land use changes that conflict with the General Plan or other relevant City of Citrus Heights plans (such as the Pedestrian Master Plan, Bikeway Master Plan, Safe Routes to School Master Plan, or ADA Master Plan).

*Right-of-Way*

Four parcels are expected to be impacted on a permanent (after construction) and/or temporary (during construction) basis as a result of the project. The Stock Ranch Nature Preserve will require a permanent easement and PTE. The Huntington Square

Apartments may require modification of an existing permanent easement and a PTE. A TCE will be needed from Walmart.

*Utilities*

Utility coordination may be required for a few utilities; however, the service will not be disrupted.

## CONCLUSION

Overall, the proposed Project is anticipated to benefit the community by enhancing pedestrian infrastructure along Sylvan Road, which will improve the mobility along the creek corridors. The area surrounding the Project has land use designations of General Commercial, Open Space, Low Density Residential, and Medium Density Residential which includes the Stock Ranch Nature Preserve, Arcade Creek, residential communities, and residential homes. The proposed Project is consistent with the General Plan, with no changes to zoning and/or land use designations for adjacent areas will be required.

The proposed Project will require permanent easements, PTEs, and TCEs, including partial road closures during construction. To minimize potential traffic disruptions, Measure **LU-2** will be implemented by development of a traffic management plan prior to construction. The Project's overall community impact is expected to be minimal and temporary with implementation of the measures listed below.

## AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

The following avoidance, minimization, and mitigation measures will ensure no impacts to land use or community occur as a result of the proposed Project:

**LU-1:** An outreach and engagement plan will be developed to ensure potential security concerns from residents of the Huntington Square Apartments are identified and addressed prior to construction.

**LU-2:** A Traffic Management Plan will be prepared to identify ways to minimize impacts to the public during partial road closures anticipated during construction.

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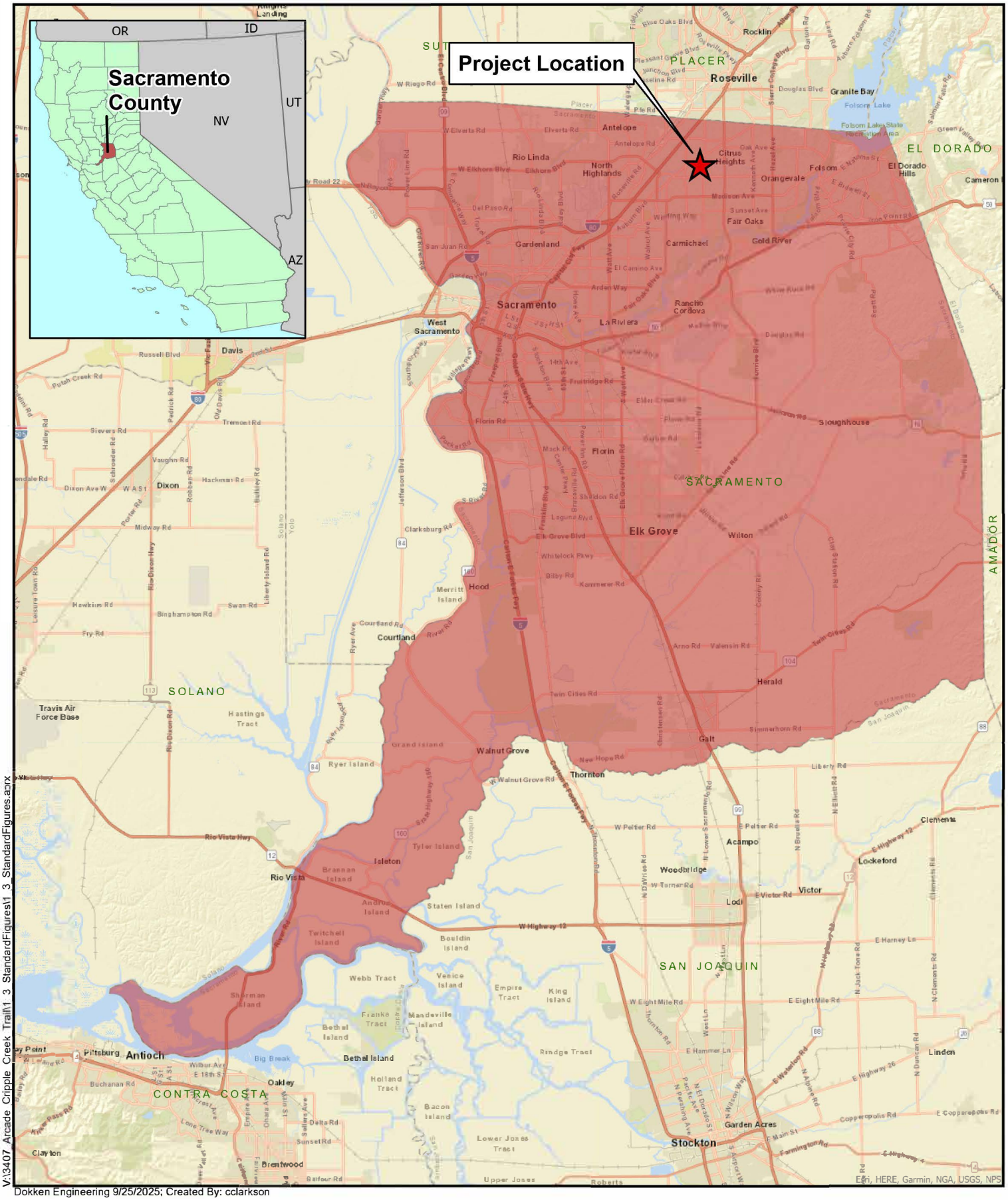
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# Appendix A. Figures



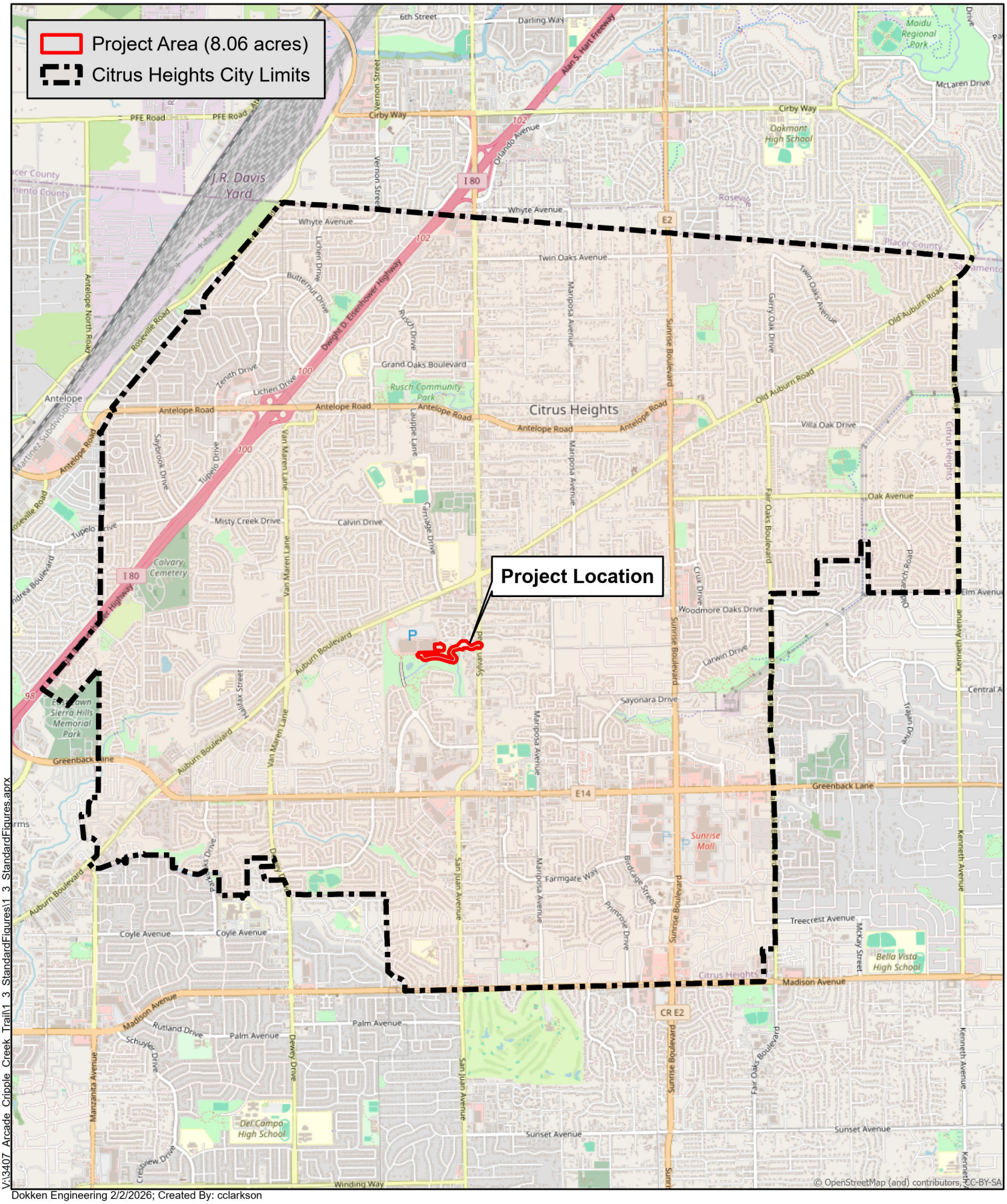

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Dokken Engineering 9/25/2025; Created By: cclarkson

0 3.5 7 Miles

**Figure 1**
**Project Vicinity**

Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Dokken Engineering 2/2/2026; Created By: cclarkson

0 1,750 3,500

Feet

**Figure 2**
**Project Location**

Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Source: Dokken Engineering 2/4/2026; Created By: kjacobson

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**Figure 3**
**Project Features**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

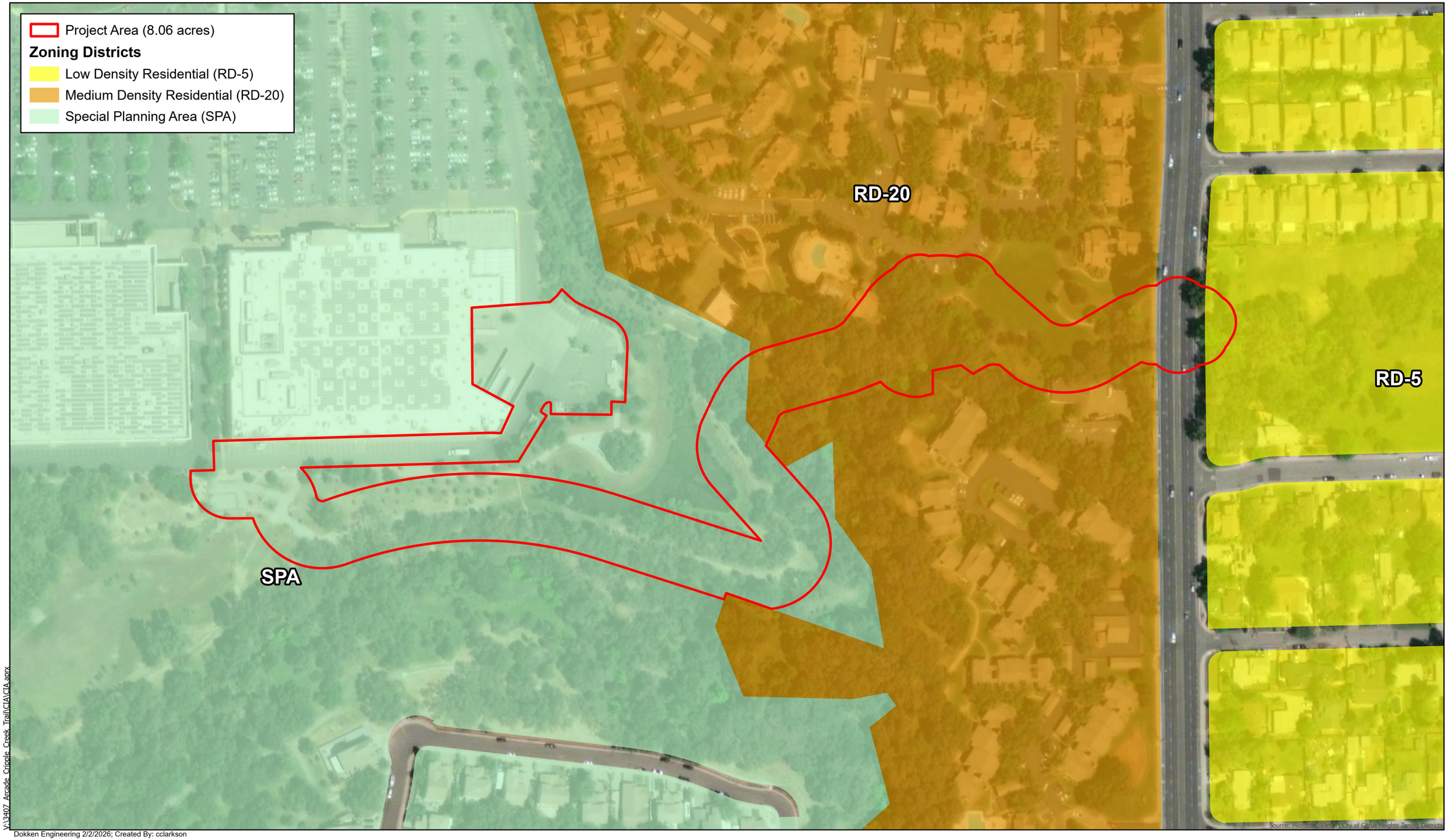



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**Figure 4**
**Land Use Designations**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

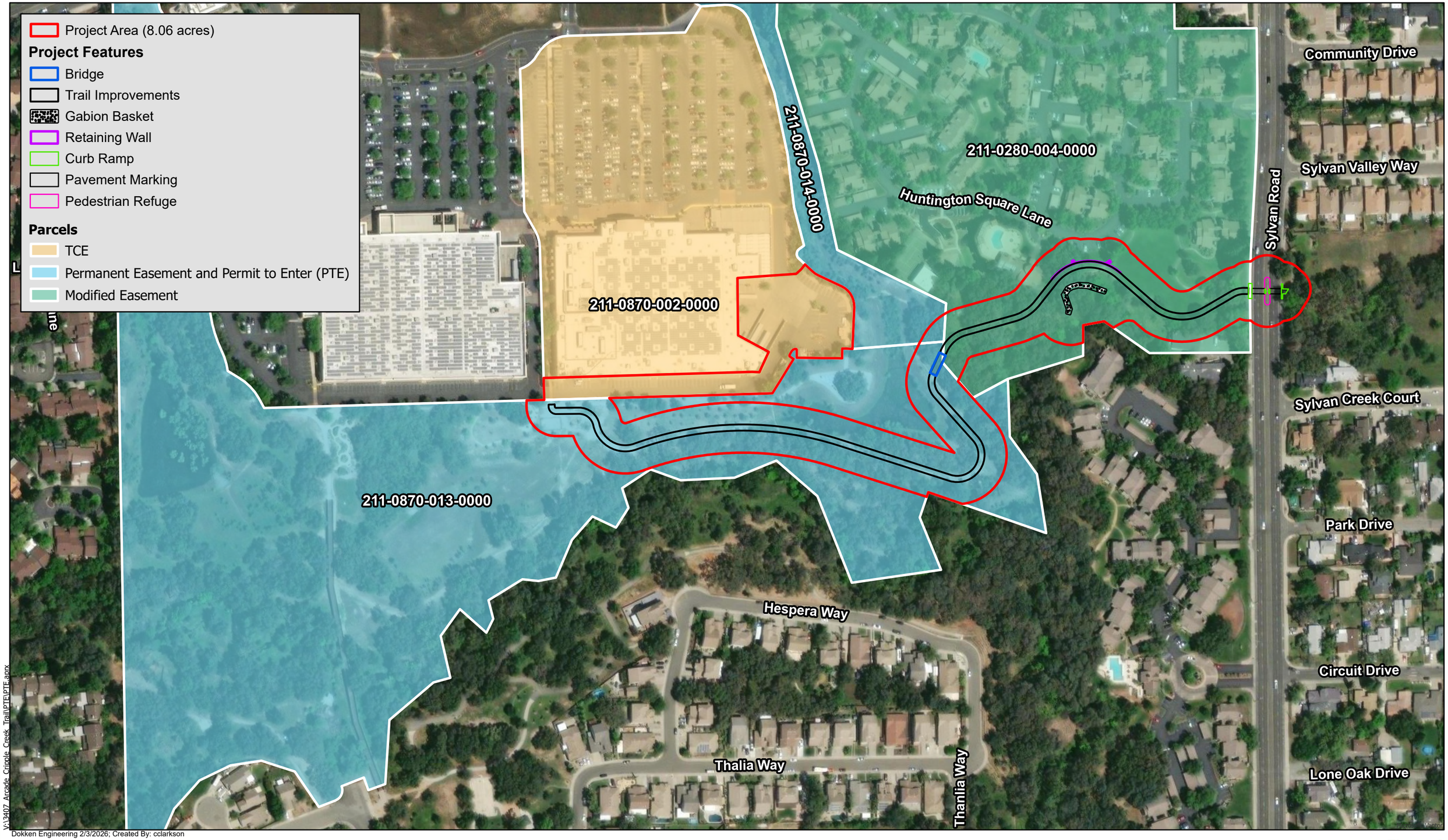



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**Figure 5**
**Zoning Districts**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California




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Dokken Engineering 2/3/2026; Created By: cclarkson

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**Figure 6**
**Potential Right-of-Way**
Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project
Citrus Heights, Sacramento County, California

# APPENDIX H: Noise Technical Memorandum

**Arcade-Cripple Creek Trail** **NTM**

**(Sylvan Road to Stock Ranch) Extension Project**



# Noise Technical Memorandum

Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project

City of Citrus Heights, Sacramento County, California

District 3–SAC

CRP 5475 (053)

**March 2026**

STATE OF CALIFORNIA

Caltrans

CALIFORNIA DEPARTMENT OF TRANSPORTATION

# Noise Technical Memorandum

## Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project

City of Citrus Heights, Sacramento County, California

District 3 – SAC

CRP– 5475 (053)

**March 2026**

STATE OF CALIFORNIA

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

Prepared By: _____ Date: 3/24/26

Ken Chen, Environmental Planner
Dokken Engineering
110 Blue Ravine Rd, #200
Folsom, CA, 95630
(916) 858-0642

Reviewed By: _____ Date: 3/25/26

Daniel Kehrer, Principal Civil Engineer
(916) 727-4770
City of Citrus Heights General Services Department
6360 Fountain Square Drive
Citrus Heights CA 95621

Approved By: Caitlin Greenwood Date: 4/14/2026

Caitlin Greenwood, Associate Environmental Planner
District 3 North Region Local Assistance

Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

## INTRODUCTION

This memorandum discusses temporary (including short-term and intermittent) construction-related noise impacts from implementation of the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project in the City of Citrus Heights, Sacramento County, California.

## PROJECT DESCRIPTION

The City of Citrus Heights (City) proposes to construct a 0.5-mile addition to the planned 16-mile Creek Corridor Trail Project (CCTP) as part of the Arcade-Cripple Creek Trail (Sylvan to Stock Ranch) Extension Project (Project) (**Appendix A. Figure 1. Project Vicinity; Figure 2. Project Location)**. The Project is funded through the federal Carbon Reduction Program and therefore requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for CEQA compliance is the City of Citrus Heights and the federal lead agency for NEPA compliance is the California Department of Transportation (Caltrans).

The Project is located in the City of Citrus Heights and will extend east from the existing Stock Ranch Trail behind the Costco/Walmart shopping center, also known as the Stock Ranch Retail Center, to Sylvan Road. The proposed alignment begins south of the Walmart property boundary and proceeds east through the Stock Ranch Nature Preserve, curving south around Walmart's water quality detention basin. The alignment continues north, crossing a tributary of Arcade Creek and passes south of the Huntington Square Apartments connecting to Sylvan Road. The alignment terminates east of Sylvan Road at the location of a planned future trail extension segment from Sylvan Road to Mariposa Avenue. The Project has independent utility and would function as a stand-alone improvement.

Proposed facilities include a paved trail, a new prefabricated bridge across the unnamed creek tributary, solar lighting, bank protection along a segment of Arcade Creek, and an at-grade signalized crossing at Sylvan Road (**Appendix A. Figure 3. Project Features**). Construction activities will involve grading to achieve ADA-compliant slopes, installing the creek crossing, paving the trail, erecting the solar lighting, constructing bank protection, and adding pedestrian signal infrastructure with minor utility adjustments as needed.

To accommodate construction, partial right-of-way (ROW) acquisitions will be required from several parcels. These include a permanent easement and permit to enter (PTE) from the Sunrise Recreation & Park District and a temporary construction easement (TCE) from Walmart. An existing rail easement exists across the Hunting Square Apartments property and there is potential for permanent easement to be modified to best incorporate the trail alignment with the physical site features.

Construction access will be provided primarily through Walmart parking lot under a TCE, as well as PTE for access from the Hunting Square Apartments parcel. These provisions will allow safe and efficient construction of the rail and its associated improvements.

Construction is anticipated to start in 2027 and last approximately 6 months.

## PROJECT PURPOSE

The purpose of this Project is to construct one of the several planned segments of the CCTP by replacing dirt and narrow concrete paths with an ADA-compliant Class I multi-use trail.

## PROJECT NEED

This trail extension is needed to enhance pedestrian and bicycle connectivity, provide a safe recreational facility, and improve access through the Arcade Creek greenbelt.

## NO-BUILD ALTERNATIVE

The No-Build Alternative would result in no paved trail extension from Sylvan Road to Stock Ranch, leaving a remaining gap in the Arcade-Cripple Creek trail system, and users would continue to traverse through dirt and narrow concrete paths that are not ADA-compliant.

## NOISE SETTING

In accordance with the Caltrans Environmental Handbook guidelines, noise is defined as unwanted sound. Sound levels usually are measured and expressed in decibels (dB), with 0 dB being the threshold of hearing. Decibel levels range from 0 to 140: 50 dB for light traffic is considered a low decibel level, whereas 120 dB for a jet takeoff at 200 feet (ft.) is considered a high decibel level.

Under the Caltrans Traffic Noise Analysis Protocol 2020, projects other than Type 1 require an evaluation of predicted construction noise. The Project is not a Type 1 project as defined in 23 CFR 772.5(h); “construction of a highway on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes.” A Type II project is a noise barrier retrofit project that involves no changes to highway capacity or alignment. A Type III project is a project that does not meet the classifications of a Type I or Type II project. Type III projects do not require noise analysis. The proposed Project falls within the category of a Type III project as it would include constructing a segment of a paved trail, a creek crossing structure, and a signalized crossing, which would not be anticipated to change any roadway horizontal or vertical alignment, nor increase the number of traffic lanes. Therefore, new substantial noise would not be generated, and only construction-related noise impacts are discussed.

There are existing sensitive receivers within the vicinity of the proposed construction activity, including existing residences north, south, and east of the existing trail.

Noise sources that contribute to ambient noise levels in and adjacent to the Project site include operational and traffic noise associated with the Walmart and Costco to the west of the existing trail. Table 1 summarizes typical ambient noise levels based on population density.

**Table 1. Population Density and Associated Ambient Noise Levels**

| Population Density | dBA, Ldn |
|---|---|
| Rural Suburban | 40–50 |
| Quiet suburban residential or small town | 45–50 |
| Normal suburban residential urban | 50–55 |
| Normal urban residential | 60 |
| Noisy urban residential | 65 |
| Very noisy urban residential | 70 |
| Downtown, major metropolis | 75–80 |
| Under flight path at major airport, 0.5 to 1 mile from runway | 78–85 |
| Adjoining freeway or near a major airport | 80–90 |

Sources: Cowan 1984; Hoover and Keith 1996

The vicinity of the Project area is most similar to that of a "normal suburban residential urban" setting due the Project's surrounding uses of residential neighborhoods and local streets. Such areas have an expected typical noise level of 50–55 dBA.

## LOCAL REQUIREMENTS

The City of Citrus Heights Noise Ordinance (Citrus Heights Municipal Code, Chapter 34, Article III) contains performance standards for the purpose of prohibiting unnecessary, excessive, annoying sounds that, at certain levels and frequencies, are detrimental to the health and welfare of the City's residents.

The exterior noise standards applicable to the proposed Project for Noise Area 1, which covers the SPA, RD-5, and RD-20 land use zones abutting the proposed Project (**Appendix A. Figure 4. Noise Area 1 Zones**), are for exterior noise limits of 55 dBA between 7:00 a.m. to 10 p.m. and 50 dBA between 10:00 p.m. to 7:00 a.m.

The Noise Ordinance provides exemptions from the above standards for outdoor school events; outdoor gatherings conducted pursuant to a City permit; activities in parks, playgrounds and school grounds; machinery used in connection with emergency activities; daytime construction noise; daytime agricultural noise; agricultural noise to salvage crops or perform pest control; daytime residential property maintenance; and airport operations and maintenance.

Specifically, the following exemption is provided for daytime construction noise.

"Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided the activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday, Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday, and on each Sunday after the hour of

8:00 p.m. However, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner."

**Environmental Consequences**

Generally, noise levels at construction sites can vary from 55 dBA to a maximum of nearly 90 dBA when heavy equipment is used. During construction-related activities of the Project, noise from construction-related activities may intermittently (that is, short-term and temporarily) dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans Standard Specifications for noise control which state that noise levels should not exceed 86 dBA Lmax at 50 feet from job site from 9:00 p.m. to 6:00 a.m.

Construction activities would include cranes, earth movers, dump trucks, concrete mixers, generators, pavers, and possibly jackhammers or pile driving. Noise levels would vary depending on the type, duration, and occurrence of construction-related activity. The loudest construction-related activities may include engine noise from pile driving, jack hammering, and construction vehicles. For this Project, the lowest construction equipment-related noise levels would be 55 dBA at a distance of 50 feet for sound from a pick-up truck. The highest construction-related noise levels would be for pile driving (up to 90 dBA at a distance of 50 feet) involved in installation of the bridge supports for the creek overcrossing structure and for jackhammering (90 dBA at a distance of 50 feet) involved in removing the existing concrete pathways on the apartment complex property.

The nearest distance between nearby residences to bridge supports where pile driving would occur is approximately 300 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance. At a distance of 300 feet, noise from pile driving would attenuate to approximately 74 dBA.

Construction-related noise would be short-term, temporary, and intermittent. Construction is expected to be completed within a 6-month time period, with pile-driving anticipated to occur over a two-day period within the 6 months. No additional construction-related noise control minimization measures are necessary.

Due to the temporarily increased noise levels during construction, minimal adverse noise impacts from construction-related activities are anticipated. Construction would be conducted in accordance with Caltrans Standard Specifications for noise control and in accordance with the Chapter 6.32.100(E) of the City of Citrus Heights Municipal Code:

**NOI-1**:To minimize the construction-generated noise, the contractor shall follow the Caltrans Standard Specifications for noise control and Chapter 34, Article III, Sec. 34-88(5) of the City of Citrus Heights Municipal Code, which requires the following:

Control and monitor noise resulting from work activities. Only operate construction equipment or run the equipment engines between the hours of 7:00 a.m. and 8:00 p.m.

- When an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in progress be continued until a specific phase is completed, the contractor shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor.

## SUMMARY

From the above discussion, it is concluded that construction-related noise impacts caused by the Project would not be substantial because: 1) the Project is not a Type 1 project; 2) the proposed construction duration is short-term, temporary, and intermittent; and 3) construction of the Project would be conducted in accordance with Caltrans' Standard Specifications for noise control and City of Citrus Heights requirements.

## REFERENCES

California Department of Transportation: Division of Environmental Analysis. April 2020. Traffic Noise Analysis Protocol: For New Highway Construction, Reconstruction, and Retrofit Barrier Projects.

Cowan, J. P. 1984. Handbook of Environmental Acoustics. New York, NY: John Wiley & Sons.

City of Citrus Heights, California—Citrus Heights Municipal Code, Chapter 34, Article III.–NOISE CONTROL.

# APPENDIX I: Mitigation Monitoring Plan

# MITIGATION MONITORING PLAN CHECKLIST FOR THE ARCADE-CRIPPLE CREEK TRAIL (SYLVAN ROAD TO STOCK RANCH) EXTENSION PROJECT

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
|---|---|---|---|---|---|
| | | | | Initials | Date |
| **City of Citrus Heights General Plan (CCHGP)** | | | | | |
| **MM 4.7-7:** | **Discovery of Potential Paleontological Resources**<br>If potential paleontological resources are detected by construction workers or City staff during construction of future land uses, work shall stop immediately, and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include, but are not limited to, construction worker personnel education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures considered appropriate after further consultation. | During Construction | City of Citrus Heights/ Contractor | | |
| **AESTHETICS** | | | | | |
| **VIS-1** | Aesthetic treatments on the new paved trail and prefabricated bridge over Arcade Creek will be consistent with other trails and bridges along the CCTP. | Prior to Construction | City of Citrus Heights | | |
| **VIS-2** | Lighting along the trail will be downcast to minimize glare. The Project's lighting design must be consistent with the City Citrus Heights lighting guidelines and standards. | Prior to and during Construction | City of Citrus Heights/ Contractor | | |
| **AIR QUALITY** | | | | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
|---|---|---|---|---|---|
| | | | | Initials | Date |
| **AQ-1:** | Implement Sacrameto Metropolitan Air Quality Management District (SMAQMD) Basic and Enhanced Construction Emission Control Practices to Reduce Fugitive Dust.<br>The implementing agency will require, as a standard or specification of their contract, the construction contractor(s) to implement basic and enhanced control measures to reduce construction-related fugitive dust. Although the following measures are outlined in the SMAQMD's California Environmental Quality Act (CEQA) guidelines, they are required for the entirety of the construction area. The implementing agency will ensure through contract provisions and specifications that the contractor adheres to the mitigation measures before and during construction and documents compliance with the adopted mitigation measures.<br>• 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.<br>• Cover or maintain at least 2 feet of freeboard 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 shall be covered.<br>• Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.<br>• Limit vehicle speeds on unpaved roads to 15 miles per hour.<br>• All trail, and curb/sidewalk paving should be completed as soon as possible.<br>The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board (CARB) enforces idling limitations and compliance with diesel fleet regulations.<br>• Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 3 minutes. Provide clear signate that posts this requirement for workers at the entrances to the site.<br>• Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, Sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html. | During Construction | City of Citrus Heights/ Contractor | | |
| **BIOLOGY** | | | | | |
| **BIO-1:** | Every individual working on the Project must attend a biological awareness training session | Prior to | City of Citrus | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
|---|---|---|---|---|---|
| | | | | Initials | Date |
| | conducted by the Project biologist. This training program will include information regarding the sensitive habitats and an overview of special status wildlife species that may be encountered within the work area. During biological awareness training, construction personnel will be briefed on topics including, but not limited to, the protected status of VELB and NWPT, as well as the need to protect elderberry shrubs, the host plant of VELB. | Construction | Heights/ Contractor | | |
| **BIO-2:** | Prior to the start of construction activities, the Project limits adjacent to the Arcade Creek, the Arcade Creek tributary and the riparian woodland habitat will be marked with flagging, staking, or high visibility fencing to ensure construction will not further encroach into adjacent sensitive resources. | Prior to Construction | City of Citrus Heights/ Contractor | | |
| **BIO-3:** | Best Management Practices (BMPs) will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):<br>• Exposed soils and material stockpiles will be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction.<br>• Implementation of the Project shall require approval of a site-specific SWPPP or Water Pollution Control Program that will implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques.<br>• All construction areas will be properly protected to prevent excess erosion, sedimentation, and water pollution.<br>• All vehicle and equipment fueling/maintenance will be conducted outside of any surface waters and/or sensitive habitat.<br>• Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants.<br>• Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters.<br>• All erosion control measures, and storm water control measures will be properly maintained until the site has returned to a pre-construction state.<br>• All construction materials will be hauled off-site after completion of construction. | During Construction | Contractor | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
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| | | | | Initials | Date |
| **BIO-4:** | Permanent effects to stream channel and riparian woodland habitat will be provided compensatory mitigation to result in no net loss of habitat, at an agency-approved mitigation ratio via one of the following compensatory mitigation options:<br>• payment of an in-lieu fee to an agency-approved mitigation site,<br>• compensatory off-site mitigation at an agency-approved mitigation site,<br>• compensatory on-site mitigation, or<br>• a combination of the above compensatory mitigation options. | Prior to Construction | City of Citrus Heights | | |
| **BIO-5:** | Native vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:<br>• leave branch stubs<br>• make unnecessary heading cuts<br>• cut off the branch collar (not make a flush cut)<br>• top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)<br>• remove more than 25 percent of the foliage of a single branch<br>• remove more than 25 percent of the total tree foliage in a single year<br>• damage other parts of the tree during pruning<br>• use wound paint<br>• climb the tree with climbing spikes | During Construction | City of Citrus Heights/ Contractor | | |
| **BIO-6:** | Following the completion of construction, all temporary effects to riparian woodland, annual grassland and oak woodland habitat will be recontoured and re-seeded at a 1:1 ratio, to allow for the habitat to return to its previous function. Tree removal will follow final plans and specifications, and any deviation must be approved by a Project biologist. All temporarily disturbed areas will be seeded with a Project biologist-approved native seed mix. Any trees removed from the riparian woodland and oak woodland habitat will be appropriately mitigated for through replanting or other methods in coordination with CDFW and the City of Citrus Heights. | Prior to Construction | City of Citrus Heights | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
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| **BIO-7:** | A focused rare plant survey will be conducted within the Project area prior to the start of construction. If rare plants are discovered during pre-construction surveys but can be reasonably avoided, an Environmentally Sensitive Area (ESA) fence will be installed to protect the specimens in place.<br><br>If a special status plant specimen is present within the Project area and cannot be fully avoided, the Project biologist will relocate individual(s) and/or collect seeds to ensure the continued existence of the local population. Area of relocation or re-seeding will be at the discretion of the Project biologist but will be located within suitable habitat and within the same watershed of the Project, preferably at a location that is protected in perpetuity. | Prior to construction | City of Citrus Heights/ Contractor | | |
| **BIO-8:** | Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1–September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 1 week of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required. | Prior to construction | City of Citrus Heights/ Contractor | | |
| **BIO-9:** | During the spring/summer season prior to construction the Project biologist must conduct pre-construction Swainson's hawk protocol-level surveys within the Project area plus a 0.25-mile buffer in accordance with California Department of Fish and Wildlife's guide for Swainson's Hawk Technical Advisory Committee. Pre-construction surveys will determine if active nests are present within the Project area or within 0.25 mile of Project activities. If an active nest is discovered within the survey area the Project biologist will determine the appropriate avoidance strategies (e.g., monitoring, no-work buffers, work windows, temporary sound/noise barriers, etc.) to avoid take of the nest and will coordinate with CDFW as needed. | Prior to construction | City of Citrus Heights | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
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| | | | | Initials | Date |
| **BIO-10:** | To avoid impacts to western pond turtles, the Project biologist will conduct a pre-construction survey of the aquatic and upland habitats within the Project area. Surveys will be conducted no more than 24 hours prior to onset of construction. If a western pond turtle is spotted within an active work area the Project Biologist will be contacted, and work activities will immediately cease within 100 feet of the turtle. Work will not recommence until the turtle has left the Project site on its own volition. In addition, if western pond turtle nests are detected within or adjacent to the Project area, the Project biologist will mark the nests with high-visibility flagging or fencing and establish a 25-foot no-disturbance buffer around each nest to prevent disturbance until hatching occurs or the biologist determines the nest is no longer at risk. | Prior to Construction | City of Citrus Heights/ Contractor | | |
| **BIO-11:** | To prevent the inadvertent entrapment of NWPT, all excavated, steep-walled holes or trenches more than 3 inches wide and 1 foot deep will be inspected for NWPT then covered at the close of each working day by plywood or similar materials. If it is not feasible to cover an excavation, one or more escape ramps constructed of earthen fill or wood ≥ 6 inches wide shall be installed. Before such holes or trenches are filled, they must be thoroughly inspected by the biologist for trapped NWPT. | During Construction | Contractor | | |
| **BIO-12:** | Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds. | During Construction | Contractor | | |
| **BIO-13:** | All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area. | During Construction | Contractor | | |
| **BIO-14:** | The contractor must not apply rodenticide or herbicide within the Project area during construction. | During Construction | Contractor | | |
| **BIO-15:** | If any wildlife is encountered during the course of construction, said wildlife will be allowed to leave the construction area unharmed. | During Construction | Contractor | | |
| **CULTURAL RESOURCES** | | | | | |
| **CR-1:** | If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey would be needed if project limits are extended beyond the present survey limits. | During Construction | City of Citrus Heights/ Contractor | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
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| **CR-2:** | Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, all ground disturbance within a 100-ft radius must stop and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation and Caltrans PQS should be contacted. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of such identification. CEQA details steps to be taken if human burials are of Native American origin. | During Construction | City of Citrus Heights/ Contractor | | |
| **GREENHOUSE GAS EMISSIONS** | | | | | |

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| **CC-1:** | The implementing agency will require through construction contract terms and specifications that the contractor adheres to the mitigation measures and implements all applicable Sacramento Metropolitan Air Quality Management District (SMAQMD) best management practices for reducing construction-related Greenhouse Gas (GHG) emissions. Documentation will be provided to the implementing agency on a weekly basis. The contract provisions and specifications will authorize the implementing agency to sanction contractors for non-compliance. The implementing agency will consult SMAQMD prior to construction about the most current recommended construction best management practices and will adopt those practices. Practices include the following:<br>• Improve fuel efficiency from construction equipment:<br>o Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes. Provide clear signage that posts this requirement for workers at the entrances to the site.<br>o Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.<br>o Train equipment operators in proper use of equipment, including limiting idling time, minimizing warm-up time, performing routine maintenance, and optimizing equipment use.<br>o Avoid using equipment that is larger than the job requires.<br>o Use equipment with new technologies (e.g., repowered engines, electric drivetrains).<br>• Perform on-site material hauling with trucks equipped with on-road engines (if the air districts or CARB determine them to emit less than the off-road engines).<br>• Use alternative fuels for generators at construction sites, rather than gasoline or diesel (e.g., propane or solar), or use electrical power.<br>• Use a California Air Resources Board-approved low-carbon fuel for construction equipment. (NOx emissions from the use of low-carbon fuel must be reviewed and increases mitigated.)<br>• Encourage and provide carpools, shuttle vans, and transit passes for construction worker commutes.<br>• Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and using the most efficient heating and cooling units available.<br>• Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75% by weight) to avoid landfill disposal. | During Construction | City of Citrus Heights/ Contractor | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
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| | • Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials, and based on volume for trail, sidewalk and curb materials). Wood products utilized should be certified through a sustainable forestry program.<br>• Minimize the amount of concrete for paved surfaces or utilize a low carbon concrete option.<br>• Produce concrete on-site if determined to be less emissive than transporting ready mix.<br>• Use Smartway certified trucks for deliveries and equipment transport.<br>• Develop a plan to efficiently use water for adequate dust control. | | | | |
| **HAZARDS** | | | | | |
| **HM-1:** | To avoid impacts from pavement striping during construction it is recommended that removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provision 14-11.07 REMOVE YELLOW TRAFFIC STRIPE AND PAVEMENT MARKING WITH HAZARDOUS WASTE RESIDUE. | During Construction | Contractor | | |
| **HM-2:** | Should any previously unknown hazardous waste/material be encountered during construction, the procedures outlined in Caltrans Hazards Procedures for Construction shall be followed. | During Construction | Contractor | | |
| **HYDROLOGY** | | | | | |
| **WQ-1:** | The proposed project will require a National Pollution Discharge Elimination System (NPDES) General Construction Permit for Discharges of storm water associated with construction activities (Construction General Permit 2022-0057-DWQ). As part of this Permit requirement, a SWPPP shall be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality. | Prior to Construction | City of Citrus Heights/ Contractor | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
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| | | | | Initials | Date |
| **WQ-2:** | To conform with water quality requirements, the SWPPP must include the following:<br>• Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 50 feet from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters.<br>• The project specifications will require the contractor to operate under an approved spill prevention and clean-up plan;<br>• Construction equipment will not be operated in flowing water;<br>• Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters;<br>• Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life must be prevented from contaminating the soil or entering surface waters;<br>• Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and,<br>• Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site. | Prior to Construction | City of Citrus Heights/ Contractor | | |
| **WQ-3:** | Prior to the start of construction activities, the project limits in proximity to jurisdictional waters must be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into jurisdictional waters. | Prior to Construction | Contractor | | |
| **WQ-4:** | Contract specifications will include the following Best Management Practices (BMPs), where applicable, to reduce erosion during construction:<br>• Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control;<br>• As a permanent BMP, slope roughening by equipment tracking will be implemented to create unevenness on bare soil. Surface roughening reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing water infiltration. | During and after Construction | Contractor | | |
| **NOISE** | | | | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
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| **NOI-1:** | To minimize the construction-generated noise, the contractor shall follow the Caltrans Standard Specifications for noise control and Chapter 34, Article III, Sec. 34-88(5) of the City of Citrus Heights Municipal Code, which requires the following:<br>• Only operate construction equipment or run the equipment engines between the hours of 7:00 a.m. and 8:00 p.m.<br>• When an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in progress be continued until a specific phase is completed, the contractor shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor. | During Construction | Contractor | | |
| **PUBLIC SERVICES** | | | | | |
| **LU-1:** | An outreach and engagement plan will be developed to ensure potential security concerns from residents of the Huntington Square Apartments are identified and addressed prior to construction. | Prior to Construction | City of Citrus Heights | | |
| **TRANSPORTATION AND TRAFFIC** | | | | | |
| **LU-2:** | A Traffic Management Plan will be prepared to identify ways to minimize impacts to the public during partial road closures anticipated during construction. | Prior to Construction | City of Citrus Heights | | |
| **TRIBAL CULTURAL RESOURCES** | | | | | |

| Mitigation Measure | | Reporting Milestone | Reporting / Responsible Party | VERIFICATION OF COMPLIANCE | |
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| | | | | Initials | Date |
| **TCR-1:** | **Unanticipated Discoveries of TCRs**<br>If any suspected TCRs or resources of cultural significance to UAIC, including but not limited to features, anthropogenic/cultural soils, cultural belongings or objects (artifacts), shell, bone, shaped stones or bone, or ash/charcoal deposits are discovered by any person during construction activities including ground disturbing activities, all work shall pause immediately within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. Work shall cease in and within the immediate vicinity of the find regardless of whether the construction is being actively monitored by a Tribal Monitor, cultural resources specialist, or professional archaeologist.<br>A Tribal Representative and the Lead Agency shall be immediately notified, and the Tribal Representative in coordination with the Lead Agency shall determine if the find is a TCR (PRC Section 21074) and the Tribal Representative shall make recommendations for further evaluation and treatment as necessary. | During Construction | City of Citrus Heights/ Contractor | | |
| **TCR-2:** | **Cultural Awareness and Sensitivity Training**<br>Cultural Awareness Training will be developed and provided to all personnel working in the Project area. | Prior to Construction | City of Citrus Heights | | |

# APPENDIX J: Public Comments Received

# COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

great work!

Name: Riley Keller
Email Address: Riley.Kell@aim.com
Phone Number:

# COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

Our family lives south of Greenback in the Park Oaks neighborhood so we regularly use the existing paths around Walmart and are very excited that this will be the next section of the trail constructed. We are thrilled that the city is making access to outdoor trails and recreation a priority. We hope this trend will continue as money becomes available. The more connected to the wider trail system the better!

Thank you to everyone at the meeting who provided us with so much great information!

Name: Diana Ryan
Email Address: dianaandraja@aol.com
Phone Number: (916)717-5577

# COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

LOOKS GREAT! LOOKING FORWARD TO IT.

**Name:** AARON TWEETON
**Email Address:** aaron.tweeton@icloud.com
**Phone Number:** 916-436-6917

# COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

Good Meeting to Explain All
Good Project !!!
WELL DONE DESIGN CONSIDERATION
of PEOPLE & ENVIRONMENT

**Name:** Kathey Mathes
**Email Address:**
**Phone Number:**

# COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

Thank you very much to the city of Citrus Heights for putting in so much effort into this project and their care for our community and its members, and guests from other states. We are proud of our relative Val Minlikayev for being a part of this project and inviting us to the city event to get informed about the project. We know its a lot of work and we appreciate everyone involved in the city that makes our community a better place. May God bless everyone who lives here in our beautiful city & keeps us all safe!
~ Friends from Boise, Idaho ☺

**Name:**
**Email Address:**
**Phone Number:**

# COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

3

Looks good

**Name:**
**Email Address:**
**Phone Number:**

| | |
|---|---|
| **From:** | Kehrer, Daniel |
| **To:** | maxcarol@surewest.net |
| **Cc:** | ACCT - Sylvan2StockRanch |
| **Subject:** | RE: Arcade cripple Creek trail |
| **Date:** | Thursday, May 21, 2026 5:18:34 PM |
| **Attachments:** | image002.png<br>image003.png<br>ACCT-Sylvan to Stock Ranch Exhibit.pdf<br>Project Overview Map.pdf<br>Citrus Heights Cripple Creek Flyer.pdf |

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Hi Carol,

Thank you for your interest and questions, here are my responses.
Feel free to respond or ask additional ones if you think of them.

1 Who is going to keep the bike trail clean on both sides from Thai Way to Woodside.
There is no formal trail proposed from Thalia Way to Woodside Dr, our project will be on the other side of the creek (north side).
Those existing pathways and Park are owned and maintained by Sunrise Recreation and Parks District.

2. How much right away will you take on both sides of the creek bed (same area)?
No right of way takes are proposed for this trail. We will obtain a 20'-30' wide easement from Parks District and there is an existing easement on the Huntington Square Apartments we are utilizing for our trail.

3. Where is bike signalized light going in, at end of Woodside?
The proposed signal will be on Sylvan Road, just north of the bridge at the southern end of Huntington Square Apartments property.
No crossings or connections to Woodside Drive are planned (the crossing will be ~1,300 feet north of Woodside Dr).

4. The bridge you are talking about on Woodside?
No. This will be a new (small) bridge only for trail purposes between Huntington Square Apartments and the Stock Ranch open space on the north side of the creek.

5. What are you going to do to protect property owners from Woodside to Thai?
No plans for added security, the trail is not close to these roadways.

We have not had any known incidents or safety concerns along our existing trail systems (beyond the E-bikes going too fast).
We actually see a reduction in homeless and 'undesirable' activities where trails are installed and used by the general public.

6. I have had all the plans for this area for years, and you are aware part of the plan will be owned by the City, part by the Park District, and part by Igor. We have been here on John Stocks property for 90 years, but actually it was Mae van Marens house at the end of the road, John Stock offered me 2 years before he died the property attached between Woodside Dr and Thai and I said, no thanks John I don't trust the City on what they will do and I knew you had I think 35 feet of right away so I didn't buy it, and now I am glad. I feel sorry for Igor who just bought the adjoining property a year ago, and if it isn't kept up, we will probably have a fire in the same location.
I am unsure what you are referring to with this question. The City will only "own" (in easement) the area isolated to the trail so we can keep up on the maintenance.
All other land uses and ownership will be the same as it is today.
Please take a closer look at the project's alignment in the attached PDF to help clarify where this trail is actually going.

CITRUS HEIGHTS CALIFORNIA
Solid roots. New growth.

**Daniel Kehrer PE CFM QSD/P**
Principal Civil Engineer
dkehrer@citrusheights.net
6360 Fountain Square Dr. | Citrus Heights, CA
(916) 727-4904 | www.citrusheights.net

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**From:** maxcarol@surewest.net <maxcarol@surewest.net>
**Sent:** Monday, May 18, 2026 2:17 PM
**To:** Kehrer, Daniel <dkehrer@citrusheights.net>
**Subject:** Arcade cripple Creek trail

> You don't often get email from maxcarol@surewest.net. Learn why this is important

Carol Alexander, 7330 Woodside Dr, 916-725-5834. I do have some questions about your proposal. Number 1 Who is going to keep the bike trail clean on both sides from Thai Way to Woodside. 2. How much right away will you take on both sides of the creek bed (same area)? 3. Where is bike signalized light going in, at end of Woodside? 4. The bridge you are talking about on Woodside? 5. What are you going to do to protect property owners from Woodside

to Thai?

6. I have had all the plans for this area for years, and you are aware part of the plan will be owned by the City, part by the Park District, and part by Igor.

We have been here on John Stocks property for 90 years, but actually it was Mae van Marens house at the end of the road, John Stock offered me 2 years before he died the property attached between Woodside Dr and Thai and I said, no thanks John I don't trust the City on what they will do and I knew you had I think 35 feet of right away so I didn't buy it, and now I am glad. I feel sorry for Igor who just bought the adjoining property a year ago, and if it isn't kept up, we will probably have a fire in the same location.

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**From:** Kehrer, Daniel
**To:** Bobbi
**Cc:** ACCT - Sylvan2StockRanch
**Subject:** RE: failure notice
**Date:** Wednesday, June 17, 2026 4:32:09 PM
**Attachments:** image002.png
image003.png
image004.png

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Hi Bobbi,

Please see below for responses to your questions, please let me know if I've left any un-answered.

My main concern is that the MND may not adequately evaluate potential upstream flooding impacts associated with the project. Any modifications
to drainage patterns, creek crossings, bridge structures, embankments, or trail improvements within or adjacent to flood-prone areas could affect water flow during storm events, especially bomb cyclones. I don't see any clear analysis that it WILL NOT increase flood risk to upstream properties.
This Project has completed a Location Hydraulic Study that incorporated rainfall models and physical cross sections of the creek for the existing and proposed conditions.
The findings of this report includes detailed hydraulic analysis and states, " The Project has been designed to minimize both short-term and long-term impacts to the floodplain. Temporary construction disturbances will be minimized through the implementation of best management practices (BMPs), including erosion and sediment control measures. Permanent improvements, including minor grading, bank protection, and installation of a prefabricated bridge, have been designed to avoid adverse hydraulic impacts. While fill is proposed to support the bridge structure, hydraulic modeling confirms that there are no increases in BFEs between the existing and proposed conditions."
You may download/view the report here: 5475(053) DRAFT Location Hydraulic Study.pdf
This report has been approved and is currently being routed for signatures with City and State Department of Transportation staff. I will post this (and all approved studies) to the project website when they are fully signed.

Also, the long-term maintenance and replacement costs associated with the proposed bridges and related infrastructure concerns me. While the

MND discusses project construction impacts, it appears to provide limited info regarding ongoing maintenance and future repair or replacement expenses. You did tell us at the June 4th meeting the 4 bridge repairs already constructed are paid half by Caltrans and half from the Citrus Heights general fund, or rather us taxpayers. These long-term costs will ultimately be borne by the taxpayers and should be fully disclosed and evaluated.
Maintenance costs have been incorporated into the City's budgets for our planned trail extensions (including this one) on-going maintenance costs are do not differ very much from the existing costs for maintaining the creeks and open spaces. The discussion we had during the June 4th meeting are for bridges constructed in the 1960's and the maintenance work is primarily creek embankment repairs near the bridge (re-shape the embankments and armor with heavy rock slope protections). No major bridge repairs or re-construction are necessary for these prescribed corrections sent to us from State structural inspections. Please note that we have 63 bridges in the City (and growing) and only 4 required *minor* repairs from reports received last year. We have carefully planned the bridge for this project to be 2' above the 100-year flood plain, to minimize any damage from significant rain events, we do anticipate minor repairs to the embankments in the future, as is very typical of all creek crossings and creek maintenance costs.

There has been a significant increase in the use of motorized bicycles on the trails and streets of Stock Ranch. The safety and enforcement appear to rely on the Citrus Heights police (cops on bikes). I have rarely, if ever, observed police patrols on these facilities. The city should provide info regarding how such enforcement would be implemented.
I agree with your observations regarding motorized bicycles, our Police Problem-Oriented Policing (POP) Unit is currently working on formalizing a trail use ordinance to improve their enforcement capabilities. Our department meets with CHPD (POP and Traffic Enforcement) monthly and they indicate the trails are patrolled daily by at-least one of their motor officers. It is currently illegal to use a private motorcycle or dirt-bike on our trail network and the new ordinance will provide a maximum speed limit and provide clarifications on E-bike and E-scooter restrictions (please keep an eye out for City Council hearings for this Ordinance later in 2026).

The proposed trial segment should not be evaluated in isolation from the larger trail network. Public info indicated that the future trail
segment between Sayonara and Mariposa includes 4 additional bridges. While that project may not begin construction until a later date, the
cumulative effect of construction and maintaining multiple bridge crossings throughout the trail system should be considered. Repair costs

can be substantial and is important for the public to understand the full long=term obligations associated with the expansion of the trail
network.
This is not how hydraulic studies work. Each individual project must meet a “no rise” certification for its specific impact. Any significant changes to floodways (for any project) would require a map revision with FEMA and County Department of Water Resources. The City takes floodplain management very seriously and implements local requirements above and beyond the minimums mandated by the State and Federal Government. The ACCT Sylvan to Stock Ranch project has studied and exhibited that there will not be an increase in floodplain (upstream, downstream, or within) the project limits.
When the Sayonara to Mariposa extension is ready, it will be held to the same standards as the current project. See response above for maintenance and repair cost planning within the City’s capital improvement and maintenance budget documents.

How is it that the Sayonara-Mariposa project showed fully funded on the map at the June 4th meeting, but the current Stock Ranch
is only partially funded?
Every project is unique. The Sayonara-Mariposa Project applied for Active Transportation (ATP) Grant funding in 2023 for all phases of that Project’s design and construction. The current project (Sylvan-Stock Ranch), received Federal Carbon Reduction Grant Funding for the preliminary and final design phases (this grant program does not offer construction funds). The City Team is currently applying for the 2027 ATP Grant Funding for construction and we are hopeful that we can get this awarded. If not, we will keep trying any and all appropriate grant opportunities as outside funding is critical to the budgets we have for the vast majority of our Capital Improvement Projects.

I am also concerned about the accuracy of the land use info presented in the documents. The maps appear to identify certain areas adjacent to the
proposed trail as "Open Space" Page 10 Fig. 5. East of Sylvan Road. My understanding is that this area consists of privately owned residential property, in a low-density residential neighborhood. The city should verify the accuracy of the land use designation and mapping used in the environmental review. because it affects the analysis of privacy concerns security consideration and potential effects of adjacent residents.
The CEQA Document, on Page 17 (Figure 4, Zoning Districts) this area is clearly labeled as RD-5 which matches your understanding and the City’s General Plan for low-density housing. On Page 18, the area shown as ‘open space’ is potentially misleading, that shape appears to be consistent with the existing trail easement on the properties on the

north-side of Arcade Creek for a future trail segment. The City accepts your comment and will have our consultant team provide a clarification/correction in the final CEQA document. We will follow up with you after the final version is posted on the City's website.

My concern is not with the trail development in the Stock Ranch area, and I welcome the Ped crossing over Sylvan Road, but the city should ensure that residents have a complete understanding of the true public cost and property impacts before additional commitments are made.
Thank you again for your attention to this project and your comments provided. Your City works very hard to provide transparency and information for our projects, budgets, and plans. Every project that we deliver meets (and generally exceeds) the high-standard of reporting and notices required by State and Federal Law, we do listen to our residents and feedback. We post our citywide budgets, capital projects, capital project funding online; and provide annual updates at City Council Meetings (if not more frequently), and hold project-specific outreach campaigns to ensure the public has an opportunity to comment. In addition, our Team is committed to transparency and regularly schedule meetings with residents at City Hall who are interested in learning more about a project or the City's programs/budgets (just stop by or give us a call). If you have any specific suggestions for improvement, let us know.

I am here and available to discuss any questions or follow up items you may have regarding this or any other City project, reach out anytime.
Sincerely,

CITRUS HEIGHTS CALIFORNIA
Solid roots. New growth.

**Daniel Kehrer PE CFM QSD/P**
Principal Civil Engineer

6360 Fountain Square Dr. | Citrus Heights, CA
(916) 727-4904 | www.citrusheights.net

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**From:** Kehrer, Daniel
**Sent:** Tuesday, June 16, 2026 12:38 PM
**To:** 'Bobbi' <brobben@cwo.com>
**Cc:** ACCT - Sylvan2StockRanch <acct-sylvan2stockranch@citrusheights.net>
**Subject:** RE: failure notice

Hi Bobbi,

I wanted to let you know that I received your email this time and our team will send you responses to the questions soon.
Thank you for reaching out.

**Daniel Kehrer PE CFM QSD/P**
Principal Civil Engineer
dkehrer@citrusheights.net
6360 Fountain Square Dr. | Citrus Heights, CA
(916) 727-4904 | www.citrusheights.net

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**From:** Bobbi <brobben@cwo.com>
**Sent:** Sunday, June 14, 2026 10:21 AM
**To:** Kehrer, Daniel <dkehrer@citrusheights.net>
**Subject:** FW: failure notice

Sent from my Galaxy

-------- Original message --------
From: MAILER-DAEMON@mail.succeed.net
Date: 6/14/26 9:10 AM (GMT-08:00)
To: brobben@cwo.com
Subject: failure notice

Hi. This is the qmail-send program at mail.succeed.net.
I'm afraid I wasn't able to deliver your message to the following addresses.
This is a permanent error; I've given up. Sorry it didn't work out.

<dkehrer@citruheight.net>:
Sorry, I couldn't find any host named citruheight.net. (#5.1.2)

--- Below this line is a copy of the message.

Return-Path: <brobben@cwo.com>
Received: (qmail 2883441 invoked from network); 14 Jun 2026 16:10:14 -0000
Received: from localhost (HELO mail.succeed.net)
(brobben@cwo.com@97.205.86.118)
by mail.succeed.net with ESMTPA (via Webmail)
id 871d00d6-680b-11f1-a5d4-0050568549ca; Sun, 14 Jun 2026 09:10:14 -0700
MIME-Version: 1.0
Date: Sun, 14 Jun 2026 09:10:14 -0700
From: brobben@cwo.com
To: dkehrer@citruheight.net
Subject: Fwd: Comments on Stock Ranch Sylvan Rd Bike Trail MND
In-Reply-To: <fb084b482a7b867573d6899a64855846@cwo.com>
References: <fb084b482a7b867573d6899a64855846@cwo.com>
User-Agent: MagicMail Tuxedo/1.6.15
Message-ID: <abd8b512e30346bc544a5c1acf2289ee@cwo.com>
X-Sender: brobben@cwo.com
Content-Type: text/plain; charset=US-ASCII;
format=flowed
Content-Transfer-Encoding: 7bit
X-MagicMail-OS: MagicMail 6.0-Stable
X-MagicMail-UUID: 871d00d6-680b-11f1-a5d4-0050568549ca
X-MagicMail-Authenticated: brobben@cwo.com
X-MagicMail-SourceIP: 127.0.0.1
X-MagicMail-RegexMatch: 2
X-MagicMail-EnvelopeFrom: <brobben@cwo.com>

Dan,

I am a long-term resident of Citrus Heights and attended the June 4th community meeting. I do have some concerns about this project and some questions.

My main concern is that the MND may not adequately evaluate potential upstream flooding impacts associated with the project. Any modifications

to drainage patterns, creek crossings, bridge structures, embankments, or trail improvements within or adjacent to flood-prone areas could affect water flow during storm events, especially bomb cyclones. I don't see any clear analysis that it WILL NOT increase flood risk to upstream properties.

Also, the long-term maintenance and replacement costs associated with the proposed bridges and related infrastructure concerns me. While the MND discusses project construction impacts, it appears to provide limited info regarding ongoing maintenance and future repair or replacement expenses. You did tell us at the June 4th meeting the 4 bridge repairs already constructed are paid half by Caltrans and half from the Citrus Heights general fund, or rather us taxpayers. These long-term costs will ultimately be borne by the taxpayers and should be fully disclosed and evaluated.

There has been a significant increase in the use of motorized bicycles on the trails and streets of Stock Ranch. The safety and enforcement appear to rely on the Citrus Heights police (cops on bikes). I have rarely, if ever, observed police patrols on these facilities. The city should provide info regarding how such enforcement would be implemented.

The proposed trial segment should not be evaluated in isolation from the larger trail network. Public info indicated that the future trail segment between Sayonara and Mariposa includes 4 additional bridges. While that project may not begin construction until a later date, the cumulative effect of construction and maintaining multiple bridge crossings throughout the trail system should be considered. Repair costs can be substantial and is important for the public to understand the full long=term obligations associated with the expansion of the trail network. How is it that the Sayonara-Mariposa project showed fully funded on the map at the June 4th meeting, but the current Stock Ranch is only partially funded?

I am also concerned about the accuracy of the land use info presented in the documents. The maps appear to identify certain areas adjacent to the proposed trail as "Open Space" Page 10 Fig. 5. East of Sylvan Road. My understanding is that this area consists of privately owned residential property, in a low-density residential neighborhood. The

city should verify the accuracy of the land use designation and mapping used in the environmental review. because it affects the analysis of privacy concerns security consideration and potential effects of adjacent residents.

My concern is not with the trail development in the Stock Ranch area, and I welcome the Ped crossing over Sylvan Road, but the city should ensure that residents have a complete understanding of the true public cost and property impacts before additional commitments are made.

Sincerely,
Bobbi Robben

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