

# Palomino Place Project

SCH# 2007072020

---

## Draft Subsequent Environmental Impact Report

Prepared for  
City of Davis



**August 2024**

Prepared by



# **Palomino Place Project Draft Subsequent Environmental Impact Report**

---

SCH# 2007072020

## **Lead Agency**

---

City of Davis  
23 Russell Boulevard,  
Davis, CA, 95616

Eric Lee  
Senior Planner  
(530) 757-5610

## **Prepared By**

---

Raney Planning and Management, Inc.  
1501 Sports Drive, Suite A  
Sacramento, CA 95834  
(916) 372-6100

Contact:  
Nick Pappani  
Vice President



---

---

# **TABLE OF CONTENTS**

---

---

# TABLE OF CONTENTS

<b><u>CHAPTER</u></b>	<b><u>PAGE</u></b>
<b>1. Introduction .....</b>	<b>1-1</b>
1.1 Type and Purpose of the SEIR.....	1-1
1.2 Known Responsible and Trustee Agencies .....	1-2
1.3 Project Summary.....	1-3
1.4 SEIR Process.....	1-4
1.5 Scope of the SEIR.....	1-5
1.6 Definition of Baseline .....	1-6
1.7 Significance Criteria .....	1-7
1.8 Notice of Preparation and Scoping.....	1-7
1.9 Comments Received on the Notice of Preparation .....	1-8
1.10 Draft SEIR and Public Review.....	1-10
1.11 Organization of the Draft SEIR.....	1-11
<b>2. Executive Summary.....</b>	<b>2-1</b>
2.1 Introduction .....	2-1
2.2 Summary Description of the Proposed Project .....	2-1
2.3 Environmental Impacts and Mitigation Measures .....	2-2
2.4 Summary of Project Alternatives .....	2-2
2.5 Areas of Controversy .....	2-6
<b>3. Project Description.....</b>	<b>3-1</b>
3.1 Introduction and Background.....	3-1
3.2 Project Location .....	3-2
3.3 Project Setting and Surrounding Land Uses.....	3-2
3.4 Project Objectives .....	3-5
3.5 Project Components.....	3-5
3.6 Project Approvals .....	3-16
<b>4. Existing Environmental Setting, Impacts, and Mitigation</b>	
<u>4.0 Introduction to the Analysis .....</u>	<u>4.0-1</u>
4.0.1 Introduction .....	4.0-1
4.0.2 Determination of Significance.....	4.0-1
4.0.3 Environmental Issues Addressed in this SEIR.....	4.0-2
4.0.4 Chapter Format.....	4.0-2
<u>4.1 Aesthetics .....</u>	<u>4-1</u>
4.1.1 Introduction .....	4.1-1



<b>CHAPTER</b>		<b>PAGE</b>
4.1.2	Existing Environmental Setting.....	4.1-3
4.1.3	Regulatory Context .....	4.1-11
4.1.4	Impacts and Mitigation Measures.....	4.1-13
<b>4.2</b>	<b><u>Air Quality, Greenhouse Gas Emissions, and Energy</u>.....</b>	<b>4.2-1</b>
4.2.1	Introduction .....	4.2-1
4.2.2	Existing Environmental Setting.....	4.2-1
4.2.3	Regulatory Context .....	4.2-17
4.2.4	Impacts and Mitigation Measures.....	4.2-33
<b>4.3</b>	<b><u>Biological Resources</u>.....</b>	<b>4.3-1</b>
4.3.1	Introduction .....	4.3-1
4.3.2	Existing Environmental Setting.....	4.3-1
4.3.3	Regulatory Context .....	4.3-28
4.3.4	Impacts and Mitigation Measures.....	4.3-37
<b>4.4</b>	<b><u>Noise</u> .....</b>	<b>4.4-1</b>
4.4.1	Introduction .....	4.4-1
4.4.2	Existing Environmental Setting.....	4.4-1
4.4.3	Regulatory Context .....	4.4-9
4.4.4	Impacts and Mitigation Measures.....	4.4-13
<b>4.5</b>	<b><u>Public Services and Utilities</u>.....</b>	<b>4.5-1</b>
4.5.1	Introduction .....	4.5-1
4.5.2	Existing Environmental Setting.....	4.5-2
4.5.3	Regulatory Context .....	4.5-14
4.5.4	Impacts and Mitigation Measures.....	4.5-22
<b>4.6</b>	<b><u>Transportation</u>.....</b>	<b>4.6-1</b>
4.6.1	Introduction .....	4.6-1
4.6.2	Existing Environmental Setting.....	4.6-1
4.6.3	Regulatory Context .....	4.6-11
4.6.4	Impacts and Mitigation Measures.....	4.6-18
<b>4.7</b>	<b><u>Other Effects</u>.....</b>	<b>4.7-1</b>
4.7.1	Introduction .....	4.7-1
4.7.2	Agriculture and Forestry Resources .....	4.7-1
4.7.3	Cultural Resources.....	4.7-5
4.7.4	Geology and Soils.....	4.7-7
4.7.5	Hazards and Hazardous Materials .....	4.7-9
4.7.6	Hydrology and Water Quality.....	4.7-12
4.7.7	Land Use and Planning .....	4.7-16
4.7.8	Mineral Resources .....	4.7-18
4.7.9	Noise.....	4.7-19



<b><u>CHAPTER</u></b>	<b><u>PAGE</u></b>
4.7.10 Population and Housing .....	4.7-20
<b>5. Statutorily Required Sections.....</b>	<b>5-1</b>
5.1 Introduction .....	5-1
5.2 Growth-Inducing Impacts .....	5-1
5.3 Cumulative Impacts.....	5-4
5.4 Significant Irreversible Environmental Changes .....	5-6
5.5 Significant and Unavoidable Impacts.....	5-6
<b>6. Alternatives Analysis.....</b>	<b>6-1</b>
6.1 Introduction .....	6-1
6.2 Purpose of Alternatives .....	6-1
6.3 Selection of Alternatives.....	6-11
6.4 Environmentally Superior Alternative.....	6-31
<b>7. References .....</b>	<b>7-1</b>
<b>8. EIR Authors and Persons Consulted .....</b>	<b>8-1</b>

**Appendices**

Appendix A	Notice of Preparation (NOP)
Appendix B	NOP Comment Letters
Appendix C	Air Quality and Greenhouse Gas Emissions Modeling Results
Appendix D	Biological Resources Assessment
Appendix E	Environmental Noise & Vibration Assessment
Appendix F	Water Study
Appendix G	Sewer Study
Appendix H	Transportation Impact Study
Appendix I	Geotechnical Update
Appendix J	Phase I Environmental Site Assessment and Limited Pesticide Assessment
Appendix K	Tentative Map Drainage Design Memorandum



# LIST OF FIGURES

<b><u>FIGURE</u></b>	<b><u>PAGE</u></b>
<b>3. Project Description</b>	
3-1 Regional Vicinity Map.....	3-3
3-2 Project Site Boundaries.....	3-4
3-3 Vesting Tentative Subdivision Map.....	3-7
3-4 Obstacle Course Layout.....	3-10
3-5 Palomino Place Cross Sections .....	3-12
3-6 Utilities Plan .....	3-14
<b>4.1 Aesthetics</b>	
4.1-1 Existing Northerly View of Project Site from East Covell Boulevard.....	4.1-4
4.1-2 Westerly View of Site from Wildhorse Agricultural Buffer (1 of 2) .....	4.1-4
4.1-3 Westerly View of Site from Wildhorse Agricultural Buffer (2 of 2) .....	4.1-5
4.1-4 Existing On-Site View of Gated Entrance From East Covell Boulevard ...	4.1-5
4.1-5 Existing On-Site View of Southwestern Pasture .....	4.1-6
4.1-6 Existing On-Site View of Southeastern Pasture.....	4.1-6
4.1-7 Existing On-Site View of Ranch Home .....	4.1-7
4.1-8 Existing On-Site View of Duplexes in Central Portion of Project Site .....	4.1-7
4.1-9 Existing On-Site View of Eastern Side of Horse Barn.....	4.1-8
4.1-10 Existing On-Site View of Wildhorse Neighborhood to the North of Project Site .....	4.1-8
4.1-11 Existing On-Site View of North Pasture Looking Towards Wildhorse Neighborhood.....	4.1-9
<b>4.2 Air Quality, Greenhouse Gas Emissions, and Energy</b>	
4.2-1 California Energy Generation by Source .....	4.2-16
4.2-2 California Energy Consumption by Sector.....	4.2-16
<b>4.3 Biological Resources</b>	
4.3-1 Study Area Evaluated Under the BRA.....	4.3-3
4.3-2 Yolo HCP/NCCP Land Cover Types .....	4.3-5
4.3-3 Aquatic Resources .....	4.3-7
4.3-4 California Natural Diversity Database Occurrences of Special-Status Plant Species .....	4.3-9
4.3-5 California Natural Diversity Database Occurrences of Special-Status Wildlife.....	4.3-19
4.3-6 Elderberry Shrub Locations .....	4.3-21



---

<b>FIGURE</b>		<b>PAGE</b>
4.3-7	Tree Inventory .....	4.3-27
<b>4.4</b>	<b>Noise</b>	
4.4-1	Noise Levels Associated with Common Noise Sources .....	4.4-2
4.4-2	Ambient Noise and Vibration Survey Locations .....	4.4-4
<b>4.5</b>	<b>Public Services and Utilities</b>	
4.5-1	DFD Drive Time Zone .....	4.5-4
4.5-2	Existing Park Facilities .....	4.5-7
4.5-3	City of Davis Water Service Area .....	4.5-9
<b>4.6</b>	<b>Transportation</b>	
4.6-1	Existing Roadway Facilities .....	4.6-3
4.6-2	Existing Bicycle Facilities .....	4.6-6
4.6-3	Existing Transit Facilities .....	4.6-9
<b>6.</b>	<b>Alternatives Analysis</b>	
6-1	Increased Density Alternative Site Plan .....	6-18
6-2	Reduced Density Alternative Site Plan .....	6-22
6-3	No Pentathlon Facility Alternative Site Plan .....	6-27



# LIST OF TABLES

<b><u>TABLE</u></b>	<b><u>PAGE</u></b>
<b>2. Executive Summary</b>	
2-1 Summary of Impacts and Mitigation Measures .....	2-7
<b>3. Project Description</b>	
3-1 Proposed Residential Units .....	3-6
<b>4.2 Air Quality, Greenhouse Gas Emissions, and Energy</b>	
4.2-1 Summary of Criteria Pollutants .....	4.2-3
4.2-2 Ambient Air Quality Standards .....	4.2-4
4.2-3 Attainment Status .....	4.2-10
4.2-4 Air Quality Data Summary (2020-2022) .....	4.2-11
4.2-5 GWPs and Atmospheric Lifetimes of Select GHGs .....	4.2-13
4.2-6 Non-residential EV Charging Station Standards .....	4.2-34
4.2-7 Residential EV Charging Station Standards .....	4.2-35
4.2-8 YSAQMD Thresholds of Significance .....	4.2-36
4.2-9 Maximum Unmitigated Construction Emissions .....	4.2-44
4.2-10 Maximum Unmitigated Operational Emissions .....	4.2-47
4.2-11 Maximum Unmitigated Construction GHG Emissions .....	4.2-62
4.2-12 Maximum Unmitigated Operational GHG Emissions .....	4.2-63
<b>4.3 Biological Resources</b>	
4.3-1 Yolo HCP/NCCP Land Cover Types Within the Study Area .....	4.3-4
4.3-2 Aquatic Resources Delineated Within the Study Area .....	4.3-6
4.3-3 Special-Status Species with Potential to Occur Within the Study Area ...	4.3-11
4.3-4 Trees Within the Study Area .....	4.3-29
4.3-5 Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls .....	4.3-58
<b>4.4 Noise</b>	
4.4-1 Long-Term Ambient Noise Survey Results .....	4.4-5
4.4-2 Existing Traffic Noise Modeling Results .....	4.4-6
4.4-3 Short-Term Ambient Vibration Survey Results .....	4.4-9
4.4-4 Standards for Exterior Noise Exposure .....	4.4-11
4.4-5 Standards for Interior Noise Levels .....	4.4-12
4.4-6 City of Davis Municipal Code Exterior Noise Standards .....	4.4-13
4.4-7 Significance of Changes in Cumulative Noise Exposure (dB DNL) .....	4.4-15



<b>TABLE</b>	<b>PAGE</b>
4.4-8	Federal Transit Administration Criteria for Assessing Vibration Damage to Structures .....4.4-16
4.4-9	Construction Equipment Reference Noise Levels and Predicted Noise Levels at 25 Feet.....4.4-19
4.4-10	Predicted Traffic Noise-Level Increases at Existing Sensitive Receptors – Existing Versus Existing Plus Project Conditions.....4.4-24
4.4-11	Vibration Source Amplitudes for Construction Equipment .....4.4-27
4.4-12	Predicted Traffic Noise-Level Increases at Existing Sensitive Receptors – Cumulative Versus Cumulative Plus Project Conditions.....4.4-30
<b>4.5</b>	<b>Public Services and Utilities</b>
4.5-1	Davis Joint Unified School District Enrollment by Facility .....4.5-5
4.5-2	Projected Wholesale Surface Water Supply, AFY .....4.5-10
4.5-3	Projected Groundwater Supply, AFY.....4.5-11
4.5-4	2023 Unit Water Demand Factors .....4.5-24
4.5-5	City of Davis, 1991, Unit Wastewater Demand Factors .....4.5-24
4.5-6	Proposed Project Unit Wastewater Demand Factors.....4.5-25
4.5-7	Potable Water Demand .....4.5-35
4.5-8	Daily Peak Wet Weather Flows (gpd).....4.5-36
4.5-9	Projected Water Supply and Demand During Normal, Single Dry, and Multiple Dry Years (AFY) .....4.5-40
4.5-10	Total Cumulative Water Demand (AFY) .....4.5-48
<b>4.6</b>	<b>Transportation</b>
4.6-1	Unitrans Route Summary – Project Site Vicinity .....4.6-7
4.6-2	Aquatic Complex Weekday Programming .....4.6-22
4.6-3	Project Vehicle Trip Generation Estimates .....4.6-24
4.6-4	Project Residential Component Weekday Residential VMT per Capita.....4.6-33
4.6-5	Effect of Project Non-Residential Component on Weekday Total VMT.....4.6-34
4.6-6	Freeway Off-Ramp Queuing – Existing Plus Project Conditions.....4.6-39
<b>6.</b>	<b>Alternatives Analysis</b>
6-1	No Pentathlon Facility Alternative vs. Proposed Project .....6-26
6.2	Comparison of Environmental Impacts for Project Alternatives .....6-32





---

---

# **1. INTRODUCTION**

---

---

# 1. INTRODUCTION

## 1.1 TYPE AND PURPOSE OF THE SEIR

The Palomino Place Project Subsequent Environmental Impact Report (SEIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, Public Resources Code (PRC) Sections 21000-21189, as amended, and the Guidelines for Implementation of the California Environmental Quality Act, California Code of Regulations (CCR) Title 14, Sections 15000-15387 (CEQA Guidelines). The City of Davis is the lead agency for the environmental review of the Palomino Place Project (proposed project) evaluated herein and has the principal responsibility for approving the project. As required by Section 15121 of the CEQA Guidelines, this SEIR will (a) inform public agency decision-makers, and the public generally, of the significant environmental effects of the project, (b) identify possible ways to minimize the significant adverse environmental effects, and (c) describe reasonable and feasible project alternatives that reduce environmental effects. The public agency shall consider the information in the SEIR along with other information that may be presented to the agency.

As provided in the CEQA Guidelines Section 15021, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. The public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social issues. CEQA requires the preparation of an EIR prior to approving any project that may have a significant effect on the environment. For the purposes of CEQA, the term project refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]). With respect to the proposed project, the City has determined that the proposed development is a “project” within the definition of CEQA, which has the potential to result in significant environmental effects.

The lead agency, which is the City of Davis for this project, is required to consider the information in the SEIR along with any other available information in deciding whether to approve the application. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, alternatives, growth inducing impacts, and cumulative impacts.

The project site was originally evaluated in the 2009 Wildhorse Ranch Project EIR (2009 EIR),<sup>1</sup> which evaluated a 25.8-acre site located at the intersection of East Covell Boulevard and Monarch Lane in the City of Davis, California. The 2009 EIR (State Clearinghouse [SCH] No. 2007072020) anticipated development of up to 191 residential units, comprised of 73 detached single-family residences and 78 two- to three-story attached single-family townhome units on 11.95 acres, as well as a maximum of 40 attached affordable housing units on 1.92 acres. The Wildhorse Ranch Project also included interior greenbelt and open space uses, as well as an agricultural buffer. The 2009 EIR found that significant and unavoidable impacts would occur related to visual impacts associated with the conversion of open space or agricultural land, adequate service response times from the Davis Fire Department, and greenhouse gas emissions (GHG) and

<sup>1</sup> City of Davis. *Wildhorse Ranch Project Final Environmental Impact Report*. Certified July 2009.



climate change. The remaining environmental issues were either addressed and dismissed in the Initial Study prepared for the Wildhorse Ranch Project, or reduced to a less-than-significant level through mitigation measures included in the 2009 EIR.

In the case of a project proposal requiring discretionary approval by the city for which the city has previously certified an EIR or adopted a Negative Declaration, the city must determine whether an SEIR is required, pursuant to CEQA Guidelines Section 15162. The CEQA Guidelines provide guidance on this process by requiring an examination of whether, since the certification of the EIR or adoption of the Negative Declaration, changes in the approved project or circumstances under which the approved project would be undertaken have occurred to such an extent that the proposal may result in a new significant impact (not previously identified in the certified EIR or adopted Negative Declaration) or substantial increase in the severity of a previously identified significant impact. If so, the city would be required to prepare an SEIR.

The City has determined that the proposed project could result in new significant impacts not previously identified in the 2009 EIR. Thus, the City has prepared this SEIR, which is focused on the topics that could potentially result in significant effects (see Section 1.5, Scope of the SEIR). In addition to project-specific technical reports, this SEIR incorporates information from the City of Davis General Plan<sup>2</sup> and the Final Program EIR for the City of Davis General Plan Update and Final Project EIR for Establishment of a New Junior High School (City of Davis General Plan EIR).<sup>3</sup>

## 1.2 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

“Responsible agency” is defined as a public agency that proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term “responsible agency” includes all California public agencies other than the lead agency that have discretionary approval power over the project or an aspect of the project. The Central Valley Regional Water Quality Control Board (RWQCB), Yolo-Solano Air Quality Management District (YSAQMD), and Yolo Habitat Conservancy are identified as responsible agencies.

“Trustee agency” means a State agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California. Known possible trustee agencies for the project include the California Department of Fish and Wildlife (CDFW).

Although not subject to California law, and, thus, outside the definitions of responsible agency or trustee agency, the U.S. Army Corps of Engineers (USACE) and U.S. Fish and Wildlife Service (USFWS) may also be called upon to grant approvals — under federal law — necessary for the future development of the project sites. The above agencies do not have duties under CEQA, but, rather, are governed by a variety of federal statutes, such as the Clean Water Act, which governs the dredging and filling of waters of the U.S. (e.g., wetlands), and the Endangered Species Act, which requires USACE to consult with the USFWS as part of the review process for any wetland or fill permits that may be required.

<sup>2</sup> City of Davis. *City of Davis General Plan*. Adopted May 2001, Amended January 2007.

<sup>3</sup> City of Davis. *Final Program EIR for the City of Davis General Plan Update and Final Project EIR for Establishment of a New Junior High School*. Certified May 2001.



### **1.3 PROJECT SUMMARY**

A summary of the project location, description, and approvals is provided below. Please refer to Chapter 3, Project Description, of this SEIR for a detailed description of the proposed project and entitlements, as well as a full list of the project objectives.

#### **Project Location**

The approximately 25.8-acre project site is located north of East Covell Boulevard on an existing property known as the Wildhorse Ranch and/or Duffel Horse Ranch in the City of Davis, California. The project site is identified by Assessor's Parcel Number (APN) 071-140-011. The City of Davis General Plan designates the site as Agriculture and the site is zoned Planned Development (PD 3-89). The majority of the project site is undeveloped and consists of grazing land; although, it should be noted that agricultural activity does not currently occur on-site. Within the central portion of the project site, the site includes a ranch home, two duplexes, a horse barn, and an equestrian training facility that is not currently in use. A paved driveway extends into the site from East Covell Boulevard and bisects the majority of the site in a north-to-south direction. Trees are located adjacent to the driveway, on-site structures, and project site boundaries. In addition, it should be noted that at least nine existing bus stops are located less than 0.25-mile from the project site along East Covell Boulevard, Monarch Lane, Temple Drive, and Alhambra Drive. The transit stops are served by Unitrans (Lines L, P, and Q) and Yolobus (Routes 42 and 43).

The site is bounded to the south by East Covell Boulevard and to the east by the 135-foot-wide Wildhorse Agricultural Buffer. A grade-separated crossing that allows bicyclists and pedestrians to cross under East Covell Boulevard is located to the southeast of the project site. Surrounding existing uses include single-family residences associated with the Wildhorse neighborhood to the north and west; single-family residences associated with the Slide Hill Park neighborhood to the south, across East Covell Boulevard; and agricultural land to the east, across the Wildhorse Agricultural Buffer that abuts the eastern site boundary.

#### **Project Description**

The proposed project would include demolition of the two on-site duplex buildings and barn, followed by development of a residential community, comprised of up to 175 new units, including new cottages, half-plex townhomes, single-family residences, and multi-family apartments. The existing ranch home would be retained and renovated. In addition, the proposed project would include land anticipated to be developed with recreational uses, including a USA Pentathlon Training Facility and pool complex. The project would also consist of new on-site roadways and associated utility improvements, as well as open space, landscaping, and trails.

The proposed project would require approval of a Vesting Tentative Subdivision Map to subdivide the project site and develop the residential units, Site Plan and Architectural Review to determine compliance with City development standards, and an Affordable Housing Plan to comply with the City's Affordable Housing Ordinance.<sup>4</sup>

---

<sup>4</sup> The currently proposed project invokes the "Builder's Remedy," which is based on a provision of California's Housing Accountability Act that prevents jurisdictions without a substantially compliant housing element from denying certain housing projects, even if such projects do not comply with the jurisdiction's general plan or zoning ordinance. The City and project applicant entered into a settlement agreement that provides, among other things, that the City will process the project application as a Builder's Remedy project without requiring the applicant to submit for legislative entitlements, including a General Plan Amendment and Rezone.



Primary site access would be provided from East Covell Boulevard. From the terminus of Monarch Lane at East Covell Boulevard, the project site's existing private driveway would be redeveloped as Palomino Way, the new northern leg of the East Covell Boulevard/Monarch Lane intersection. From the newly constructed Palomino Way, internal access through the project site would be provided through a traditional grid street network. With respect to parking, the multi-family residential apartments would include a total of 33 parking stalls, and the USA Pentathlon Training Facility and pool complex would include a 55-stall surface parking lot for visitors. The proposed project would include Level 1 and Level 2 electric vehicle (EV) charging features throughout the development.

The proposed project would include associated utility improvements, with water, sewer, and storm drainage services provided by the City of Davis through new connections to existing infrastructure located in the project vicinity. With regard to sewer service, the proposed project would include 2,270 lineal feet of new, off-site 12-inch sewer line that would be extended through the edge of the existing Wildhorse Agricultural Buffer from an existing 42-inch sewer trunk main to the north of the project site, along the northern boundary of the Wildhorse Golf Course, to the project site's northeastern corner. Electricity service would be provided to the project site by Pacific Gas and Electric Co. (PG&E) and Valley Clean Energy (VCE) through new connections to existing infrastructure in the project vicinity along East Covell Boulevard. The proposed project would not use natural gas. Telecommunication services, such as telephone and internet services, would be provided by Xfinity and/or other providers through new connections to existing infrastructure.

### **Project Approvals**

The City of Davis has discretionary authority and is the lead agency for the project. The project would require City approval of the following entitlements:

- Certification of the SEIR and adoption of the Mitigation Monitoring Plan (MMP). Before the City can approve the proposed project, the City must certify that the SEIR was completed in compliance with the requirements of CEQA, that the decision-making body has reviewed and considered the information in the SEIR, and that the SEIR reflects the independent judgment of the City of Davis. Approval of the SEIR also requires adoption of a MMP, which specifies the methods for monitoring mitigation measures required to eliminate or reduce the project's significant effects on the environment. The City would also be required to adopt Findings of Fact, and for any impacts determined to be significant and unavoidable, a Statement of Overriding Considerations, as part of project approval.
- Vesting Tentative Subdivision Map: The proposed project would require approval of a Vesting Tentative Subdivision Map.
- Site Plan and Architectural Review: The proposed project would be subject to the City's Site Plan and Architectural Review process.
- Affordable Housing Plan: The proposed project would require approval of an Affordable Housing Plan in accordance with the City's Affordable Housing Ordinance.

## **1.4 SEIR PROCESS**

The City has determined that the proposed project would result in new significant impacts not previously identified in the Wildhorse Ranch Project EIR. Thus, the City has prepared this SEIR, which is focused on the topics that could potentially result in significant effects (see Section 1.5, Scope of the SEIR).



Upon completion of the Draft SEIR and prior to circulation to State and local agencies and interested members of the public, a Notice of Completion (NOC) is filed with the SCH and a public notice of availability is published to inform interested parties that a Draft SEIR is available for agency and public review. In addition, the NOC provides information regarding the location where copies of the Draft SEIR are available for public review and any public meetings or hearings that are scheduled. The Draft SEIR is circulated for a minimum period of 45 days, during which time reviewers may submit comments on the document to the lead agency. The lead agency must respond to comments in writing. If significant new information, as defined in CEQA Guidelines Section 15088.5, is added to an SEIR after public notice of availability is given, but before certification of the SEIR, the revised SEIR or affected chapters must be recirculated for an additional public review period with related comments and responses.

A Final SEIR will be prepared, containing public comments on the Draft SEIR and written responses to those comments, as well as a list of changes to the Draft SEIR text necessitated by public comments, as warranted. Before approving a project, the lead agency shall certify that the SEIR (consisting of the Draft SEIR and Final SEIR) has been completed in compliance with CEQA, and that the SEIR has been presented to the decision-making body of the lead agency, which has reviewed and considered the SEIR. The lead agency shall also certify that the SEIR reflects the lead agency's independent judgment and analysis.

The findings prepared by the lead agency must be based on substantial evidence in the administrative record and must include an explanation that bridges the gap between evidence in the record and the conclusions required by CEQA. If the decision-making body elects to proceed with a project that would have unavoidable significant impacts, then a Statement of Overriding Considerations explaining the decision to balance the benefits of the project against unavoidable environmental impacts must be prepared.

## **1.5 SCOPE OF THE SEIR**

Pursuant to the CEQA Guidelines, the SEIR needs only to contain the information necessary to make the previous EIR adequate for the proposed project, as revised. The main purpose of the SEIR will be to provide an environmental analysis of the currently proposed project as changed since the certification of the previous EIR.

### **Environmental Issues Addressed in this SEIR**

This SEIR addresses all CEQA-required environmental topics. The following environmental issue areas are addressed in the SEIR:

- Aesthetics;
- Air Quality, Greenhouse Gas Emissions, and Energy;
- Biological Resources;
- Noise;
- Public Services and Utilities;
- Transportation; and
- Other Effects.

The evaluation of effects is presented on a resource-by-resource basis in Chapters 4.1 through 4.7 of the SEIR. Chapters 4.1 through 4.6 are divided into the following four sections: Introduction, Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures. The Impacts and Mitigation Measures section addresses both project-specific and cumulative impacts.





Impacts that are determined to be significant in Chapters 4.1 through 4.6, and for which feasible mitigation measures are not available to reduce those impacts to a less-than-significant level, are identified as significant and unavoidable. Chapter 4.7, Other Effects, has been prepared to address all other CEQA environmental issue areas not analyzed in an individual technical chapter, and addresses changes in circumstances, changes in the approved project, and project-specific impacts for the following environmental issue areas: Agriculture and Forestry Resources; Cultural Resources; Geology and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; and Population and Housing. Where appropriate, Chapter 4.7 includes mitigation measures to reduce any identified new significant or substantially more severe significant impacts to a less-than-significant level. Chapter 5 presents a discussion of growth-inducing impacts, a summary of cumulative impacts, and significant irreversible as well as significant and unavoidable environmental changes associated with the project. Alternatives to the proposed project are discussed in Chapter 6 of the SEIR.

## 1.6 DEFINITION OF BASELINE

According to CEQA Guidelines Section 15125, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the “baseline physical conditions” against which project-related changes could be compared. In addition, CEQA Guidelines Section 15126.2(a) states that an EIR shall identify and focus on the significant environmental effects of the proposed project. The CEQA Guidelines, Section 15126.2(a), states in pertinent part:

An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced.

Normally, the baseline condition is the physical condition that exists when the Notice of Preparation (NOP) is published. The NOP for the proposed project was published on February 22, 2024. However, in cases where an approved project has already undergone environmental review and the environmental document has been certified or adopted by the lead agency, the lead agency can restrict the current review to the incremental effects of the modified project, rather than having to reconsider the overall impacts of the project. In such cases, as the project under review constitutes only a modification of a previously approved project, the “baseline” for the purposes of CEQA is adjusted such that the originally approved project is assumed to exist.<sup>5</sup>

As discussed further in Chapter 3, Project Description, of this SEIR, following certification of the 2009 EIR and approval of the project by the Davis City Council, the Wildhorse Ranch Project required approval by Davis residents before the project could proceed (Measure P); however, the Wildhorse Ranch Project ultimately failed to gain the requisite percentage of votes on the ballot. Nonetheless, as the Wildhorse Ranch Project has already undergone environmental review, with the Davis City Council certifying the 2009 EIR, the environmental baseline for this SEIR is appropriately considered to be the approved Wildhorse Ranch Project, which included a 191-unit

<sup>5</sup> See Michael H. Remy et al. *Guide to CEQA, 11th Edition*. Point Arena: Solano Press Books (2007), pg. 207; Stephen L. Kostka and Michael H. Zischke. *Practice Under the Environmental Quality Act, Second Edition* (Vol. 1). Oakland: Continuing Education of the Bar (2018), pgs. 12-32; *Benton v. Board of Supervisors* (1st Dist. 1991) 226 Cal. App. 3d 1467.



residential development, dedication of 2.26 acres of additional agricultural buffer dedication, 1.61 acres of interior greenbelt, and 4.44 acres of interior open space.

## **1.7 SIGNIFICANCE CRITERIA**

The CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance.” In addition, the Guidelines state, “An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.” (CEQA Guidelines Section 15382).

Each impact analysis includes a determination of whether the proposed project would result in a new significant impact or a substantially more severe significant impact beyond what was previously identified in the 2009 EIR. In cases where a new or substantially more severe significant impact is identified, mitigation, if available, is required in order to reduce the specific impact to the maximum extent feasible. The level of significance of the impact following mitigation is then included. The following levels of significance that would occur following implementation of mitigation are used in this SEIR:

- 1) Less than Significant: Impacts that are adverse, but that do not exceed the specified thresholds of significance;
- 2) Significant: Impacts that exceed the defined standards of significance and require mitigation;
- 3) Less than Cumulatively Considerable: Where cumulative impacts have been identified, but the project’s incremental contribution towards the cumulative impacts would not be considered significant;
- 4) Cumulatively Considerable: Where cumulative impacts have been identified and the project’s incremental contribution towards the cumulative impacts would be considered significant; and
- 5) Significant and Unavoidable Impact: An impact (project-level or cumulative) that cannot be eliminated or reduced to a less-than-significant or less than cumulatively considerable level through the implementation of feasible mitigations measures.

Each environmental area of analysis uses a distinct set of significance criteria. Where measurable and explicit quantification of significance is identified, such as violation of an ambient noise level standard, this measurement is used to assess the level of significance of a particular impact in this SEIR. If criteria for determining significance relative to a specific environmental resource impact are not identified in the CEQA Guidelines, criteria were developed for this Draft SEIR.

The significance criteria are identified at the beginning of the Impacts and Mitigation Measures section in each of the technical chapters of this SEIR. Although significance criteria are necessarily different for each resource considered, the provided significance levels ensure consistent evaluation of impacts for all resource areas evaluated.

## **1.8 NOTICE OF PREPARATION AND SCOPING**

While preparation of a new NOP and completion of a scoping meeting are not required by the CEQA Guidelines for an SEIR, the City of Davis chose to circulate a new NOP (see Appendix A of this SEIR) to the public, local and State agencies, and other known interested parties for a 30-





day public and agency review period from February 22, 2024, to March 25, 2024. The purpose of the NOP was to provide notification that an SEIR for the proposed project was being prepared and to solicit public input on the scope and content of the document.

In addition, the City of Davis held an NOP scoping meeting during the 30-day review period, on March 11, 2024 to collect comments related to the changes in circumstances that may have occurred in the project vicinity since the certification of the 2009 EIR, given that environmental changes are an important criterion when preparing further environmental documents for projects, according to CEQA Guidelines Section 15162(a)(2). The meeting was held at the City of Davis Senior Center, located at 445 A Street in Davis. Agencies and members of the public were invited to attend and provide input on the scope of the SEIR. A total of 14 comment letters were received during the NOP public review period. The comment letters, as well as a summary of the written comments received at the NOP scoping meeting, are provided as Appendix B to this SEIR. All comments were taken into consideration during the preparation of this SEIR. A summary of the NOP comments received is provided in Section 1.9 below.

## **1.9 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION**

---

As noted above, the City of Davis received 14 comment letters during the NOP public review period, including written comments received at the public scoping meeting held on March 11, 2024. A copy of each letter is provided in Appendix B of this SEIR. The comment letters received during the NOP public review period were authored by the following representatives of public agencies and groups, as well as individual members of the general public:

### **Public Agencies**

- California Department of Transportation (Caltrans) – Gary Arnold;
- Central Valley Regional Water Quality Control Board (RWQCB) – Peter Minkel;
- California Department of Fish and Wildlife (CDFW) – Tanya Sheya;
- Department of Toxic Substances Control (DTSC) – Tamara Purvis;
- Native American Heritage Commission (NAHC) – Pricilla Torres-Fuentes;
- Yolo Habitat Conservancy – Charlie Tschudin; and
- Yolo Transportation District – Brian Abbanat.

### **Individuals**

- Al Lin and Linh Thai;
- Dennis Smith;
- Frank Young;
- Greg Rowe;
- Jeffrey Flynn;
- Kuk Chow; and
- Yan Zhang.

The following list, categorized by issue, summarizes the environmental concerns brought forth in the comment letters received on the scope of the SEIR. It should be noted that comments outside of the purview of CEQA or that are speculative in nature have not been included, as, according to Section 15145 of CEQA Guidelines, CEQA does not require evaluation of speculative impacts.



<b><u>Aesthetics</u></b>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Aesthetic impacts of dedicated greenbelt acreage.</li> <li>• Consistency with the City's urban design goals related to aesthetics.</li> <li>• Potential light pollution impacts on existing residences on Caravaggio Drive, due to lack of buffer between existing and proposed residences.</li> </ul>
<b><u>Air Quality, Greenhouse Gas Emissions, and Energy</u></b>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Impacts to greenhouse gas (GHG) emissions and air quality associated with the trips generated to use the USA Pentathlon Training Facility.</li> <li>• Examine whether the USA Pentathlon Training Facility will feature solar panels, and the net energy use with and without solar panels.</li> <li>• Impacts to emissions associated with vehicles idling at the proposed traffic signal.</li> </ul>
<b><u>Biological Resources</u></b>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Impacts to wildlife species located in Wildhorse Agricultural Buffer.</li> <li>• Impacts to potential on-site special-status species, such as burrowing owls, Swainson's hawk, white-tailed kite, or other raptors.</li> <li>• Impacts to aquatic resources within the project site.</li> <li>• Adequacy of the proposed tree buffer as substitution for the 10 percent greenbelt dedication standard.</li> <li>• Conducting appropriate assessment of habitat types and special-status plant and wildlife species present on-site.</li> <li>• Consistency with the proposed project and the Yolo County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP).</li> <li>• Whether the Yolo Habitat Conservancy was alerted about the proposed project.</li> </ul>
<b><u>Noise</u></b>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Noise pollution impacts on nearby residences from the USA Pentathlon Training Facility.</li> <li>• Noise pollution impacts on existing residences on Caravaggio Drive, due to potential lack of buffer between existing and proposed residences.</li> </ul>
<b><u>Transportation</u></b>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Updates to existing public transit services to evaluate existing service levels and potential route changes.</li> <li>• Plans to signalize the East Covell Boulevard/Monarch Lane intersection.</li> <li>• Single point of entry/exit connecting to East Covell Boulevard.</li> <li>• Increased traffic on Interstate 80 (I-80) since preparation of the 2009 EIR.</li> <li>• Rush hour traffic associated with I-80 at UC Davis creates significant safety hazards.</li> <li>• Roadways located in the vicinity of the project site are subject to increased traffic from commuters avoiding I-80.</li> <li>• Traffic increases associated with UC Davis students and staff.</li> <li>• Inclusion of an updated Traffic Study that uses new existing traffic conditions.</li> </ul>



	<ul style="list-style-type: none"> <li>• Cumulative increases in traffic associated with development projects throughout the City of Davis subject to Measure D.</li> <li>• Updated transportation mitigation measures from the 2009 EIR.</li> <li>• Increases in traffic associated with the trips generated by the USA Pentathlon Training Facility.</li> <li>• Demand for parking by users of the USA Pentathlon Training Facility and if users would park on the street.</li> <li>• Inclusion of peak-hour maximum off-ramp queue lengths within the Traffic Study.</li> <li>• Number of exits to facilitate evacuation in the event of an emergency, such as a wildfire.</li> <li>• Compliance with a potential encroachment permit issued by Caltrans.</li> <li>• Actively reducing vehicle miles traveled (VMT) to the maximum extent possible through a transportation demand management (TDM) program.</li> <li>• Inclusion of accessory dwelling units (ADUs) and the impact ADU residents would have on parking demand.</li> </ul>
<b><u>Other Effects</u></b>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Adequate drainage from the stormwater detention pond located in the northern portion of the project site after storm events.</li> <li>• Potential relocation of the pond to the southern or eastern areas of the project site to create distance between the pond and the existing residences.</li> <li>• Compliance with all necessary permits issued by the Central Valley RWQCB.</li> <li>• Sufficient water supply to serve the project, including potential delivery delays associated with droughts caused by climate change.</li> <li>• Conducting hazardous material surveys prior to demolition of any existing buildings or structures.</li> <li>• Screening of all imported soil and fill material to evaluate contamination levels.</li> <li>• Consultation with Native American tribes affiliated with the area.</li> </ul>
<b><u>Alternatives Analysis</u></b>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Reducing the number of residential units.</li> <li>• Consistency with General Plan standards and policies.</li> <li>• Alternatives related to the proposed 20-foot buffer, including a City-maintained greenbelt, transferring the buffer land to Caravaggio Drive homeowners, and replacing lots with a greenbelt or urban forest.</li> <li>• Replacing the USA Pentathlon Training Facility with additional residential development.</li> </ul>

All of the foregoing concerns are addressed in this SEIR, in the relevant sections identified in the first column.

### **1.10 DRAFT SEIR AND PUBLIC REVIEW**

This Draft SEIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and agencies can submit comments to the lead agency on the Draft SEIR's accuracy and completeness. Release of the Draft SEIR marks the



beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105. The public can review the Draft SEIR at the City's website at:

<https://www.cityofdavis.org/city-hall/community-development-and-sustainability/development-projects/palomino-place>

or at the following address during normal business hours:

City of Davis  
Department of Community Development and Sustainability  
23 Russell Blvd, Suite 2  
Davis, CA 95616

All comments or questions regarding the Draft SEIR should be submitted in written form and addressed to:

Eric Lee, Senior Planner  
City of Davis, Department of Community Development and Sustainability  
530-757-5610  
[elee@cityofdavis.org](mailto:elee@cityofdavis.org)

## **1.11 ORGANIZATION OF THE DRAFT SEIR**

---

The SEIR is organized into the following sections:

### **Chapter 1 – Introduction**

Provides an introduction and overview describing the intended use of the SEIR and the review and certification process, as well as summaries of the chapters included in the SEIR and summaries of the issues and concerns received from public agencies during the NOP review period.

### **Chapter 2 – Executive Summary**

Summarizes the elements of the project and the environmental impacts that would result from implementation of the proposed project, describes proposed mitigation measures, and indicates the level of significance of impacts after mitigation. In addition, the Executive Summary includes a summary of the project alternatives and areas of known controversy.

### **Chapter 3 – Project Description**

Provides a detailed description of the proposed project, including the project's location, background information, objectives, and technical characteristics.

### **Chapter 4 – Environmental Setting, Impacts, and Mitigation**

Contains project-specific and cumulative analyses of environmental issue areas associated with the proposed project. The section for each environmental issue contains an introduction and description of the setting of the project site, identifies impacts, and recommends appropriate mitigation measures.



**Chapter 5 – Statutorily Required Sections**

Provides discussions required by CEQA regarding impacts that would result from the proposed project, including a summary of potential growth-inducing impacts, significant irreversible changes to the environment, and significant and unavoidable impacts.

**Chapter 6 – Alternatives Analysis**

Provides a comparative analysis of the alternatives to the proposed project, their respective comparative environmental effects, and a determination of the environmentally superior alternative.

**Chapter 7 – References**

Provides bibliographic information for all references and resources cited.

**Chapter 8 – EIR Authors and Persons Consulted**

Lists SEIR and technical report authors who provided technical assistance in the preparation and review of the SEIR.

**Appendices**

The Appendices include the NOP and 2009 EIR, comments received during the NOP comment period, and technical reports prepared for the proposed project.



---

---

## **2. EXECUTIVE SUMMARY**

---

---

## 2. EXECUTIVE SUMMARY

### 2.1 INTRODUCTION

The Executive Summary chapter of the Subsequent Environmental Impact Report (SEIR) provides an overview of the proposed project (see Chapter 3, Project Description, for further details) and provides a table summary of the conclusions of the environmental analysis provided in Chapters 4.1 through 4.7. This chapter also summarizes the alternatives to the proposed project that are described in Chapter 6, Alternatives Analysis, and identifies the Environmentally Superior Alternative. Table 2-1 contains the environmental impacts associated with the proposed project, the significance of the impacts, the proposed mitigation measures for the impacts, and the significance of the impacts after implementation of the mitigation measures.

### 2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The approximately 25.8-acre project site is located north of the East Covell Boulevard/Monarch Lane intersection on an existing property known as the Wildhorse Ranch and/or Duffel Horse Ranch in the City of Davis, California, and is identified by Assessor's Parcel Number (APN) 071-140-011. The majority of the project site is undeveloped and consists of grazing land; although, agricultural activity does not currently occur on-site. Within the central portion of the project site, the site includes a ranch home, two duplexes, a horse barn, and an equestrian training facility that is not currently in use. A paved driveway extends into the site from East Covell Boulevard and bisects much of the site in a north-to-south direction. Trees are located adjacent to the driveway, on-site structures, and project site boundaries. In addition, it should be noted that at least nine existing bus stops are located less than 0.25-mile from the project site along East Covell Boulevard, Monarch Lane, Temple Drive, and Alhambra Drive. The transit stops are served by Unitrans and Yolobus. The City of Davis General Plan designates the site as Agriculture and the site is zoned Planned Development (PD) 3-89.

The proposed project would include a Vesting Tentative Subdivision Map to subdivide the project site and develop up to 175 new residential units, comprised of cottages, half-plex units, single-family residences (medium and large), and multi-family residential apartments. In addition, subdivision of the project site would include land anticipated to be developed with a new USA Pentathlon Training Facility and pool complex, new internal roadways, associated utility improvements, and open space, landscaping, and trails.

Primary site access would be provided from East Covell Boulevard. From the terminus of Monarch Lane at East Covell Boulevard, the project site's existing private driveway would be redeveloped as Palomino Way, the new northern leg of East Covell Boulevard/Monarch Lane intersection. From the newly constructed Palomino Way, internal access through the project site to the proposed residences and recreational facilities would be provided through a traditional grid street network. Water, sanitary sewer, and storm drainage services would be provided to the proposed project through new connections to the existing utility systems in the project vicinity. It should be noted that the project would require installation of 2,270 lineal feet of off-site, 12-inch sewer line to establish sewer service.



The proposed project would require discretionary approvals of the following entitlements:

- Vesting Tentative Subdivision Map;
- Site Plan and Architectural Review; and
- Affordable Housing Plan.

It should be noted that the original Wildhorse Ranch Project required a General Plan Amendment to redesignate the project site from Agriculture to Residential High Density, Residential Medium Density, Neighborhood Greenbelt, Natural Habitat Area, and Urban Agricultural Transition Area. In addition, the Wildhorse Ranch Project required a Rezone to change the site's zoning from PD 3-89 to a new PD. The currently proposed Palomino Place Project invokes the "Builder's Remedy," which is based on a provision of California's Housing Accountability Act that prevents jurisdictions without a substantially compliant housing element from denying an eligible housing project on the basis that the project does not comply with the jurisdiction's general plan or zoning ordinance. With respect to this Project, the City and Project Applicant entered into a settlement agreement which provides, among other things, that the City will process the Project application as a Builder's Remedy project and without requiring the Applicant to submit for legislative entitlements, including a General Plan Amendment and Rezone. Therefore, for purposes of this SEIR, the Palomino Place Project does not require a General Plan Amendment or Rezone. As voter approval of projects under Measure D is triggered by a General Plan Amendment, the Project would not require a public vote in order to be developed.

Please refer to Chapter 3, Project Description, of this SEIR for a detailed description of the proposed project and entitlements, as well as a full list of the project objectives.

### **2.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, mineral, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Mitigation measures must be implemented as part of the proposed project to reduce new or substantially more severe potential adverse impacts to a less-than-significant level. Such mitigation measures are noted in this SEIR and are found in the following technical chapters: Aesthetics; Biological Resources; Noise; Public Services and Utilities; Transportation; and Other Effects. The mitigation measures required for the proposed project, as presented in this SEIR, will form the basis of the Mitigation Monitoring and Reporting Program. Any impact that remains significant after implementation of mitigation measures is considered a significant and unavoidable impact.

A summary of the evaluated impacts from each technical chapter (Chapters 4.1 through 4.7) of the SEIR is presented in Table 2-1 at the end of this chapter. In addition, Table 2-1 includes the level of significance of each impact, any mitigation measures required for each impact, and the resulting level of significance after implementation of mitigation measures for each impact.

### **2.4 SUMMARY OF PROJECT ALTERNATIVES**

The following section presents a summary of the alternatives evaluated in this SEIR for the proposed project, which include the following:

- No Project (No Build) Alternative;
- Increased Density Alternative;





- Reduced Density Alternative; and
- No Pentathlon Facility Alternative.

For a more thorough discussion of project alternatives that were evaluated in this SEIR, including alternatives considered but dismissed, please refer to Chapter 6, Alternatives Analysis.

### **No Project (No Build) Alternative**

Under the No Project (No Build) Alternative, the current conditions of the project site would remain, and the site would not be developed. As described in this SEIR, the majority of the project site is undeveloped and consists of ruderal grasses that were previously used as pasture/grazing land. Within the central portion of the project site, the site includes a ranch home, two duplexes, a horse barn, and an equestrian training facility that is not currently in use. A paved driveway extends into the site from East Covell Boulevard and bisects the majority of the site in a north-to-south direction. Trees are located adjacent to the driveway, on-site structures, and project site boundaries. The No Project (No Build) Alternative would not meet any of the project objectives, which are listed in Chapter 3, Project Description, of this SEIR.

### **Increased Density Alternative**

Under the Increased Density Alternative, a total of 260 residential units would be developed on the project site. The 260-unit count was selected for the Alternative in order to reduce per capita VMT below both City and regional average VMT thresholds. The 260 total residential units would be comprised of 50 single-family residences, 158 townhomes, and 52 affordable multi-family units, as compared to the currently proposed 175 units, which include 19 cottage units, 29 half-plex townhomes, 82 single-family residences, and up to 45 multi-family apartments. The 52 affordable multi-family units would be located in the southern portion of the project site to provide ease of access to East Covell Boulevard. The 158 medium-high-density townhomes would be located primarily in the western portion of the project site to allow for more efficient lotting patterns. The Alternative would also include a Multi-Modal Transit Center in the southwestern corner of the project site along East Covell Boulevard.

The proposed development area of the project site would not change under the Increased Density Alternative, and all other site improvements required under the proposed project would still be developed under the Increased Density Alternative, including an internal roadway network and on- and off-site utility improvements. The Increased Density Alternative would involve the same type and amount of recreational uses, as the USA Pentathlon Training Facility, pool complex, and obstacle course would still be developed under the Alternative. The Alternative would include similar open space area as compared to the currently proposed project, including a 1.09-acre open space area north of the USA Pentathlon Training Facility, and the 0.85-acre, 20-foot-wide tree easement along the western boundary of the project site. The tree easement open space area would be maintained by the Homeowners Association (HOA) associated with the proposed project.

Similar to the proposed project, the Increased Density Alternative would invoke Builder's Remedy, which is a provision of California's Housing Accountability Act that prevents jurisdictions without a substantially compliant housing element from denying eligible housing projects on the basis of inconsistency with the jurisdiction's general plan or zoning ordinance. Therefore, similar to the proposed project, the Increased Density Alternative would not include a General Plan Amendment or Rezone. The Alternative would still require the approval of a Vesting Tentative Subdivision Map, Site Plan and Architectural Review for the Pentathlon Facility, and Affordable Housing Plan.



Furthermore, because the Increased Density Alternative would generally result in similar development as the proposed project, nine of the ten project objectives would be met by the Alternative. The Alternative would not meet Objective #9, to create a neighborhood that respects its surroundings and is compatible with the scale of the adjacent community, because the Alternative would result in greater inconsistencies with the General Plan.

### **Reduced Density Alternative**

The Reduced Density Alternative would include the development of 98 single-family detached residential units, ranging from 1,600 to 2,500 square feet (sf), in addition to the single existing ranch home, for a total residential area of 15.54 acres. A total of 98 residential units was selected for the Alternative in order to result in a density of four to five dwelling units per acre (du/ac), similar to the density of the adjacent Wildhorse neighborhood. The Alternative would not include the development of any multi-family residential units. The proposed development area of the project site would not change under the Reduced Density Alternative, and the Alternative would still include the USA Pentathlon Training Facility, pool complex, and obstacle course. All other site improvements required under the proposed project would still be developed under the Alternative, including an internal roadway network and on-site and off-site utility improvements. The Reduced Density Alternative would also include the same type and amount of open space areas as the proposed project. Similar to the proposed project, the 20-foot tree buffer in the northwestern portion of the project site would remain as part of the Alternative.

Similar to the proposed project, the Reduced Density Alternative would invoke Builder's Remedy. Therefore, the Reduced Density Alternative would not submit an application for a General Plan Amendment or Rezone. Additionally, in order to comply with Builder's Remedy affordable housing requirements, the Alternative would still be required to include 20 percent of the single-family units as deed restricted, affordable units. Thus, the Alternative would still require approval of an Affordable Housing Plan. The Alternative would also still require the approval of a Vesting Tentative Subdivision Map and Site Plan and Architectural Review for the USA Pentathlon Facility.

Because the Alternative would include the development of only single-family residences, Objective #1, to construct a housing development project within the City of Davis that includes a broad mix of housing types and levels of affordability, would not be met. Objective #2 and Objective #6 would be partially met; however, developing the project site with low-density residential uses would not maximize the potential of the project site in helping to address the housing crisis or climate change. The remaining project objectives would be met by the Reduced Density Alternative. Arguably, the Alternative would better meet Objective #9 by creating a neighborhood that respects its surroundings and is compatible with the scale of the adjacent community, which is currently comprised primarily of single-family homes.

### **No Pentathlon Facility Alternative**

The No Pentathlon Facility Alternative would eliminate the USA Pentathlon Training Facility, pool complex, and obstacle course, and would instead develop the space with a mix of townhomes and multi-family residential units. Similar to the proposed project, the Alternative would include development of 19 cottage units, up to 45 multi-family apartment units, and 31 medium-sized single-family residences. However, the Alternative would include 50 large-sized single-family residences, a reduction of one unit as compared to the proposed project. The Alternative would also include 39 townhome units, an increase of 10 units as compared to the proposed project.



Overall, the Alternative would develop a maximum of up to 184 units, while the proposed project would include a maximum of up to 175 units. All other site improvements required under the proposed project would still be developed under the No Pentathlon Facility Alternative, including an internal roadway network and on- and off-site utility improvements. The No Pentathlon Facility would also include the same type and amount of open space.

Similar to the proposed project, the No Pentathlon Facility Alternative would invoke Builder's Remedy. Therefore, the No Pentathlon Facility Alternative would not include a General Plan Amendment or Rezone. The Alternative would still require the approval of a Vesting Tentative Subdivision Map and Affordable Housing Plan.

Although the No Pentathlon Facility Alternative would generally result in similar residential development as the proposed project, because the Alternative would not include the development of the USA Pentathlon Training Facility, pool complex, or obstacle course, Objective #8, to provide a location for the construction of a new pentathlon training facility that includes a pool to also be used by local community swim organizations, would not be met. All other project objectives would be met by the Alternative.

### **Environmentally Superior Alternative**

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. The environmentally superior alternative is generally the alternative that would be expected to generate the least number of significant impacts. However, the lead agency may consider certain issue areas as a higher priority than others. For the purposes of this SEIR, reduction of impacts related to VMT are considered a high priority due to the potential consequences of climate change for the City of Davis. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the City. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." In this case, the No Project (No Build) Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, none of the impacts resulting from the proposed project would occur under the Alternative. In addition, the No Project (No Build) Alternative would result in fewer impacts than the proposed project related to seven resources areas where new or more severe significant impacts were identified for the proposed project. In addition, the significant and unavoidable impacts identified for the proposed project would not occur under the No Project (No Build) Alternative. However, the No Project (No Build) Alternative would not meet any of the project objectives, and thus, an environmentally superior alternative among the other alternatives must be identified pursuant to CEQA.

Apart from the No Project (No Build) Alternative, the Increased Density Alternative would meet the majority of the project objectives. In addition, the Increased Density Alternative would result in fewer impacts than the proposed project related to transportation; specifically, the significant and unavoidable project impact associated with transportation would not occur under the Increased Density Alternative. The Alternative would result in similar impacts as the proposed project related to biological resources, noise, hazards and hazardous materials, public services and utilities, and agricultural resources, whereas greater impacts could occur in the areas of aesthetics and land use and planning. Overall, this alternative is the only alternative that



eliminates the proposed project's significant and unavoidable VMT impact. Thus, the Increased Density Alternative is considered the environmentally superior alternative.

## **2.5 AREAS OF CONTROVERSY**

---

CEQA Guidelines Section 15123(b) requires that this SEIR consider areas of controversy known to the lead agency, including issues raised by agencies and the public. Areas of controversy that were identified in NOP comment letters on the proposed project should be considered, as well. The areas of known controversy for the proposed project relate to the following:

- Increases in light pollution;
- Impacts to scenic quality;
- Increases in air quality and greenhouse gas emissions;
- Impacts to wildlife and plant habitats;
- Impacts to tribal cultural resources;
- Impacts associated with soil erosion;
- Impacts to water quality and drainage;
- Consistency with local and State policies;
- Updates to public transit services;
- Traffic increases along surrounding roadways;
- Noise pollution;
- Increased utility service demand;
- Safety hazards created from increased traffic;
- Number of exits to facilitate evacuation;
- Traffic increase associated with University of California, Davis and motorists traveling to and from the Interstate 80/Mace Boulevard junction;
- Reducing vehicle miles traveled through transportation demand management program; and
- Sufficient water supply.



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
<b>4.1 Aesthetics</b>				
<p><b>4.1-1</b> Have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.</p>	<p>LS</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i></p> <p><u>Modified Mitigation Measure(s)</u> <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u> <i>None required.</i></p>	<p>N/A</p>	<p>No</p>
<p><b>4.1-2</b> In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are</p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i></p> <p><u>Modified Mitigation Measure(s)</u> <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u> <i>SEIR 4.1-2 The project shall comply with Conditions of Approval on the Tentative Map with respect to aspects of project design, including, but not limited to, lotting layout, setbacks, height</i></p>	<p>SU</p>	<p>Yes</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
<p>experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.</p>		<p><i>limitations, structural design, landscaping, and appearance of the project intended to create visual consistency with adjacent uses to the north, south, and west of the project site. Such conditions shall be developed by the City with the intent of imposing development standards on the project similar to what is required for the adjacent Planned Development (PD) zoning districts to ensure aesthetic compatibility with the surrounding areas and scenic quality.</i></p>		
<p>4.1-3 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.</p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  None applicable.</p> <p><u>Modified Mitigation Measure(s)</u>  4.7-2(a) <del>Prior to issuance of the first building permit approval of the subdivision improvement plans, the developer shall submit a street lighting plan for review and approval by the City Engineer. Street lightning shall be limited to reduced height low profile fixtures. The Plan shall comply with Chapter 6 of the Davis Municipal Code- Article VIII: Outdoor Lighting Control, and the most recent edition of City standards and specifications.</del></p>	<p>LS</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		4.7-2(b) <i>Prior to the issuance of building permits for the multi-family apartments and USA Pentathlon Training Facility, the developer shall submit a lighting plan for the review and approval of the Chief Building Official and the Community Development Director of the City of Davis. The lighting plan shall include shielding on all light fixtures and shall address limiting light trespass and glare on the multi-family apartment site and the USA Pentathlon Training Facility through the use of shielding and directional lighting methods, including which may include, but is not limited to, fixture location and height. The Plan shall comply with Chapter 6 of the Davis Municipal Code- Article VIII: Outdoor Lighting Control.</i>  <u>New Mitigation Measure(s)</u> None required.		
4.1-4 Long-term changes in visual character associated with development of the proposed project in combination with future buildout of the	CC	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> SEIR 4.1-4 Implement Mitigation Measure SEIR 4.1-2.	CC, SU	Yes

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





<b>Table 2-1 Summary of Impacts and Mitigation Measures</b>				
<b>Impact</b>	<b>Level of Significance Prior to Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance After Mitigation</b>	<b>New Significant or Substantially More Severe Significant Impact</b>
City of Davis and present and probable future projects.				
4.1-5 Creation of new sources of light or glare associated with development of the proposed project in combination with future buildout of the City of Davis and present and probable future projects.	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.	N/A	No
<b>4.2 Air Quality, GHG Emissions, and Energy</b>				
4.2-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction.	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> Mitigation Measure 4.4-1 from the 2009 EIR is not applicable.  <u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.	N/A	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
4.2-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation.	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>	N/A	No
4.2-3 Expose sensitive receptors to substantial pollutant concentrations.	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>	N/A	No
4.2-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>	N/A	No
4.2-5 Result in the inefficient or	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>	N/A	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
wasteful use of energy, or conflict with a State or local plan for renewable energy or energy efficiency.		<u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>		
4.2-6 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for	LCC	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>	N/A	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
ozone precursors).				
4.2-7 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	LCC	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>Mitigation Measure 4.10-1 from the 2009 EIR is not applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>	N/A	No
4.2-8 Result in a cumulatively considerable inefficient or wasteful use of energy or conflict with a State or local plan for	LCC	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>	N/A	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



<b>Table 2-1 Summary of Impacts and Mitigation Measures</b>				
<b>Impact</b>	<b>Level of Significance Prior to Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance After Mitigation</b>	<b>New Significant or Substantially More Severe Significant Impact</b>
renewable energy or energy efficiency.				
<b>4.3 Biological Resources</b>				
4.3-1 Have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species.	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i></p> <p><u>Modified Mitigation Measure(s)</u> <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u> <i>SEIR 4.3-1 If construction has not commenced prior to the first day of spring 2025 (March 20, 2025), a new round of special-status plant surveys shall be conducted by a qualified biologist in areas proposed for disturbance, prior to the commencement of construction.</i></p> <p><i>The surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants, the California Native Plant Society (CNPS) Botanical Survey Guidelines of the California Native Plant Society, and the California Department of Fish and Wildlife (CDFW) Protocols for Surveying and</i></p>	LS	Yes

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. The surveys shall be conducted at the appropriate time of year when plants are in bloom. A report summarizing the results of the protocol-level special-status plant surveys shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department.</i></p> <p><i>If special-status plant species are not found, further mitigation shall not be required. If special-status plants are found within the proposed impact area and they are perennials, such as bristly sedge, then mitigation shall consist of digging up the plants and transplanting them into a suitable mitigation area prior to construction. If special-status plants will be impacted, a mitigation plan shall be developed and approved by the City of Davis Community Development and Sustainability Department. Mitigation for the transplantation/establishment of rare plants shall result in no net loss of individual plants after a five-year monitoring period.</i></p>		
4.3-2 Have a substantial adverse effect, either directly or	S	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.	LS	Yes

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
through substantial habitat modifications, on monarch butterfly.		<p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>SEIR 4.3-2 If project-related vegetation removal occurs during the time when milkweed plants may host monarch eggs or caterpillars (March 15 through September 30, or otherwise identified in any future USFWS survey protocol), a preconstruction survey shall be conducted by a qualified biologist to survey for monarch eggs, larvae, and chrysalises, at most, 14 days prior to the commencement of construction. All milkweed plants within the study area shall be surveyed, as well as surrounding vegetation which may support chrysalises. A report summarizing the results of the preconstruction survey shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department.</i></p> <p><i>If any monarch eggs, larvae, or chrysalises are found within the study area, they shall be avoided and work shall not occur within 50 feet of the monarchs until adults emerge and voluntarily leave the project site. If the eggs, larvae, or chrysalises are located in the work area and cannot be avoided, as determined by a qualified</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>biologist in coordination with the project engineer and the City, eggs shall be allowed to hatch, and all larvae and chrysalises shall be translocated to an alternative location (e.g., containing a suitable population of larval host plants) outside of the work area. Should the species be listed under the federal Endangered Species Act (FESA) in the future, additional coordination with USFWS shall be completed, as necessary, prior to translocation.</i></p>		
<p><b>4.3-3 Have a substantial adverse effect, either directly or through habitat modifications, on VELB.</b></p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  None applicable.</p> <p><u>Modified Mitigation Measure(s)</u>  None required.</p> <p><u>New Mitigation Measure(s)</u>  SEIR 4.3-3 <u>Yolo HCP/NCCP AMM12</u>: The project proponent will retain a qualified biologist who is familiar with valley elderberry longhorn beetle and evidence of its presence (i.e., exit holes in elderberry shrubs) to map all elderberry shrubs in and within 100 feet of the project footprint with stems that are greater than one inch in diameter at ground level. To avoid take of valley elderberry longhorn beetle fully, the project proponent will maintain a buffer of at least 100 feet from any elderberry shrubs</p>	<p>LS</p>	<p>Yes</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>with stems greater than one inch in diameter at ground level. AMM1, Establish Buffers, above [in the Yolo HCP/NCCP], describes circumstances in which a lesser buffer may be applied. For elderberry shrubs that cannot be avoided with a designated buffer distance as described above, the qualified biologist will quantify the number of stems one inch or greater in diameter to be affected, and the presence or absence of exit holes. The Yolo Habitat Conservancy will use this information to determine the number of plants or cuttings to plant on a riparian restoration site to help offset the loss, consistent with Section 6.4.2.4.1, Valley Elderberry Longhorn Beetle. Additionally, prior to construction, the project proponent will transplant elderberry shrubs identified within the project footprint that cannot be avoided.</i></p> <p><i>Transplantation will only occur if a shrub cannot be avoided and, if indirectly affected, the indirect effects would otherwise result in the death of stems or the entire shrub. If the project proponent chooses, in coordination with a qualified biologist, not to transplant the shrub because the activity would not likely result in death of stems of the shrub, then the qualified biologist will monitor the shrub annually for a five-year monitoring period.</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>The monitoring period may be reduced with concurrence from the wildlife agencies if the latest research and best available information at the time indicates that a shorter monitoring period is warranted. If death of stems at least one inch in diameter occurs within the monitoring period, and the qualified biologist determines that the shrub is sufficiently healthy to transplant, the project proponent will transplant the shrub as described in the following paragraph, in coordination with the qualified biologist. If the shrub dies during the monitoring period, or the qualified biologist determines that the shrub is no longer healthy enough to survive transplanting, then the Yolo Habitat Conservancy will offset the shrub loss consistent with the preceding paragraph.</i></p> <p><i>The project proponent will transplant the shrubs into a location in the HCP/NCCP reserve system that has been approved by the Conservancy. Elderberry shrubs outside the project footprint but within the 100-foot buffer will not be transplanted.</i></p> <p><i>Transplanting will follow the following measures:</i></p> <ol style="list-style-type: none"> <li><i>1. Monitor: A qualified biologist will be on-site for the duration of the transplanting</i></li> </ol>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>of the elderberry shrubs to ensure the effects on elderberry shrubs are minimized.</i></p> <p>2. <i>Timing: The project proponent will transplant elderberry plants when the plants are dormant, approximately November through the first two weeks of February, after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the plant and increase transplantation success.</i></p> <p>3. <i>Transplantation procedure:</i></p> <ul style="list-style-type: none"> <li>a. <i>Cut the plant back three to six feet from the ground or to 50 percent of its height (whichever is taller) by removing branches and stems above this height. Replant the trunk and stems measuring one inch or greater in diameter. Remove leaves that remain on the plants.</i></li> <li>b. <i>Relocate plant to approved location in the reserve system, and replant as described in Section 6.4.2.4.1, Valley Elderberry Longhorn Beetle.</i></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
4.3-4 Have a substantial adverse effect, either directly or through habitat modifications, on Crotch's bumble bee.	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  <i>None applicable.</i></p> <p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>SEIR 4.3-4 If feasible, initial ground-disturbing activities associated with the proposed project (e.g., grading, vegetation removal, staging) shall take place between September 1 and March 31 (i.e., outside the colony active period) to avoid potential impacts on special-status bumble bees. If completing all initial ground-disturbing activities between September 1 and March 31 is not feasible, then at a maximum of 14 days prior to the commencement of construction activities, a qualified biologist with 10 or more years of experience conducting biological resource surveys within California shall conduct a preconstruction survey for Crotch's bumble bees in the area(s) proposed for impact.</i></p> <p><i>The survey shall occur during the period from one hour after sunrise to two hours before sunset, with temperatures between 65 degrees Fahrenheit and 90 degrees Fahrenheit, with low</i></p>	LS	Yes

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p>wind and zero rain. If the timing of the start of construction makes the survey infeasible due to the temperature requirements, the surveying biologist shall select the most appropriate days based on the National Weather Service seven-day forecast and shall survey at a time of day that is closest to the temperature range stated above. The survey duration shall be commensurate with the extent of suitable floral resources (which represent foraging habitat) present within the area proposed for impact, and the level of effort shall be based on the metric of a minimum of one person-hour of searching per three acres of suitable floral resources/foraging habitat. A meandering pedestrian survey shall be conducted throughout the area proposed for impact in order to identify patches of suitable floral resources. Suitable floral resources for Crotch's bumble bee include species in the following families: Apocynaceae, Asteraceae, Boraginaceae, Fabaceae, and Lamiaceae.</p> <p>At a minimum, preconstruction survey methods shall include the following:</p> <ul style="list-style-type: none"> <li>• Search areas with floral resources for foraging Crotch's bumble bees. Observed foraging activity may indicate</li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>a nest is nearby, and therefore, the survey duration shall be increased when foraging bumble bees are present;</i></p> <ul style="list-style-type: none"> <li>• <i>If Crotch's bumble bees are observed, watch any Crotch's bumble bees present and observe their flight patterns. Attempt to track their movements between foraging areas and the nest;</i></li> <li>• <i>Visually look for nest entrances. Observe burrows, any other underground cavities, logs, or other possible nesting habitat;</i></li> <li>• <i>If floral resources or other vegetation preclude observance of the nest, small areas of vegetation may be removed via hand removal, line trimming, or mowing to a height of a minimum of four inches to assist with locating the nest;</i></li> <li>• <i>Look for concentrated Crotch's bumble bee activity;</i></li> <li>• <i>Listen for the humming of a nest colony; and</i></li> <li>• <i>If bumble bees are observed, attempt to photograph the individual and identify it to species.</i></li> </ul> <p><i>The biologist conducting the survey shall record when the survey was conducted, a general</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>description of any suitable foraging habitat/floral resources present, a description of observed bumble bee activity, a list of bumble bee species observed, a description of any vegetation removed to facilitate the survey, and their determination of if survey observations suggest a Crotch's bumble bee nest(s) may be present or if construction activities could result in take of Crotch's bumble bees. The report shall be submitted to the City of Davis Community Development and Sustainability Department prior to the commencement of construction activities.</i></p> <p><i>If bumble bees are not located during the preconstruction survey or the bumble bees located are definitively identified as a common species (i.e., not special-status species), then further mitigation or coordination with the CDFW is not required.</i></p> <p><i>If any sign(s) of a bumble bee nest is observed, and if the species present cannot be established as a common bumble bee, then construction shall not commence until either (1) the bumble bees present are positively identified as common (i.e., not a special-status species), or (2) the completion of coordination with CDFW to identify</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>appropriate mitigation measures, which may include, but not be limited to, waiting until the colony active season ends, establishment of nest buffers, or obtaining an Incidental Take Permit (ITP) from CDFW.</i></p> <p><i>If Crotch's bumble bees are located, and after coordination with CDFW take of Crotch's bumble bees cannot be avoided, the project proponent shall obtain an ITP from CDFW, and the project proponent shall implement all conditions identified in the ITP. Mitigation required by the ITP may include, but not be limited to, the project proponent translocating nesting substrate in accordance with the latest scientific research to another suitable location (i.e., a location that supports similar or better floral resources as the impact area), enhancing floral resources on areas of the project site that will remain appropriate habitat, worker awareness training, and/or other measures specified by CDFW.</i></p>		
<p><b>4.3-5 Have a substantial adverse effect, either directly or through habitat modifications,</b></p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>                      None applicable.</p> <p><u>Modified Mitigation Measure(s)</u>                      None required.</p>	<p>LS</p>	<p>Yes</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
on northwestern pond turtle.		<p><u>New Mitigation Measure(s)</u>  SEIR 4.3-5 <i>Yolo HCP/NCCP AMM14: There are no specific design requirements for western pond turtle habitat, however, project proponents must follow design requirements for the valley foothill riparian and lacustrine and riverine natural communities described in AMMs 9 and 10, which require a 100-foot (minimum) permanent buffer zone from the canopy drip-line (the farthest edge on the ground where water will drip from the tree canopy, based on the outer boundary of the tree canopy). If modeled upland habitat will be impacted, a qualified biologist must be present and will assess the likelihood of western pond turtle nests occurring in the disturbance area (based on sun exposure, soil conditions, and other species habitat requirements). If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground disturbing activity for nests that may be unearthed during the disturbance, and will move out of harm's way any turtles or hatchlings found.</i></p>		
4.3-6 Have a substantial adverse effect, either directly or	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  None applicable.</p>	LS	Yes

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
through habitat modifications, on giant garter snake.		<p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>SEIR 4.3-6 Yolo HCP/NCCP AMM15: The project proponent will avoid effects on areas where planning-level surveys indicate the presence of suitable habitat for giant garter snake. To avoid effects on giant garter snake aquatic habitat, the project proponent will conduct no in-water/in-channel activity and maintain a permanent 200-foot non-disturbance buffer from the outer edge of potentially occupied aquatic habitat. If the project proponent cannot avoid effects of construction activities, the project proponent will implement the measures below to minimize effects of construction projects (measures for maintenance activities are described after the following bulleted list).</i></p> <ul style="list-style-type: none"> <li><i>Conduct preconstruction clearance surveys using USFWS-approved methods within 24 hours prior to construction activities within identified giant garter snake aquatic and adjacent upland habitat. If construction activities stop for a period of two weeks or more,</i></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p>conduct another preconstruction clearance survey within 24 hours prior to resuming construction activity.</p> <ul style="list-style-type: none"> <li>• Restrict all construction activity involving disturbance of giant garter snake habitat to the snake's active season, May 1 through October 1. During this period, the potential for direct mortality is reduced because snakes are expected to move and avoid danger.</li> <li>• In areas where construction is to take place, encourage giant garter snakes to leave the site on their own by dewatering all irrigation ditches, canals, or other aquatic habitat (i.e., removing giant garter snake aquatic habitat) between April 15 and September 30. Dewatered habitat must remain dry, with no water puddles remaining, for at least 15 consecutive days prior to excavating or filling of the habitat. If a site cannot be completely dewatered, netting and salvage of giant garter snake prey items may be necessary to discourage use by snakes.</li> <li>• Provide environmental awareness training for construction personnel, as approved by the Conservancy. Training</li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p>may consist of showing a video prepared by a qualified biologist, or an in-person presentation by a qualified biologist. In addition to the video or in-person presentation, training may be supplemented with the distribution of approved brochures and other materials that describe resources protected under the Yolo HCP/NCCP and methods for avoiding effects.</p> <ul style="list-style-type: none"> <li>• A qualified biologist will prepare a giant garter snake relocation plan which must be approved by the Conservancy prior to work in giant garter snake habitat. The qualified biologist will base the relocation plan on criteria provided by CDFW or USFWS, through the Conservancy.</li> <li>• If a live giant garter snake is encountered during construction activities, immediately notify the project's biological monitor and USFWS and CDFW. The monitor will stop construction in the vicinity of the snake, monitor the snake, and allow the snake to leave on its own. The monitor will remain in the area for the remainder of the work day to ensure the snake is not harmed or, if it leaves the site, does not return. If the giant</li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>garter snake does not leave on its own, the qualified biologist will relocate the snake consistent with the relocation plan described above.</i></p> <ul style="list-style-type: none"> <li>• <i>Employ the following management practices to minimize disturbances to habitat:</i> <ul style="list-style-type: none"> <li>○ <i>Install temporary fencing to identify and protect adjacent marshes, wetlands, and ditches from encroachment from construction equipment and personnel.</i></li> <li>○ <i>Maintain water quality and limit construction runoff into wetland areas through the use of hay bales, filter fences, vegetative buffer strips, or other accepted practices. No plastic, monofilament, jute, or similar erosion-control matting that could entangle snakes or other wildlife will be permitted.</i></li> </ul> </li> </ul> <p><i>Ongoing maintenance covered activities by local water and flood control agencies typically involve removal of vegetation, debris, and sediment from</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Prior to Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance After Mitigation</b>	<b>New Significant or Substantially More Severe Significant Impact</b>
		<p><i>water conveyance canals as well as resloping, rocking, and stabilizing the canals that serve agricultural water users. Maintenance of these conveyance facilities can typically occur only from mid-January through April when conveyance canals and ditches are not in service by the agency, although some drainages are used for storm conveyance during the winter and are wet all year. This timing is during the giant garter snake's inactive period. This is when snakes may be using underground burrows and are most vulnerable to take because they are unable to move out of harm's way. Maintenance activities, therefore, will be limited to the giant garter snake's active season (May 1 to October 1) when possible. All personnel involved in maintenance activities within giant garter snake habitat will first participate in environmental awareness training for giant garter snake, as described above for construction-related activities. To minimize the take of giant garter snake, the local water or flood control agency will limit maintenance of conveyance structures located within modeled giant garter snake habitat (Appendix A, Covered Species Accounts) to clearing one side along at least 80 percent of the linear distance of canals and ditches during each maintenance year (e.g., the left bank of a canal is</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>maintained in the first year and the right bank in the second year). To avoid collapses when resloping canal and ditch banks composed of heavy clay soils, clearing will be limited to one side of the channel during each maintenance year.</i></p> <p><i>For channel maintenance activities conducted within modeled habitat for giant garter snake, the project proponent will place removed material in existing dredged sites along channels where prior maintenance dredge disposal has occurred. For portions of channels that do not have previously used spoil disposal sites and where surveys have been conducted to confirm that giant garter snakes are not present, removed materials may be placed along channels in areas that are not occupied by giant garter snake and where materials will not re-enter the canal because of stormwater runoff.</i></p> <p><i>Modifications to this AMM may be made with the approval of the Conservancy, USFWS, and CDFW.</i></p>		
<p><b>4.3-7 Have a substantial adverse effect, either directly or</b></p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>                      None applicable.</p>	<p>LS</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
through habitat modifications, on tricolored blackbird		<p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>SEIR 4.3-7 Yolo HCP/NCCP AMM21: The project proponent will retain a qualified biologist to identify and quantify (in acres) tricolored blackbird nesting and foraging habitat (as defined in Appendix A, Covered Species Accounts) within 1,300 feet of the footprint of the covered activity. If a 1,300-foot buffer from nesting habitat cannot be maintained, the qualified biologist will check records maintained by the Conservancy (which will include CNDDDB data, and data from the tricolored blackbird portal) to determine if tricolored blackbird nesting colonies have been active in or within 1,300 feet of the project footprint during the previous five years. If there are no records of nesting tricolored blackbirds on the site, the qualified biologist will conduct visual surveys to determine if an active colony is present, during the period from March 1 to July 30, consistent with protocol described by Kelsey (2008).</i></p> <p><i>Operations and maintenance activities or other temporary activities that do not remove nesting habitat and occur outside the nesting season</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>(March 1 to July 30) do not need to conduct planning or construction surveys or implement any additional avoidance measures.</i></p> <p><i>If an active tricolored blackbird colony is present or has been present within the last five years within the planning-level survey area, the project proponent will design the project to avoid adverse effects within 1,300 feet of the colony site(s), unless a shorter distance is approved by the Conservancy, USFWS, and CDFW. If a shorter distance is approved, the project proponent will still maintain a 1,300-foot buffer around active nesting colonies during the nesting season but may apply the approved lesser distance outside the nesting season. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.</i></p>		
<p><b>4.3-8 Have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl.</b></p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  None applicable.</p> <p><u>Modified Mitigation Measure(s)</u>  4.6-2(a) <del>Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities and within 15 days of initiation of any</del></p>	<p>LS</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><del>grading or other construction activities, pre-construction surveys of all potential burrowing owl habitat shall be conducted by a qualified biologist within the project area and within 250 feet of the project boundary. Presence or sign of burrowing owl and all potentially occupied burrows shall be recorded and monitored according to the CDFG and California Burrowing Owl Consortium guidelines. If burrowing owls are not detected by sign or direct observation, construction may proceed.</del></p> <p><u>Yolo HCP/NCCP AMM18: The project proponent will retain a qualified biologist to conduct planning-level surveys and identify western burrowing owl habitat (as defined in Appendix A, Covered Species Accounts) within or adjacent to (i.e., within 500 feet of) a covered activity. If habitat for this species is present, additional surveys for the species by a qualified biologist are required, consistent with CDFW guidelines (Appendix L).</u></p> <p><u>If burrowing owls are identified during the planning-level survey, the project proponent will minimize activities that will affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint does not</u></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>impinge on a nondisturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this nondisturbance buffer could range from 150 to 1,500 feet (Table 4-2, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls [incorporated as Table 4.3-5 of this chapter]), depending on the time of year and the level of disturbance, based on current guidelines (California Department of Fish and Game 2012). The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.</u></p> <ul style="list-style-type: none"> <li><u>Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high-tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.</u></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<ul style="list-style-type: none"> <li><u>Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.</u></li> <li><u>High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground</u></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact																								
		<p><i>explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.</i></p> <table border="1"> <thead> <tr> <th colspan="4"> <b>Table 4.3-5                      Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls</b> </th> </tr> <tr> <th></th> <th colspan="3"> <b>Level of Disturbance (feet) from Occupied Burrows</b> </th> </tr> <tr> <th> <b>Time of Year</b> </th> <th> <b>Low</b> </th> <th> <b>Medium</b> </th> <th> <b>High</b> </th> </tr> </thead> <tbody> <tr> <td> <u>April 1-August 15</u> </td> <td> <u>600</u> </td> <td> <u>1,500</u> </td> <td> <u>1,500</u> </td> </tr> <tr> <td> <u>August 16-October 15</u> </td> <td> <u>600</u> </td> <td> <u>600</u> </td> <td> <u>1,500</u> </td> </tr> <tr> <td> <u>October 16-March 31</u> </td> <td> <u>150</u> </td> <td> <u>300</u> </td> <td> <u>1,500</u> </td> </tr> </tbody> </table> <p><b><u>Source: Yolo Habitat Conservancy, Yolo County Habitat Conservation Plan/Natural Community Conservation Plan [Table 4-2], April 2018.</u></b></p> <p><i>The project proponent may qualify for a reduced buffer size, based on existing vegetation, human development, and land use, if agreed upon by CDFW and USFWS (California Department of Fish and Game 2012).</i></p>	<b>Table 4.3-5                      Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls</b>					<b>Level of Disturbance (feet) from Occupied Burrows</b>			<b>Time of Year</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<u>April 1-August 15</u>	<u>600</u>	<u>1,500</u>	<u>1,500</u>	<u>August 16-October 15</u>	<u>600</u>	<u>600</u>	<u>1,500</u>	<u>October 16-March 31</u>	<u>150</u>	<u>300</u>	<u>1,500</u>		
<b>Table 4.3-5                      Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls</b>																												
	<b>Level of Disturbance (feet) from Occupied Burrows</b>																											
<b>Time of Year</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>																									
<u>April 1-August 15</u>	<u>600</u>	<u>1,500</u>	<u>1,500</u>																									
<u>August 16-October 15</u>	<u>600</u>	<u>600</u>	<u>1,500</u>																									
<u>October 16-March 31</u>	<u>150</u>	<u>300</u>	<u>1,500</u>																									

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), the project proponent will retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines (Appendix L, Take Avoidance Surveys). The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance.</u></p> <p><u>If the biologist finds the site to be occupied by western burrowing owls during the breeding season (February 1 to August 31), the project proponent will avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the</u></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and the project proponent develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:</u></p> <ul style="list-style-type: none"> <li>• <u>The Conservancy, CDFW, and USFWS approves the AMM plan provided by the project proponent.</u></li> <li>• <u>A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).</u></li> <li>• <u>The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.</u></li> <li>• <u>If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have</u></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>the authority to stop all construction related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree.</u></p> <ul style="list-style-type: none"> <li><u>If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the project proponent may remove the nondisturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies.</u></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>If evidence of western burrowing owl is detected outside the breeding season (December 1 to January 31), the project proponent will establish a non-disturbance buffer around occupied burrows, consistent with Table 4-2 (incorporated as Table 4.3-5 of this chapter), as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:</u></p> <ul style="list-style-type: none"> <li>• <u>A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).</u></li> <li>• <u>The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.</u></li> <li>• <u>If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer.</u></li> <li>• <u>If the owls are gone for at least one week, the project proponent may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to</u></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed and construction may continue.</u></p> <p><u>Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active.</u></p> <p><u>A qualified biologist will monitor the site, consistent with the requirements described above, to ensure that buffers are enforced and owls are not disturbed. Passive relocation (i.e., exclusion) of owls has been used in the past in the Plan Area to remove and exclude owls from active burrows during the nonbreeding season (Trulio 1995). Exclusion and burrow closure will not be conducted during the breeding season for any occupied burrow. If the Conservancy determines that passive relocation is necessary, the project proponent will develop a burrowing owl exclusion plan in consultation with CDFW biologists. The methods will be designed as</u></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors will be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist will collapse the burrow to prevent reoccupation. Burrows will be excavated using hand tools. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. The Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows will be constructed prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.</u></p> <p><del>4.6-2(b) If potentially nesting burrowing owl are present during pre-construction surveys conducted</del></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><del>between February 1 and August 31, grading or other construction related disturbance shall not be allowed within 250 feet of any active nest burrows during the nesting season (February 1 – August 31) unless approved by CDFG.</del></p> <p>4.6-2(c) <del>If burrowing owl are detected during pre-construction surveys outside the nesting season (September 1 – January 31), passive relocation and monitoring may be undertaken by a qualified biologist following the CDFG and California Burrowing Owl Consortium guidelines, which involve the placement of one way exclusion doors on occupied and potentially occupied burrowing owl burrows. Owls shall be excluded from all suitable burrows within the project area and within a 250-foot buffer zone of the impact area. A minimum of one week shall be allowed to accomplish this task and allow for owls to acclimate to alternate burrows. These mitigation actions shall be carried out prior to the burrowing owl breeding season (February 1 – August 31) and the site shall be monitored weekly by a qualified biologist until construction begins to ensure that burrowing owls do not re-inhabit the site.</del></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><del>4.6-2(d) — If burrowing owl or sign of burrowing owl are detected at any time on the project site, a minimum of 6.5 acres of foraging habitat per pair or individual resident bird, shall be acquired and permanently protected to compensate for the loss of burrowing owl habitat. The acreage shall be based on the maximum number of owls observed inhabiting the property for any given observation period, pre construction survey, or other field visit. The protected lands shall be occupied burrowing owl habitat and at a location acceptable to CDFG. A report shall be submitted to the City describing the agreed upon location. First priority for habitat preservation shall be accomplished on site. If the required acreage cannot be preserved on site, second priority shall be given to habitat preservation at an off-site location within the Davis city limits that shall be acquired and preserved in perpetuity. Third priority shall be given to another offsite location outside of the Davis city limits. Habitat in the amount specified above shall be acquired, permanently protected, and enhanced through management for the benefit of the species, to compensate for the loss of burrowing owl habitat on the project site. Alternatively, the applicant can provide the required mitigation either through an in-lieu fee program, purchase of the required</del></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><del>acreage in an approved mitigation bank, or an approved Habitat Conservation Plan (HCP).</del></p> <p><del>4.6-2(e) If burrowing owl are determined to be actively using the site, a qualified biologist shall conduct an education session for project contractors and construction crews responsible for site demolition and/or grading operations before any ground disturbance work within the project area. The education session, shall include includes photos of burrowing owl for identification purposes, habitat description, limits of construction activities in the project area, and guidance regarding general measures being implemented to conserve burrowing owl as they relate to the project. A qualified biologist shall provide materials and instructions to train new workers whose jobs involve initial ground disturbance, grading, or paving. Training for personnel finalizing exteriors and interiors would not be required.</del></p> <p><del>4.6-2(f) A monitoring report of all activities associated with pre construction surveys, avoidance measures, and passive relocation of burrowing owls shall be submitted to the City and CDFG no later than three days before initiation of grading.</del></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>New Mitigation Measure(s)</u>                      None required.</p>		
<p>4.3-9 Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk and white-tailed kite.</p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>                      None applicable.</p> <p><u>Modified Mitigation Measure(s)</u>  <del>4.6-5(a) In order to ensure that nesting Swainson's hawks will not be affected by construction on the project site, a qualified biologist shall conduct preconstruction surveys according to the CDFG and Swainson's hawk Technical Advisory Committee guidelines (2000). Survey Period I occurs from January 1 – March 20, Period II from March 20 – April 5, Period III from April 5 – April 20, Period IV from April 21 – June 10, and Period V from June 10 – July 30. Three surveys shall be completed in at least each of the two survey periods immediately prior to a project's initiation and shall encompass the area within one half mile of the project site.</del></p> <p><u>Yolo HCP/NCCP AMM16: The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is</u></p>	<p>LS</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>granted or if the parcels are visible from authorized areas.</u></p> <p><u>If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey shall be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive</u></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks.</u></p> <p><u>For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.</u></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><del>4.6-5(b) — Because of the potential for Swainson’s hawk to nest on-site, potential adverse affects to this species shall be avoided by establishment of CDFG approved buffers around any active nests. No construction activities shall take place within 0.25 mile of the nest until the young have fledged, or authorization has been obtained from CDFG. Weekly monitoring reports summarizing nest activities shall be submitted to the City and CDFG until the young have fledged and the nest is determined to be inactive. Trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (late September to March) and in accordance with the CDFG “Staff Report Regarding Mitigation for Impacts to Swainson’s Hawks in the Central Valley of California,” November 8, 1994.</del></p> <p><del>4.6-5(c) — Replacement trees for any potential Swainson’s hawk nest trees removed as part of project construction must be planted either on-site or at a nearby site, and/or an in-lieu fee must be paid to the City of Davis Tree Preservation Fund as detailed in Mitigation Measure 4.6-7.</del></p> <p><del>4.6-6(a) — The applicant shall be responsible for mitigating the loss of any Swainson’s hawk foraging habitat.</del></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><del>The extent of any necessary mitigation shall be determined by the City in consultation with CDFG; past recommended mitigation for loss of foraging habitat has been at a ratio of one acre of suitable foraging habitat for every one acre utilized by the proposed project. An "Agreement Regarding Mitigation for Impacts to Swainson's Hawk Foraging Habitat in Yolo County" was executed in August, 2002, between the Cities of Davis, West Sacramento, Winters, Woodland, the County of Yolo, and CDFG. The agreement currently requires 1.0 acre of habitat management lands as mitigation for each 1.0 acre of Swainson's hawk foraging habitat lost</del></p> <p>4.6-6(b) <del>The project proponent will compensate for the loss of Swainson's hawk foraging habitat by providing Habitat Management lands (HM lands) to CDFG as defined in the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (published by California Department of Fish and Game in 1994). If the proposed project is located within 1 mile of an active nest (to be determined with preconstruction surveys) the loss of habitat will be compensated at a ratio of 1:1 (HM lands:urban development). The project proponent will provide HM lands through an in-</del></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><del>lieu fee process prior to groundbreaking per the Agreement to Yolo County HCP/NCCP Joint Powers Agency. Credits will be purchased through the in-lieu fee program due to the lack of mitigation credits currently available at a bank. As of January 2007, the cost per acre for the in-lieu fee is \$8,660 payable to the Joint Powers Agency. Should the in-lieu fee be increased prior to clearance to grade the project site, the project proponent shall pay the in-lieu fee in effect at that time. The project proponent will issue a check to the Joint Powers Agency if mitigation is required. It is estimated that a total of 15.5 acres of Swainson's hawk foraging habitat would be removed as a result of the project. The applicant shall pay the in-lieu fee for the 15.5 acres based on the removal of this Swainson's hawk foraging habitat.</del></p> <p style="text-align: center;"><del>-Or-</del></p> <p><del>Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, the project proponent shall place and record one or more Conservation Easements that meet the acreage requirements of CDFG's Swainson's Hawk foraging habitat mitigation</del></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><del>guidelines. The conservation easement(s) shall be executed by the project proponent and a Conservation operator. The City may, at its discretion, also be a party to the conservation easement(s). The conservation easement(s) shall be reviewed and approved in writing by CDFG prior to recordation for the purpose of confirming consistency. The purpose of the conservation easement(s) shall be to preserve the value of the land as foraging habitat for the Swainson's hawk.</del></p> <p><u>New Mitigation Measure(s)</u>  None required.</p>		
<p><b>4.3-10 Have a substantial adverse effect, either directly or through habitat modifications, on other nesting birds and raptors protected under the MBTA and CFGC.</b></p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  None applicable.</p> <p><u>Modified Mitigation Measure(s)</u>  4.6-3(a)- The removal of any buildings, trees, or shrubs shall occur from September 1 through December 15, outside of the avian nesting season. If removal of buildings, trees, or shrubs occurs, or construction begins between February 1 and August 31 (nesting season for passerine or non-passerine land birds) or between December 15 and August 31 (nesting season for raptors), a nesting bird survey shall be performed by a</p>	<p>LS</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>qualified ornithologist throughout the project site and all accessible areas within a 500-foot radius of proposed construction areas, at most, 14 within 15 days prior to the removal or disturbance of a potential nesting structure, tree, or shrub, or the initiation of other construction activities. During this survey, a qualified biologist ornithologist shall inspect all potential nesting habitat (trees, shrubs, structures, grasslands, etc.) for nests in and immediately adjacent to the impact areas. If a break in construction activity of more than 14 days occurs, then subsequent surveys shall be conducted. A report of the survey findings shall be provided to the City of Davis Community Development and Sustainability Department and CDFG within 30 days of the completed survey and is valid for one construction season. If nests are not found, further mitigation is not required.</u></p> <p><u>If active raptor nests are found, construction activities shall not take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot non-disturbance buffer shall be established. The non-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is approved by the City after taking into consideration the natural</u></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether visual or acoustic barriers occur between the proposed activity and the nest). A qualified ornithologist may visit the nest, as needed, to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.</u></p> <p><u>If the nest buffer is reduced but construction activities cause a nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest in a way that would be considered a result of construction activities, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the agitated behavior. The revised non-disturbance buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified ornithologist in consultation with the City.</u></p> <p><u>Construction activities may only resume within the non-disturbance buffer after a follow-up survey by the ornithologist has been conducted</u></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>and a report has been prepared indicating that the nest (or nests) are not active any longer, and that new nests have not been identified.</i></p> <p><del>4.6-3(b) All vegetation and structures with active nests shall be flagged and an appropriate non-disturbance buffer zone shall be established around the nest site. The size of the buffer zone shall be determined by the project biologist in consultation with CDFG and shall depend on the species involved, site conditions, and type of work to be conducted in the area.</del></p> <p><del>4.6-3(c) A qualified biologist shall monitor active nests to determine when the young have fledged and are feeding on their own. The project biologist and CDFG shall be consulted for clearance before construction activities resume in the vicinity.</del></p> <p><u>New Mitigation Measure(s)</u> None required.</p>		
4.3-11 Have a substantial adverse effect, either directly or through habitat	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.</p> <p><u>Modified Mitigation Measure(s)</u> 4.6-4(a) A pre-construction survey for roosting bats shall be performed by a qualified biologist within 30 14</p>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
<p>modifications, on roosting bats.</p>		<p><u>days prior to any removal of trees or structures on the site that would occur during the breeding season (April through August). A report summarizing the results of the preconstruction roosting bat survey shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department. Surveys shall be repeated if project-related disturbance is delayed more than 14 days past previous survey date. If no active roosts are found, then no further action would be warranted. If either a maternity roost or hibernacula (structures used by bats for hibernation) is present, the following mitigation measures shall be implemented.</u></p> <p><u>If roosting bats are found, exclusion shall be conducted by the qualified biologist in coordination with CDFW. Exclusion and bat habitat removal shall not occur during the breeding season in order to minimize disturbance to, or abandonment of, young bats. Methods may include acoustic monitoring, evening emergence surveys, and the utilization of two-step tree removal supervised by the qualified biologist. Two-step tree removal involves removal of all branches that do not provide roosting habitat on the first day, and then the next day cutting down</u></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>the remaining portion of the tree. Building exclusion methods may include such techniques as installation of passive one-way doors, or the installation of netting when the bats are not present to prevent their reoccupation. Once the bats have been excluded, tree or building removal may occur.</u></p> <p><del>4.6-4(b) — If active maternity roosts or hibernacula are found in trees or structures which will be removed as part of project construction, the project shall be redesigned to avoid the loss of the tree or structure occupied by the roost to the extent feasible as determined by the City. If an active maternity roost is located and the project cannot be redesigned to avoid removal of the occupied tree or structure, demolition shall commence before maternity colonies form (i.e., prior to March 1) or after young are volant (flying) (i.e., after July 31). Disturbance-free buffer zones, as determined by a qualified biologist in coordination with CDFG, shall be observed during the maternity roost season (March 1 – July 31).</del></p> <p><del>4.6-4(c) — If a non-breeding bat hibernacula is found in a tree or structure scheduled for removal, the individuals shall be safely evicted, under the direction of a qualified biologist (as determined by</del></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><del>a Memorandum of Understanding with CDFG), by opening the roosting area to allow airflow through the cavity. Demolition shall then follow at least one night after initial disturbance for airflow. This action should allow bats to leave during darkness, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. Trees or structures with roosts that need to be removed shall first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours.</del></p> <p><del>4.6-4(d) If special-status bats are found roosting within trees or structures on site that require removal, appropriate replacement roosts shall be created at a suitable location on site or off site in coordination with a qualified biologist, CDFG, and the City.</del></p> <p><u>New Mitigation Measure(s)</u> None required.</p>		
4.3-12 Have a substantial adverse effect, either directly or through habitat modifications,	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.</p> <p><u>Modified Mitigation Measure(s)</u> 4.6-1(a) A <u>Within 48 hours prior to the commencement of construction activities, a qualified biologist shall</u></p>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
on American badger.		<p>conduct pre-construction surveys for American badger in all construction areas identified as potential habitat located within the project area two weeks prior to initiation of construction activities. <u>If American badger is not found, further mitigation shall not be required.</u> If an American badger or active burrow, indicated by the presence of badger sign (i.e. suitable shape and burrow-size, scat) is found within the construction area during pre-construction surveys, the CDFG shall be consulted to obtain permission for animal relocation. <u>A report summarizing the results of the preconstruction survey shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department.</u></p> <p><del>4.6-1(b) If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction.</del></p> <p>4.6-1(eb) If the qualified biologist determines that potential dens may be active, the entrances of the dens shall be blocked with soil, sticks, and debris for three to five days to discourage use of these dens prior to project disturbance. The den entrances shall be blocked to an incrementally greater</p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p>degree over the three to five day period. After the qualified biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.</p> <p>4.6-1(dc) If badger are determined to be actively using the site, a qualified biologist shall provide project contractors and construction crews responsible for site demolition and/or grading operations with a worker-awareness program before any ground disturbance work within the project area. This program shall be used to describe the species, its habits and habitats, its legal status and required protection, and all applicable mitigation measures.</p> <p><u>New Mitigation Measure(s)</u>  None required.</p>		
<p>4.3-13 Have a substantial adverse effect on any riparian habitat or other Sensitive Natural Community identified in</p>	<p>LS</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  None applicable.</p> <p><u>Modified Mitigation Measure(s)</u>  None required.</p> <p><u>New Mitigation Measure(s)</u>  None required.</p>	<p>N/A</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



<b>Table 2-1 Summary of Impacts and Mitigation Measures</b>				
<b>Impact</b>	<b>Level of Significance Prior to Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance After Mitigation</b>	<b>New Significant or Substantially More Severe Significant Impact</b>
local or regional plans, policies, regulations or by the CDFW or USFWS.				
4.3-14 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.	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.	N/A	No
4.3-15 Interfere substantially with the movement of any native resident or	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> None required.	N/A	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.		<u>New Mitigation Measure(s)</u> <i>None required.</i>		
4.3-16 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	S	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>  <u>Modified Mitigation Measure(s)</u> 4.6-7(a) <i>Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, a tree preservation plan, in compliance with Ordinance 37.03.010 in the City of Davis Municipal Code, shall be submitted to the Community Development Department and <del>City Arborist</del> <u>Public Works Department</u> for review and approval, which shall ensure the following measures:</i>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Prior to Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance After Mitigation</b>	<b>New Significant or Substantially More Severe Significant Impact</b>
		<ul style="list-style-type: none"> <li>• <i>Trees shall be cordoned off with chain link fence prior to construction as specified;</i></li> <li>• <i>Soil compaction under trees is to be avoided;</i></li> <li>• <i>The fence shall prevent equipment traffic and storage under the trees and should extend beyond the drip-line;</i></li> <li>• <i>Excavation within this zone shall be accomplished by hand, and roots ½" and larger shall be preserved;</i></li> <li>• <i>Proper fertilization and irrigation prior to and during the construction period shall be provided as specified;</i></li> <li>• <i>New landscaping under existing trees shall be carefully planned to avoid any grade changes and any excess moisture in trunk area. Existing plants which have compatible irrigation requirements and which complement the trees' color, texture and form are to be saved;</i></li> <li>• <i>Trenching within the drip-line shall be performed only with prior approval of the Park and General Services Department. Boring is preferred when feasible;</i></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p>4.6-7(b)</p> <p><i>Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, a <u>sheet page</u> shall be included with the project plans, which indicates all of the trees identified. The tree report with corresponding descriptions of each tree by species, health, etc. should also be included. In addition, notes shall be included on the plans which clearly state protection procedures for trees that are to be preserved. Any tree care practices, such as cutting of roots, pruning the top, etc., shall be adequately described and shall have the approval of a representative of the <u>Parks and General Services Public Works Utilities and Operations Department</u> prior to execution. In the event of damage to existing trees, a penalty clause shall be replacement tree(s) of equal size in D.B.H. unless specified otherwise by the Parks and General Services Department.</i></p> <ul style="list-style-type: none"> <li>• <i>All paving plans and specifications shall clearly prohibit the use of soil sterilants adjacent to preserved trees; and</i></li> <li>• <i>Grade changes greater than one foot within the drip-line shall be avoided, and nothing other than a saw shall be used for root cutting.</i></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p>4.6-7(c) <i>Trees identified on the site as Trees of Significance, that are proposed for removal, shall be replaced either on site or at a nearby site deemed acceptable by the <u>Public Works Director of the City of Davis Parks and General Services Department</u>. The Director may require an in-lieu fee to be paid to the City of Davis Tree Preservation Fund instead of or in addition to tree replacement. The recommendations for avoidance of trees contained in Chapter 37 of the City of Davis Municipal Code (Tree Planting, Preservation, and Protection) should be adopted if feasible. If infeasible, the applicant should identify trees slated for removal on the site plan, including those with encroachments within 30-feet of the drip line of trees and develop a tree replacement plan that shall be reviewed and approved by the City prior to issuance of the grading permit. Tree replacement shall be implemented according to options outlined in Section 37.03.070 of the City's Municipal Code as follows:</i></p> <p>(i) <i>Replanting a tree(s) on site: Trees shall be planted in number and size so that there is no net loss in tree diameter at breast height (DBH). For example, if</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>one tree is removed with a 12-inch DBH size, mitigation may consist of a replacement of equal size, two trees each 6-inch DBH, or four trees each 3-inch DBH. The replanted tree(s) shall be minimum 5 gallon size and of a species that will eventually equal or exceed the removed tree in size.</i></p> <p><i>(ii) Replanting a tree(s) off site: If there is insufficient space on the property for the replacement tree(s), required planting shall occur on other property in the applicant's ownership or in City-owned open space or park, subject to the approval of the City Arborist and authorized property owners.</i></p> <p><i>(iii) Payment to the Tree Preservation Fund in lieu of replacement: If in the City Arborist's determination no feasible alternative exists to plant the required mitigation, or there are other considerations for alternative mitigation, the applicant shall pay into the Tree Preservation Fund an amount determined by the Director based upon the ISA appraisal guidelines or other approved method. If the Director approves another method of appraisal</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>guideline, the Director shall publish notice of that approval and notify the permit applicant at the time the permit application is issued.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>None required.</i></p>		
<p><b>4.3-17 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.</b></p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  <i>None applicable.</i></p> <p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>SEIR 4.3-17(a) Yolo HCP/NCCP AMM3: Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the project site to established roadways and driveways to minimize natural community and covered species habitat disturbance. The project proponent will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction</i></p>	<p>LS</p>	<p>Yes</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p>vehicles, other equipment, and personnel will avoid these designated areas.</p> <p>SEIR 4.3-17(b) <u>Yolo HCP/NCCP AMM4</u>: To prevent injury and mortality of giant garter snake, western pond turtle, and California tiger salamander, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.</p> <p>SEIR 4.3-17(c) <u>Yolo HCP/NCCP AMM5</u>: Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.</p> <p>SEIR 4.3-17(d) <u>Yolo HCP/NCCP AMM6</u>: All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered</p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.</i></p> <p><i>SEIR 4.3-17(e) <u>Yolo HCP/NCCP AMM7</u>: Workers will direct all lights for nighttime lighting of project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the project construction area.</i></p> <p><i>SEIR 4.3-17(f) <u>Yolo HCP/NCCP AMM8</u>: Project proponents should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support habitat for covered species or are easily restored to prior or improved ecological functions (e.g., grassland and agricultural land). Construction staging and other temporary work areas located outside of</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>project footprints will be sited in areas that avoid adverse effects on the following:</i></p> <ul style="list-style-type: none"> <li>• <i>Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types.</i></li> <li>• <i>Occupied western burrowing owl burrows.</i></li> <li>• <i>Nest sites for covered bird species and all raptors, including noncovered raptors, during the breeding season.</i></li> </ul> <p><i>Project proponents will follow specific AMMs for sensitive natural communities (Section 4.3.3, Sensitive Natural Communities) and covered species (Section 4.3.4, Covered Species) in temporary staging and work areas. For establishment of temporary work areas outside of the project footprint, project proponents will conduct surveys to determine if any of the biological resources listed above are present. Within one year following removal of land cover, project proponents will restore temporary work and staging areas to a condition equal to or greater than the covered species habitat function of the affected habitat. Restoration of vegetation in temporary work and staging areas</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>will use clean, native seed mixes approved by the Conservancy that are free of noxious plant species seeds.</i></p> <p><i>SEIR 4.3-17(g) To ensure avoidance and minimization of impacts to the species covered by the Yolo HCP/NCCP, which could be impacted by the project, the project applicant shall obtain coverage under the Yolo HCP/NCCP for on-site, and as may be determined necessary by Yolo Habitat Conservancy, for off-site infrastructure work, for each phase of development. In addition to payment of any applicable HCP/NCCP fees, the applicant shall implement Yolo HCP/NCCP Avoidance and Minimization Measures identified in Mitigation Measures SEIR 4.3-3, SEIR 4.3-5, SEIR 4.3-6, SEIR 4.3-7, 4.6-2, 4.6-5, and SEIR 4.3-17(a) through SEIR 4.3-17(f).</i></p>		
<p><b>4.3-18 Cumulative loss of habitat for special-status species.</b></p>	<p>LCC</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i></p> <p><u>Modified Mitigation Measure(s)</u> <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u> <i>None required.</i></p>	<p>N/A</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
<b>4.4 Noise</b>				
<p><b>4.4-1</b> Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</p>	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  None applicable.</p> <p><u>Modified Mitigation Measure(s)</u>  4.5-3 <i>Compliance with the following measures shall be incorporated within the <del>Final Planned Development</del> construction documents prior to issuance of building permits with specific criteria and standards to be reviewed and approved by the <del>Planning Commission</del> City of Davis Community Development and Sustainability Department and Public Works Department:</i></p> <ul style="list-style-type: none"> <li>• <i>Construction activities shall be scheduled to occur during normal daytime working hours (i.e., 7:00 AM to 7:00 PM Monday through Friday and 8:00 AM to 8:00 PM Saturday and Sunday). These criteria shall be included in the Improvement Plans prior to initiation of construction. Exceptions to allow expanded construction activity hours shall be reviewed on a case-by-case basis as determined by the Community Development Director;</i></li> </ul>	SU	Yes

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<ul style="list-style-type: none"> <li>• <u>Nearby residences shall be notified of construction schedules as part of a Notification Program subject to review and approval by the City of Davis, so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels;</u></li> <li>• <u>All mobile or fixed noise-producing equipment used on the project site shall comply with applicable federal, State, or local agency regulations while in the course of project activity;</u></li> <li>• <u>Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible;</u></li> <li>• <u>All heavy construction equipment and all stationary noise sources (such as diesel generators) shall be fitted with factory-specified mufflers and be maintained in good working condition; and</u></li> <li>• <u>Equipment warm up areas, water tanks, material stockpiles, mobile equipment staging, parking, maintenance areas, and equipment storage areas shall be located in an area as far away from existing residences as feasible.</u></li> </ul>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<u>New Mitigation Measure(s)</u> <i>None required.</i>		
<b>4.4-2</b> Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	S	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>Mitigation Measure 4.5-4 from the 2009 EIR is not applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>SEIR 4.4-2 In conjunction with submittal of a site plan for the USA Pentathlon Training Facility, pool complex, and obstacle course, the project applicant shall submit an acoustical noise study, which shall document the predicted average (<math>L_{eq}</math>) and maximum (<math>L_{max}</math>) noise levels associated with the facilities' public address (PA) system at the nearest sensitive receptors to the pool complex and obstacle course. The acoustical noise study shall include recommendations for reducing noise levels projected to exceed the City's applicable noise standards set forth in Davis Municipal Code Article 24.02 and the Davis General Plan's day/night average noise-level threshold of 60 dBA <math>L_{dn}</math> within outdoor activity areas of residential land uses. Such</i>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>recommendations could include, but not necessarily be limited to, the following:</i></p> <ul style="list-style-type: none"> <li>• <i>Acoustic noise barriers;</i></li> <li>• <i>Monitoring of PA noise levels during national, world cup, and other organized swimming events to ensure such activities do not exceed standards contained in the City of Davis Noise Ordinance;</i></li> <li>• <i>Limitations on the hours during which the PA system may be used; and</i></li> <li>• <i>Disclosure statements provided to neighboring residences of the potential for elevated noise levels during organized events held at the pool complex.</i></li> </ul> <p><i>The acoustic noise study shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department prior to issuance of building permits.</i></p>		
<p><b>4.4-3 Exposure of persons to or generation of excessive groundborne</b></p>	<p>LS</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  <i>None applicable.</i></p>	<p>N/A</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
vibration or groundborne noise levels.		<u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.		
4.4-4 Generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future buildout of the City of Davis.	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.	N/A	No
<b>4.5 Public Services and Utilities</b>				
4.5-1 Result in substantial adverse physical impacts associated with the provision of	S	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> 4.9-4 Prior to the issuance of building permits, the applicant shall contribute funds to the Davis Fire Department for the provision of facilities needed to provide adequate fire protection service to the proposed project. These facilities may include	SU	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
<p>new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services.</p>		<p><i>but are not necessarily limited to a fourth City fire station and a ladder truck. The amount of funding shall be determined by the Community Development Director and the Davis Fire Chief.</i></p> <p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>None required.</i></p>		
<p>4.5-2 Result in substantial adverse physical impacts associated with the provision of new or</p>	<p>LS</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  <i>Mitigation Measure 4.9-5 from the 2009 EIR is not applicable.</i></p> <p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p>	<p>N/A</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services.		<u>New Mitigation Measure(s)</u> None required.		
4.5-3 Result in substantial adverse physical impacts associated with the provision of new or physically	S	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> 4.9-6 Prior to the issuance of building permits, the applicant shall show proof to the Community Development Department of payment of current	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for schools.		<p><u>Proposition 1A/SB50 and AB-16 school impacts fees.</u></p> <p><u>New Mitigation Measure(s)</u>                      None required.</p>		
4.5-4 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR 4.9-8</u>                      Prior to the issuance of building permits, the applicant shall pay in-lieu Quimby fees for required park acreage.</p> <p><u>Modified Mitigation Measure(s)</u>                      None required.</p> <p><u>New Mitigation Measure(s)</u>                      None required.</p>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Prior to Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance After Mitigation</b>	<b>New Significant or Substantially More Severe Significant Impact</b>
which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for parks, or other public facilities; or result in an increase in 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, or include				

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.				
4.5-5 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	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i></p> <p><u>Modified Mitigation Measure(s)</u> 4.9-3 <i><del>Prior to the approval of a tentative map</del> In conjunction with the submittal of improvement plans for the Wildhorse Ranch proposed project, the applicant shall submit a design-level wastewater report for the proposed project that demonstrates how the project's wastewater will be delivered to the Wastewater Treatment Plant. Included in the report shall be a determination of the capacity of downstream sewer lines and what improvements, if any, need to be constructed to accommodate and convey the</i></p>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
cause significant environmental effects.		<p><i>project's additional wastewater, and the construction and operational costs of the options. The wastewater report shall be subject to approval by the City Engineer. The applicant shall be required to fully fund and construct the necessary wastewater improvements determined by the wastewater report.</i></p> <p><u>New Mitigation Measure(s)</u> SEIR 4.5-5 <i>In conjunction with the submittal of improvement plans for the Palomino Place Project, the applicant shall submit a design-level water report for the proposed project that demonstrates how the project's water lines meet the City's applicable standards related to domestic water and fire flow demands, as well as how the proposed water lines will provide adequate water flows during each phase of development. The water report shall be subject to approval by the City Engineer. The applicant shall be required to fully fund and construct the necessary water improvements determined by the water report.</i></p>		
4.5-6 Have sufficient water supplies available to serve the project and reasonably	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>Mitigation Measure 4.9-2 from the 2009 EIR is not applicable.</i>	N/A	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
foreseeable future development during normal, dry, and multiple dry years.		<u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.		
4.5-7 Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.	N/A	No
4.5-8 Generate solid waste in excess of State or local standards, or in excess of the	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.	N/A	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste.		<u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.		
4.5-9 Cumulative impacts to public services.	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.	N/A	No
4.5-10 Increase in demand for utilities and service systems	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.	N/A	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
associated with the proposed project, in combination with future buildout of the Davis General Plan.		<p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>None required.</i></p>		
<b>4.6 Transportation</b>				
4.6-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system during construction activities.	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR 4.3-5</u>  <i>Prior to any on-site construction activities, the project applicant shall prepare a Construction Traffic Management Plan subject to the review and approval by the City Engineer. The Construction Traffic Management Plan shall include all measures for temporary traffic control, temporary signage and striping, location points for ingress and egress of construction vehicles, haul routes, staging areas, and shall provide for the timing of construction activity that appropriately limits hours during which large construction equipment may be brought onto or taken off of the site.</i></p> <p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>New Mitigation Measure(s)</u> <i>None required.</i></p>		
<p><b>4.6-2 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway, bicycle, and pedestrian facilities.</b></p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i></p> <p><u>Modified Mitigation Measure(s)</u> 4.3-3 <i>Prior to approval of the <del>Tentative Map improvement plans</del>, the project applicant shall ensure that the pathway and sidewalk network meets ADA accessibility requirements, subject to the review and approval by the City Engineer.</i></p> <p><u>New Mitigation Measure(s)</u> <i>SEIR 4.6-2(a) Prior to the commencement of operations at the aquatic complex or the commencement of operations at the USA Pentathlon Training Facility (whichever occurs first), the project applicant shall construct a contiguous bikeway facility with dedicated physical space for bicyclists between East Covell Boulevard and the project non-residential uses. Potential improvement options include the following:</i></p> <p>1) <i>Install Class II bike lanes on the new north leg of the East Covell Boulevard/Monarch Lane intersection; or</i></p>	<p>LS</p>	<p>N/A</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p>2) <i>Construct a Class I shared-use path between East Covell Boulevard and the project non-residential uses within the Wildhorse Urban Agriculture Transition Area along the easterly project site frontage.</i></p> <p><i>Implementation of these improvements, or a set of improvements of equal effectiveness as determined by the City of Davis City Engineer, would reduce the potential for conflicts involving bicyclists that could otherwise be caused by the project and promote bicycle travel to and from the project site.</i></p> <p><i>SEIR 4.6-2(b) Prior to occupancy of the residential units at the project site, the commencement of operations at the aquatic complex, or the commencement of operations at the USA Pentathlon Training Facility (whichever occurs first), the project applicant shall install a traffic signal at the East Covell Boulevard/Monarch Lane intersection. The purpose of the traffic signal is to provide temporal separation between bicyclists, pedestrians, and conflicting vehicular movements (e.g., through the provision of pedestrian crossing phases). As part of this mitigation measure, the applicant shall also</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>construct an eastbound left-turn pocket with a queue storage length of 105 feet and install designated bicycle and pedestrian facilities and crossings.</i></p> <p><i>The specific intersection geometrics, lane configurations, bicycle and pedestrian accommodations, and signal phasing are subject to review and approval by the City of Davis City Engineer.</i></p> <p><i>Note that this intersection would meet the four-hour vehicular volume signal warrant (CA MUTCD Warrant 2) and the peak hour signal warrant (CA MUTCD Warrant 3B) under Existing Plus Project conditions.<sup>5</sup></i></p> <p><i>Implementation of these improvements, or a set of improvements of equal effectiveness as determined by the City of Davis City Engineer, would reduce the potential for conflicts involving bicyclists or pedestrians that could otherwise be caused by the project and promote bicycle and pedestrian travel to and from the project site.</i></p>		
<p><b>4.6-3 Conflict with a program, plan, ordinance or policy</b></p>	<p>LS</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>  <i>None applicable.</i></p>	<p>N/A</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
addressing the circulation system, including transit.		<u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.		
4.6-4 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	S	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> SEIR 4.6-4 The project applicant shall implement the following TDM strategies to reduce the number of vehicle trips that would be generated by the project residential component, subject to review and approval by the City Engineer. The timing for each strategy is set forth below:  1) <b>Implement subsidized or discounted transit program (CAPCOA Handbook Strategy T-9)</b> – This measure would provide subsidized or discounted, or free transit passes for residents of the project’s 45 affordable housing dwelling units. Reducing the out-of-pocket cost for choosing transit improves the	SU	Yes

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>competitiveness of transit against driving, increasing the total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT.</i></p> <p><i>Prior to occupancy of the multi-family residential units, the project applicant shall provide free transit passes to residents of the project's 45 affordable housing dwelling units. According to CAPCOA, this strategy would reduce project-generated residential VMT per capita by 0.16 percent.</i></p> <p><b>2) Implement carshare program (CAPCOA Handbook Strategy T-21-A) – This measure would increase carshare access in the project site by deploying conventional carshare vehicles. Examples include programs like Zipcar and GIG Car Share. Carsharing offers people convenient access to a vehicle for personal or commuting purposes, which helps encourage transportation alternatives and reduces vehicle ownership, thereby avoiding VMT.</b></p> <p><i>Prior to occupancy of the first phase of the project residential component, the project applicant shall partner with a carshare</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>service provider and ensure that carshare vehicles are available to project residents. Proof of completion of this measure shall be provided to the City of Davis.</i></p> <p><i>According to CAPCOA, this strategy would have a maximum reduction potential of 0.15 percent of project VMT.</i></p> <p><b>3) Implement electric bikeshare program (CAPCOA Handbook Strategy T-22-B) –</b> <i>This measure would establish an electric bikeshare program. Electric bikeshare programs provide users with on-demand access to electric-pedal-assist bikes for short-term rentals. This encourages mode shift from vehicles to electric bicycles, displacing VMT and reducing GHG emissions.</i></p> <p><i>Prior to issuance of a building permit for the multi-family housing or USA Pentathlon Training Facility project components, whichever occurs first, the project applicant shall provide the City of Davis with evidence of an agreement with a bikeshare and scootershare system operator for the project. Currently, Spin provides bikeshare</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>and scootershare service to the entirety of the City of Davis and the UC Davis campus. Accordingly, the project site is presumed to be incorporated into the Spin service area.</i></p> <p><i>Prior to issuance of an occupancy permit for the multi-family housing or USA Pentathlon Training Facility project components, whichever occurs first, the applicant shall construct a hub for use by the bikeshare and scootershare system operator within the multi-family housing or USA Pentathlon Training Facility.</i></p> <p><i>According to CAPCOA, this strategy would reduce project-generated residential VMT per capita by 0.05 percent.</i></p> <p><b>4) Implement scootershare program (CAPCOA Handbook Strategy T-22-C) –</b> This measure would establish a scootershare program. Scootershare programs provide users with on-demand access to electric scooters for short-term rentals. This encourages a mode shift from vehicles to scooters, displacing VMT and thus reducing GHG emissions.</p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>Prior to issuance of a building permit for the multi-family housing or USA Pentathlon Training Facility project components, whichever occurs first, the project applicant shall provide the City of Davis with evidence of an agreement with a bikeshare and scootershare system operator for the project. Currently, Spin provides bikeshare and scootershare service to the entirety of the City of Davis and the UC Davis campus. Accordingly, the project site is presumed to be incorporated into the Spin service area.</i></p> <p><i>Prior to issuance of an occupancy permit for the multi-family housing or USA Pentathlon Training Facility project components, whichever occurs first, the applicant shall construct a hub for use by the bikeshare and scootershare system operator within the multi-family housing or USA Pentathlon Training Facility.</i></p> <p><i>According to CAPCOA, this strategy would reduce project-generated residential VMT per capita by 0.06 percent.</i></p> <p><b>5) Community-based travel planning (CAPCOA Handbook Strategy T-23) –</b></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>This measure would target residences in the project area with community-based travel planning (CBTP). CBTP is a residential-based approach to outreach that provides households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing household VMT.</i></p> <p><i>Prior to occupancy of the first phase of the project residential component, the project applicant shall partner with a CBTP service provider such as Yolo Commute and ensure that CBTP services are available to project residents, and renewed on an annual basis. As of early 2024, Yolo Commute annual membership dues for a housing development of 175 units are \$2,250 per year.</i></p> <p><i>According to CAPCOA, this strategy would have a maximum reduction potential of 2.3 percent of project VMT.</i></p>		
<p><b>4.6-5 Result in inadequate emergency access.</b></p>	<p>LS</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>                      Mitigation Measure 4.3-2 from the 2009 EIR is not applicable.</p>	<p>N/A</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.		
<b>4.6-6</b> Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.	N/A	No
<b>4.7 Other Effects</b>				
<b>4.7.2</b> Agriculture and Forestry Resources	S	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> None applicable.  <u>Modified Mitigation Measure(s)</u> 4.1-3 <i>The project applicant shall <u>comply with City of Davis Municipal Code Chapter 40A.03 (Farmland Preservation Ordinance) and shall set aside in perpetuity active agricultural acreage at a minimum ratio of 2:1 based on the total project</u></i>	SU	Yes

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p>4.1-4(a)</p> <p><i>footprint of 25.79 acres consistent with the ordinance, through granting a farmland conservation easement, a farmland deed restriction, or other farmland conservation mechanism to or for the benefit of the City and/or a qualifying entity approved by the City. The mitigation acreage shall be set aside prior to recordation of the final map(s). The location and amount of active agricultural acreage for the proposed project would be subject to the review and approval of the City Council.</i></p> <p><i>Consistent with Action AG 1.1(g) of the General Plan and the Davis Right-to-Farm Ordinance, the applicant/developer shall inform and provide recorded notice to prospective buyers within 1,000 feet of agricultural land in writing and prior to purchase, as prescribed by the City's Right to Farm Ordinance, about existing and on-going agricultural activities in the immediate area in the form of a <u>disclosure statement deed restriction to be recorded on the parcels</u>. The notifications shall disclose that Davis and Yolo County are agricultural areas and residents of the property may be subject to inconvenience or discomfort arising from the use of agricultural chemicals, and from pursuit of agricultural operations, including, but not limited to cultivation, irrigation,</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable





**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>plowing, spraying, aerial application, pruning, harvesting, crop protection, and agricultural burning which occasionally generate dust, smoke, noise, and odor. The language and format of <del>such notification</del> <u>the deed restriction</u> shall be reviewed and approved by the Community Development Director prior to recording final maps. Each <del>disclosure statement</del> <u>deed restriction</u> shall be acknowledged with the signature of each prospective property owner.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>None feasible.</i></p>		
4.7.3 Cultural Resources	S	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR V-1</u>  <i>Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, an archaeological monitor shall be retained by the applicant and approved by the City to train the construction grading crew prior to commencement of earth-grading activity in regard to the types of artifacts, rock, bone, or shell that they are likely to find, and when work shall be stopped for further evaluation. One trained crew member shall be on-site during all earth moving activities, with the assigned responsibility of “monitor.” If any earth-moving</i></p>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>activities uncover artifacts, exotic rock, or unusual amounts of bone or shell, work shall be halted in the immediate area of the find and shall not be resumed until after the archaeologist monitor has inspected and evaluated the deposit and determined the appropriate means of curation. The appropriate mitigation measures may include as little as recording the resource with the California Archaeological Inventory database or as much as excavation, recordation, and preservation of the sites that have outstanding cultural or historic significance.</i></p> <p>V-2</p> <p><i>Prior to the approval of tentative map(s), the tentative map(s) shall state that during construction, if bone is uncovered that may be human; the Native American Heritage Commission in Sacramento and the Yolo County Coroner shall be notified. Should human remains be found, the Coroner's office shall be immediately contacted and all work halted until final disposition by the Coroner. Should the remains be determined to be of Native American descent, the Native American Heritage Commission shall be consulted to determine the appropriate disposition of such remains.</i></p>		

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



<b>Table 2-1 Summary of Impacts and Mitigation Measures</b>				
<b>Impact</b>	<b>Level of Significance Prior to Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance After Mitigation</b>	<b>New Significant or Substantially More Severe Significant Impact</b>
		<u>Modified Mitigation Measure(s)</u> None required.  <u>New Mitigation Measure(s)</u> None required.		
<b>4.7.4 Geology and Soils</b>	S	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> VI-1 <i>Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, the developer shall prepare a storm water pollution prevention plan (SWPPP), consistent with the State Water Resources Control Board NPDES requirements. A of the SWPPP shall be submitted to the City Engineer subject to review and comment.</i>  <u>Modified Mitigation Measure(s)</u> VI-2 <i>Prior to the approval of final map(s), a final design-level geotechnical report, with consideration of recommendations from the <del>Wildhorse</del> Geotechnical <u>Update Investigation</u>, shall be prepared and submitted to the Chief Building Official for review and comment. The recommendations of the final geotechnical report shall be incorporated into the project design prior to issuance of building permits for</i>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><i>review and approval of the City Engineer and/or Chief Building Official.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>None required.</i></p>		
<p><b>4.7.5 Hazards and Hazardous Materials</b></p>	<p>S</p>	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR VII-1</u>  <i>Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, the on-site septic systems and agricultural well(s) shall be located and properly destroyed by a licensed contractor in compliance with Yolo County Environmental Health Department standards. Confirmation of the destruction of such facilities shall be submitted to the City Engineer.</i></p> <p><u>Modified Mitigation Measure(s)</u>  <i>None required.</i></p> <p><u>New Mitigation Measure(s)</u>  <i>SEIR 4.7-1 Prior to initiation of ground-disturbing activities, all on-site treated wood waste shall be removed and disposed of in compliance with Health and Safety Code Section 25230. Compliance with the forgoing standard includes, but is not limited to, clearly labeling all treated wood waste,</i></p>	<p>LS</p>	<p>No</p>

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<i>accumulating treated wood waste in a manner that is protected from run-on and runoff and is placed on a surface sufficiently impervious to prevent contact with soil and water, and transferring treated wood waste to only a treated wood waste facility or a treated wood waste approved landfill. Proof of compliance shall be submitted for review and approval by the City Engineer.</i>		
4.7.6 Hydrology and Water Quality	S	<u>Applicable Mitigation Measure(s) from the 2009 EIR 4.8-3</u> <i>Prior to commencement of construction, the applicant shall obtain a NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit), which pertains to pollution from grading and project construction. Compliance with the Permit requires the project applicant to file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) and prepare a Storm Water Pollution Prevention Plan (SWPPP) prior to ground disturbance. The SWPPP would incorporate Best Management Practices (BMPs) in order to prevent, or reduce to the greatest extent feasible, adverse impacts to water quality from erosion and sedimentation. A copy of the SWPP including BMP implementation provisions shall be submitted to the Chief Building Official.</i>	LS	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<p><u>Modified Mitigation Measure(s)</u>                      4.8-2 <i>In conjunction with the submittal of a <del>tentative map</del> <u>map-improvement plans</u>, the project applicant shall submit a design-level engineering report on the stormwater detention and conveyance system to the City Engineer demonstrating that the proposed project peak flows into the existing 36-inch storm drain would not exceed 6.2 cfs. The report shall also demonstrate that peak flows from the site do not coincide with peak flows within Channel "A" and demonstrate how the system would function to adequately treat stormwater runoff prior to being discharged into Channel "A." Stormwater detention and conveyance plans shall be reviewed and approved by the City Engineer.</i></p> <p><u>New Mitigation Measure(s)</u>                      None required.</p>		
4.7.7 Land Use and Planning	SU	<p><u>Applicable Mitigation Measure(s) from the 2009 EIR</u>                      None applicable.</p> <p><u>Modified Mitigation Measure(s)</u>                      None required.</p>	SU	Yes

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation	New Significant or Substantially More Severe Significant Impact
		<u>New Mitigation Measure(s)</u> <i>None feasible.</i>		
4.7.8 Mineral Resources	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>	N/A	No
4.7.9 Noise	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>	N/A	No
4.7.10 Population and Housing	LS	<u>Applicable Mitigation Measure(s) from the 2009 EIR</u> <i>None applicable.</i>  <u>Modified Mitigation Measure(s)</u> <i>None required.</i>  <u>New Mitigation Measure(s)</u> <i>None required.</i>	N/A	No

N/A = Not Applicable; LS = Less Than Significant; LCC = Less Than Cumulatively Considerable; S = Significant; CC = Cumulatively Considerable; SU = Significant and Unavoidable



---

---

## **3. PROJECT DESCRIPTION**

---

---



## 3. PROJECT DESCRIPTION

### 3.1 INTRODUCTION AND BACKGROUND

The Project Description chapter of this Subsequent Environmental Impact Report (SEIR) provides a comprehensive description of the Palomino Place Project in accordance with CEQA Guidelines Section 15124. A detailed description of the project location, project setting and surrounding uses, project objectives, project components, and required project approvals is presented in this chapter. A discussion on the project background and SEIR process and scope is provided below.

#### **Project Background**

A former project, known as the Wildhorse Ranch Project, was proposed on the 25.8-acre project site in 2009. In July 2009, the Davis City Council certified the Wildhorse Ranch Project EIR (2009 EIR) (State Clearinghouse [SCH] No. 2007072020) and approved the Wildhorse Ranch Project. The 2009 EIR analyzed development of the current project site with up to 191 residential units, comprised of 73 detached single-family residences and 78 two- and three-story single-family townhomes on 11.95 acres, as well as 40 attached affordable housing units on 1.92 acres. Additionally, the Wildhorse Ranch Project included new internal roadways, installation of a traffic signal at the East Covell Boulevard/Monarch Lane intersection, new bicycle and pedestrian facilities, associated utility improvements, open space, and landscaping. The Wildhorse Ranch Project required the following discretionary approvals by the City of Davis:

- Certification of the EIR;
- Approval of a General Plan Amendment to change the project site's land use designation from Agriculture to Residential Low Density, Residential Medium Density, Residential High Density, Neighborhood Greenbelt, Natural Habitat Area, and Urban Agricultural Transition Area; and
- A Rezone to change the zoning from Planned Development (PD) 3-89 (Horse Ranch) to a new PD (residential).

Following certification of the 2009 EIR and approval of the project by the Davis City Council, the Wildhorse Ranch Project required approval by Davis residents before the project could proceed (Measure P); however, the Wildhorse Ranch Project ultimately failed to gain the requisite percentage of votes on the ballot, and thus, could not be constructed.

As discussed further below, the currently proposed Palomino Place Project would consist of the development of up to 175 new residential units, in addition to retention of the existing ranch house. Compared to the residential portion of the former Wildhorse Ranch Project, the currently proposed project would result in a net reduction of 16 residential units. As discussed further below, unlike the original project proposal, the currently proposed project would include a 1.4-acre site for the future construction of a USA Pentathlon Training Facility and a pool complex. In addition, the former Wildhorse Ranch Project included dedication of 2.26 acres of additional agricultural buffer dedication (for a total width of 200 feet), 1.61 acres of interior greenbelt, and 4.44 acres of interior open space, whereas the proposed project would include approximately 3.22 acres of interior open space and trails.



### **Subsequent EIR Baseline**

As discussed further in the Introduction chapter of this SEIR, the CEQA Guidelines (Section 15162) provide guidance on the process of determining if an SEIR is required for a discretionary project proposal for which the lead agency has previously certified an EIR or adopted a Negative Declaration. Key to this process is determining whether, since the certification of the EIR or adoption of the Negative Declaration, changes in the approved project or circumstances under which the approved project would be undertaken have occurred to such an extent that the proposal may result in a new significant impact (not previously identified in the certified EIR or adopted Negative Declaration) or substantial increase in the severity of a previously identified significant impact. If so, the lead agency would be required to prepare an SEIR. The City of Davis has determined that the proposed project could result in new significant impacts not previously identified in the 2009 EIR for the Wildhorse Ranch project. Thus, the City has prepared this SEIR.

In cases where an approved project has already undergone environmental review, and the environmental document has been certified by the lead agency, the lead agency can restrict its review to the incremental effects of the modified project, rather than having to reconsider the overall impacts of the project. In other words, if the project under review constitutes a modification of a previously approved project previously subjected to environmental review, then the “baseline” for purposes of CEQA is adjusted such that the originally approved project is assumed to exist.<sup>1</sup> Thus, the environmental baseline for this analysis consists of the approved Wildhorse Ranch Project.

Although the Wildhorse Ranch Project Measure P vote was not passed by Davis voters, the 2009 EIR was certified by the Davis City Council and the findings remain valid. Thus, the discussions and analyses contained therein may still be relied upon as the basis of the environmental baseline in this SEIR.

## **3.2 PROJECT LOCATION**

The approximately 25.8-acre project site is located on an existing property known as the Wildhorse Ranch and/or Duffel Horse Ranch to the north of the East Covell Boulevard/Monarch Lane intersection in the City of Davis, California (see Figure 3-1 and Figure 3-2). The project site is identified by Assessor’s Parcel Number (APN) 071-140-011. The City of Davis General Plan designates the site as Agriculture and the site is zoned PD 3-89.

## **3.3 PROJECT SETTING AND SURROUNDING LAND USES**

The majority of the project site is undeveloped and consists of ruderal grasses that were previously used as pasture/grazing land; although, it should be noted that agricultural activity does not currently occur on-site. Within the central portion of the project site, the site includes a ranch home, two duplexes, a horse barn, and an equestrian training facility that is not currently in use. A paved driveway extends into the site from East Covell Boulevard and bisects the majority of the site in a north-to-south direction. Trees are located adjacent to the driveway, on-site structures, and project site boundaries.

---

<sup>1</sup> See Michael H. Remy et al. *Guide to CEQA, 11th Edition*. Point Arena: Solano Press Books (2007), pg. 207; Stephen L. Kostka and Michael H. Zischke. *Practice Under the Environmental Quality Act, Second Edition* (Vol. 1). Oakland: Continuing Education of the Bar (2018), pgs. 12-32; *Benton v. Board of Supervisors* (1st Dist. 1991) 226 Cal. App. 3d 1467.





**Figure 3-1**  
**Regional Vicinity Map**





**Figure 3-2  
Project Site Boundaries**



The site is bounded to the south by East Covell Boulevard and to the east by the 135-foot-wide Wildhorse Agricultural Buffer. A grade-separated crossing that allows bicyclists and pedestrians to cross under East Covell Boulevard is located to the southeast of the project site. In addition, it should be noted that at least nine existing bus stops are located less than 0.25-mile from the project site along East Covell Boulevard, Monarch Lane, Temple Drive, and Alhambra Drive. The transit stops are served by Unitrans (Lines L, P, and Q) and Yolobus (Routes 42 and 43).

Surrounding existing uses include single-family residences associated with the Wildhorse neighborhood to the north and west; single-family residences associated with the Slide Hill Park neighborhood to the south, across East Covell Boulevard; and agricultural land to the east, across the Wildhorse Agricultural Buffer that abuts the eastern site boundary.

### **3.4 PROJECT OBJECTIVES**

---

The following project objectives have been developed by the project applicant:

1. Construct a housing development project within the City of Davis that includes a broad mix of housing types and levels of affordability.
2. Subdivide an underutilized 25-acre infill parcel, putting the property to a higher and better use to help address the housing crisis.
3. Provide new for-sale housing opportunities without the need to expand into City-adjacent agriculture.
4. Increase housing opportunities in Davis for low- and middle-income households.
5. Include at least 20 percent of units as affordable.
6. Help address climate change by increasing opportunities for those currently commuting to and from Davis to reduce travel by living in town in housing that is all-electric and includes solar generation on every residence.
7. Support the Davis Joint Unified School District (DJUSD) by offering a first-time homebuyer program designed to attract young families and put Davis residents into the schools.
8. Provide a location for the construction of a new pentathlon training facility that includes a pool to also be used by local community swim organizations.
9. Create a neighborhood that respects its surroundings and is compatible with the scale of the adjacent community.
10. Construct housing and public amenities at a location where valuable infrastructure already exists including, but not limited to, a roadway intersection, off-grade pedestrian crossing, nearby parks, and an abutting agricultural buffer/greenbelt system.

### **3.5 PROJECT COMPONENTS**

---

The proposed project would include demolition of the two on-site duplex buildings and barn, followed by development of a residential community, comprised of up to 175 units, including new cottages, half-plex townhomes, single-family residences (medium and large), and multi-family apartments. With respect to the existing ranch home, the residence would be retained as a single-family residence and renovated. In addition, the proposed project would include land anticipated to be developed with recreational uses, such as a USA Pentathlon Training Facility and pool complex. The project would also consist of new on-site roadways; associated utility improvements; and open space, landscaping, and trails.





The proposed project would require discretionary approvals, including a Vesting Tentative Subdivision Map, Site Plan and Architectural Review, and an Affordable Housing Plan.<sup>2</sup> The aforementioned project components are discussed further below.

### **Vesting Tentative Subdivision Map**

The proposed project would include a Vesting Tentative Subdivision Map to subdivide the project site and develop up to 175 new residential units, comprised of cottages, half-plex units, single-family residences (medium and large), and multi-family residential apartments (see Figure 3-3). In addition, subdivision of the project site would include land anticipated to be developed with a new USA Pentathlon Training Facility and pool complex; new internal roadways; associated utility improvements; and open space, landscaping, and trails. The foregoing components of the Vesting Tentative Subdivision Map are discussed further below.

### **Residences**

The proposed project would consist of up to 175 new residential units, including cottages, half-plex townhomes, single-family residences (medium and large), and multi-family apartments, which are summarized in Table 3-1.

Unit Type	Number of Units	Percentage of Total Units	Anticipated Unit Size (Square Feet)
Cottages	19	10.9%	1,000
Half-Plex Townhomes	29	16.6%	1,250 – 1,450
Single-Family Residences – Medium	31	17.7%	1,600 – 2,000
Single-Family Residences – Large	51	29.1%	1,900 – 2,500
Multi-Family Apartments	45*	25.7%	Studio, 1 BR, and 2 BR
<b>Total</b>	<b>175*</b>	<b>100%</b>	<b>850 – 2500 +/-</b>
* The number of multi-family units could be up to 45 units at the City Council's discretion. For purposes of this SEIR, the project will be analyzed as such.			

It should be noted that the proposed residences would be constructed in accordance with the City's Energy Efficiency Reach Code (Davis Municipal Code Section 8.01.100). In addition, the proposed residential units would not include the use of natural gas. The new residences would also include photovoltaic (PV) systems to provide for on-site solar-energy generation. As previously discussed, the existing on-site ranch home would be retained and renovated. The aforementioned residential uses proposed as part of the project are discussed further below.

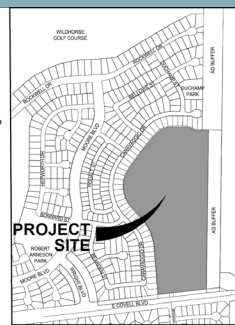
<sup>2</sup> The original 2009 Wildhorse Ranch Project required a General Plan Amendment to redesignate the project site from Agriculture to Residential High Density, Residential Medium Density, Neighborhood Greenbelt, Natural Habitat Area, and Urban Agricultural Transition Area. In addition, the 2009 Wildhorse Ranch Project required a Rezone to change the site's zoning from PD 3-89 to a new PD. The currently proposed Palomino Place Project invokes the "Builder's Remedy," which is based on a provision of California's Housing Accountability Act that prevents jurisdictions without a substantially compliant housing element from denying an eligible housing project on the basis that the project does not comply with the jurisdiction's general plan or zoning ordinance. With respect to the proposed project, the City and project applicant entered into a settlement agreement that provides, among other things, that the City will process the project application as a Builder's Remedy project and without requiring the applicant to submit for legislative entitlements, including a General Plan Amendment and Rezone. Therefore, for purposes of this SEIR, the Palomino Place Project does not require a General Plan Amendment or Rezone. As voter approval of projects under Measure D is triggered by a General Plan Amendment, the proposed project would also not require a public vote in order to be developed.



**Figure 3-3**  
**Vesting Tentative Subdivision Map**

**PALOMINO PLACE**  
**VESTING TENTATIVE SUBDIVISION MAP NO. 5238**

PARCEL 2, PARCEL MAP NO. 4341, 12 PM 60  
 CITY OF DAVIS COUNTY OF YOLO CALIFORNIA  
**CUNNINGHAM ENGINEERING**  
 MAY 2024



**VICINITY MAP**  
 NTS

**OWNER:**  
 BINNING RANCH HOLDING COMPANY, LLC  
 2514 CHINATOWN ALLEY  
 SACRAMENTO, CALIFORNIA 95616

**DEVELOPER:**  
 TAORMINO & ASSOCIATES, INC.  
 429 F STREET, SUITE 5  
 DAVIS, CALIFORNIA 95616  
 (530) 231-5519

**CIVIL ENGINEER:**  
 CUNNINGHAM ENGINEERING  
 2940 SPAFFORD STREET, SUITE 200  
 DAVIS, CALIFORNIA 95618  
 (530) 756-2026

**ASSESSORS PARCEL NUMBER:**  
 071-140-011

**AREA:**  
 25.8± ACRES

**EXISTING ZONING:**  
 PD 03-89

**FLOOD ZONE**  
 08113C0604G - ZONE X, JUNE 18, 2010

**PROPERTY DESCRIPTION**

PARCEL 2 IN PARCEL MAP NO. 4341, ENTITLED  
 "PALOMINO PLACE", FILED IN BOOK 12 OF PARCEL  
 MAPS AT PAGE 60, YOLO COUNTY RECORDS, YOLO  
 COUNTY, CALIFORNIA.

**NOTES:**

- THIS MAP WAS PREPARED UNDER THE DIRECTION OF CHARLES W. CUNNINGHAM, RCE 30339.
- ALL INFORMATION ON THIS MAP IS DEEMED TO BE OF A PRELIMINARY NATURE AND IS NOT TO BE RELIED ON FOR SURVEY OR PROPERTY LINE INFORMATION.
- THE EXISTING TOPOGRAPHY (SHOWN SCREENED) IS BASED ON AN AERIAL SURVEY PERFORMED BY WORTON & PITALO, INC., DATED MAY 2005. CONTOUR INTERVAL = 1 FOOT.
- ALL INFORMATION ON THIS MAP IS DEEMED TO BE OF A PRELIMINARY NATURE AND IS NOT TO BE RELIED ON FOR SURVEY OR PROPERTY LINE INFORMATION.
- BENCHMARK: CITY BENCHMARK #32, EL=42.37'. FOUND BUTON HEAD MONUMENT IN MONUMENT WELL AT CENTERLINE OF BIRCH STREET APPROXIMATELY 12' NORTH OF CENTERLINE OF DENISON DRIVE TO THE EAST.
- STREET ADDRESS: 3003 EAST COVELL BLVD, DAVIS, CA 95618.
- ANY STREET NAMES SHOWN ON THIS MAP ARE FOR PLANNING PURPOSES ONLY. FINAL STREET NAMES TO BE APPROVED BY THE CITY OF DAVIS.
- OWNER INTENDS TO HAVE A RECIPROCAL EASEMENT PREPARED AND RECORDED CONCURRENTLY WITH FINAL MAP TO ADDRESS ACCESS, PARKING, DRAINAGE AND MAINTENANCE OF SAME.
- THIS TENTATIVE MAP CONFORMS WITH ALL REQUIREMENTS OF THE STATE OF CALIFORNIA SUBDIVISION MAP ACT.
- THIS TENTATIVE MAP CONFORMS WITH ALL THE REQUIREMENTS OF THE CITY OF DAVIS SUBDIVISION ORDINANCE.
- NO SIGNIFICANT EROSION IS ANTICIPATED. APPROPRIATE EROSION CONTROL MEASURES ARE TO BE EMPLOYED DURING CONSTRUCTION.
- OWNER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS.
- DEVELOPMENT SHALL INCLUDE APPROPRIATE AIR QUALITY MEASURES ACCEPTABLE TO THE YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT.
- LOTS A, B, & C WILL BE PRIVATELY MAINTAINED.
- LOTS D, E, F, & G WILL BE PUBLICLY MAINTAINED AND DEDICATED TO THE CITY OF DAVIS.

**SHEET INDEX**

- C01 TITLE SHEET
- C02 CONCEPTUAL LAYOUT
- C03 CROSS-SECTIONS
- C04 GRADING & DRAINAGE PLAN
- C05 UTILITIES PLAN

**LEGEND:**

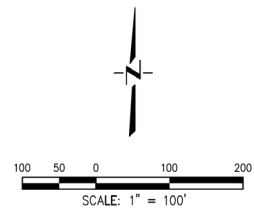
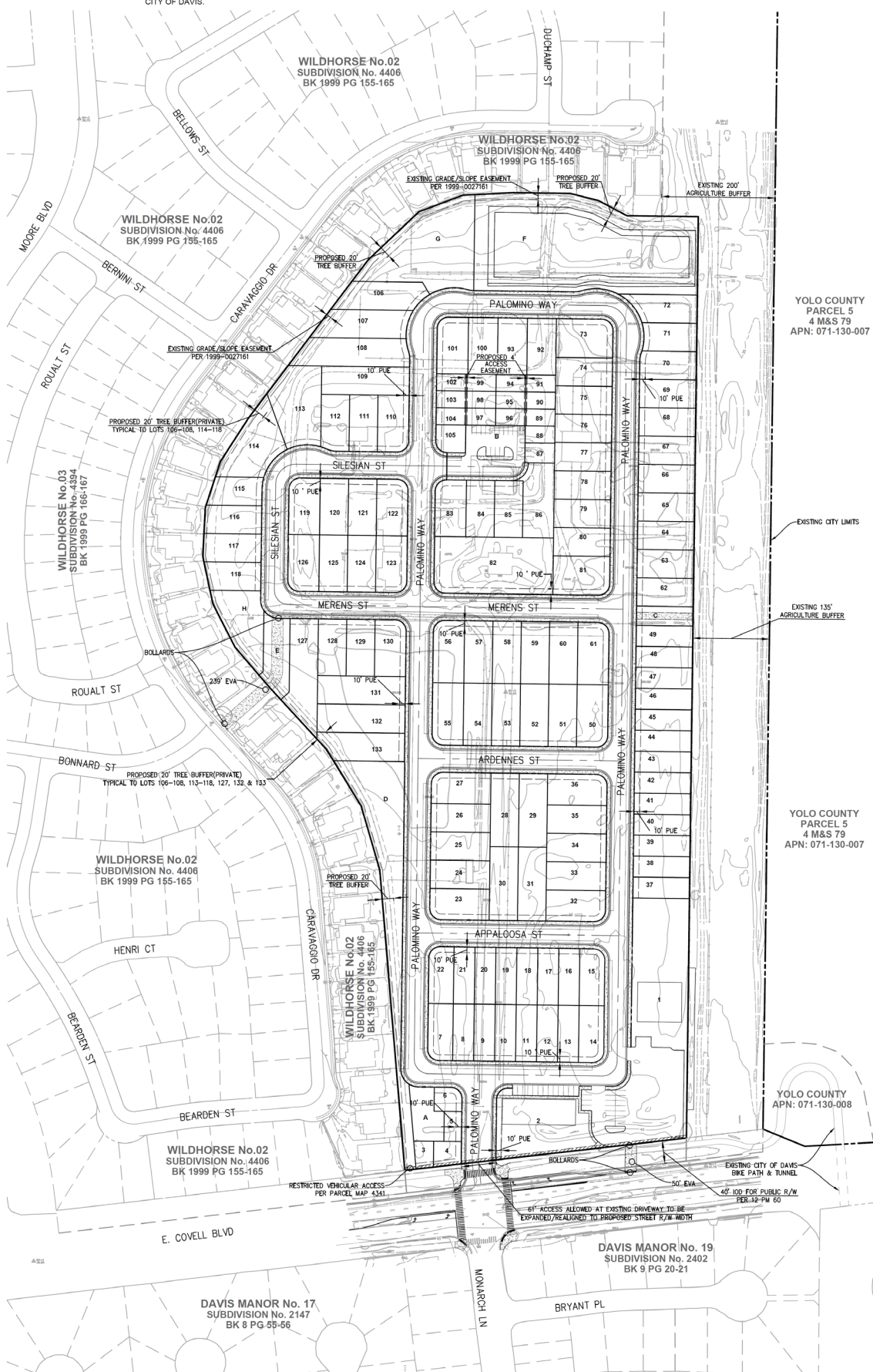
- EXISTING CURB AND GUTTER
- EXISTING SANITARY SEWER W/ MANHOLE
- EXISTING STORM DRAIN W/ MANHOLE
- EXISTING STORM DRAIN INLET
- EXISTING WATER LINE
- PROPOSED SANITARY SEWER W/ MANHOLE
- PROPOSED STORM DRAIN W/ MANHOLE
- PROPOSED WATER LINE
- PROPOSED DRAIN INLET
- EXISTING PROPERTY LINE
- EXISTING EASEMENT LINE
- SUBDIVISION BOUNDARY
- PROPOSED RIGHT-OF-WAY LINE
- PROPOSED LOT LINE
- PROPOSED CENTERLINE
- PROPOSED EASEMENT LINE
- PROPOSED RELINQUISHMENT OF DIRECT VEHICULAR ACCESS
- PROPOSED CURB AND GUTTER
- PROPOSED SIDEWALK
- PROPOSED RIDGE
- DRAINAGE FLOW DIRECTION ARROW
- LOT NUMBER
- PROPOSED STREET GRADE AND DIRECTION
- EXISTING SPOT ELEVATION
- PROPOSED ELEVATION

**ABBREVIATIONS:**

- BLVD ... BOULEVARD
- BW ... BOTTOM OF WALL
- CL ... CENTERLINE
- CH ... CHORD
- DI ... DRAIN INLET
- D ... STORM DRAIN LINE
- E ... EAST
- ELEC. ... ELECTRIC
- EP ... EDGE OF PAVEMENT
- ESMT ... EASEMENT
- FL ... FLOWLINE
- GR ... GRATE
- HP ... HIGH POINT
- INV ... INVERT
- L ... LENGTH
- LP ... LOW POINT
- MAX ... MAXIMUM
- MH ... MAINTENANCE HOLE
- MIN ... MINIMUM
- N ... NORTH
- NTS ... NOT TO SCALE
- OH ... OVERHEAD ELECTRIC
- PL ... PROPERTY LINE
- PP ... POWER POLE
- PUE ... PUBLIC UTILITY EASEMENT
- R ... CURVE RADIUS, RIDGELINE
- S ... SOUTH
- SD ... STORM DRAINAGE
- SS ... SANITARY SEWER
- STD ... STANDARD
- TBD ... TO BE DETERMINED
- TG ... TOP OF GRATE
- TW ... TOP OF WALL
- TYP ... TYPICAL
- W ... WEST, WATER
- WV ... WATER VALVE

**SERVICE PROVIDERS:**

- GAS  
 PACIFIC GAS AND ELECTRIC (PG&E)  
 (800) 743-5000
- ELECTRICITY  
 PACIFIC GAS AND ELECTRIC (PG&E)  
 (800) 743-5000
- CABLE TELEVISION  
 COMCAST  
 (800) 824-2000
- WATER  
 CITY OF DAVIS PUBLIC WORKS DEPT  
 (530) 757-5686
- SEWAGE  
 CITY OF DAVIS PUBLIC WORKS DEPT  
 (530) 757-5686
- STORM DRAIN  
 CITY OF DAVIS PUBLIC WORKS DEPT  
 (530) 757-5686
- TELEPHONE  
 AT&T  
 (800) 222-0300
- FIRE DEPARTMENT  
 CITY OF DAVIS FIRE DEPT  
 (530) 757-5684
- U.S.A.  
 (800) 227-2600
- GARBAGE & RECYCLING  
 DAVIS WASTE REMOVAL  
 (530) 756-4646



APPROVED BY: \_\_\_\_\_ DATE \_\_\_\_\_  
 CITY OF DAVIS COMMUNITY DEVELOPMENT DEPARTMENT

DESIGNED BY: DR  
 DRAWN BY: DR  
 CHECKED BY: BF  
 SCALE  
 AS SHOWN

**VESTING TENTATIVE SUBDIVISION MAP NO. 5238**  
**PALOMINO PLACE**  
**TITLE SHEET**  
 CITY OF DAVIS CALIFORNIA



CEWEST.COM  
 Project Planning • Civil Engineering • Landscape Architecture  
 Davis Office: 2940 Spafford Street, Suite 200, Davis, CA 95618, (530) 756-2026  
 Sacramento Office: 2120 20th Street, Suite Three, Sacramento, CA 95818, (916) 455-2026

NO.	DATE	REVISIONS	BY	APPD.

SHEET  
**C01**  
 OF  
**6**  
 DATE: 05/28/2024  
 PROJECT NO: 1807.10

### Cottages and Half-Plex Townhomes

The proposed project would include 19 cottage units, which would be located in the north-central and southwestern portions of the project site and would be approximately 1,000 square feet (sf). The cottage units would be targeted towards first-time homebuyers and accompanied by a first-time homebuyer program to ensure that the units are available to Davis workers who currently commute to the City for work and volunteering.

In addition, the proposed project would include 29 half-plex townhomes, which would be located in the southern portion of the project site, as well as adjacent to the agricultural buffer, and range in size from 1,250 sf to 1,450 sf. The half-plex townhomes would feature either two or three bedrooms. The townhomes would be targeted towards young families with elementary-age school children.

### Single-Family Residences, Medium and Large

The proposed project would include 82 single-family residences, which would include 31 medium-sized and 51 large floor plans and configurations. A portion of the proposed medium-sized single-family residences would be constructed adjacent to the existing agricultural buffer, with the remaining medium-sized units scattered throughout the central and western portions of the project site, adjacent to the large single-family residences. The medium-sized single-family residences would range in size from 1,600 sf to 2,000 sf. The large single-family residences would primarily be constructed in the central and western portions of the site and range in size from 1,900 sf to 2,500 sf.

As shown in Figure 3-3, the single-family residences proposed along the western site boundary would be single-story homes. The single-family residences would be consistent with the size of the existing homes located in the adjacent neighborhoods of Wildhorse and Slide Hill Park. In addition, several of the lots may accommodate the construction of Accessory Dwelling Units (ADUs) which are permitted by right under State law.

### Multi-Family Residential Apartments

The proposed project would include a three- to four-story multi-family apartment building, containing up to 45 units, on a 0.72-acre portion of the project site located adjacent to the north of East Covell Boulevard, and immediately east of the new Palomino Way (the new northern leg of the East Covell Boulevard/Monarch Lane intersection, which is discussed further below). The proposed multi-family residences would include a mix of studio, one-bedroom, and two-bedroom units.

The apartments would be deed-restricted and required to be rented at rates affordable to low-income households. As established by Davis Municipal Code Section 18.05.020, low-income households are those earning a maximum gross income of 80 percent of the area median income (AMI) of Yolo County. It should be noted the application submittal for the proposed project included 33 multi-family units; however, an additional 12 units are being analyzed as part of the proposed project in order to provide flexibility for an affordable housing developer to include more units if that is desired by the City and improves the economic feasibility of the affordable housing project component.





### Renovation of Existing Ranch Home

The proposed project would retain the existing on-site ranch home, which is located in the central portion of the project site. As part of the proposed project, the existing ranch home would be renovated. The ranch home would continue to operate as a single-family residence.

### **USA Pentathlon Training Facility and Pool Complex**

Within the southeast portion of the project site, immediately east of the southerly half-plex townhomes, the proposed project would include a 1.4-acre site to accommodate future potential development (i.e., not a component of the proposed project) of recreational facilities that would be available to local sports organizations and the general public. The recreational facilities are planned to include a two-story, 11,050-sf USA Pentathlon Training Facility, pool complex, and obstacle course, but could accommodate other active or passive recreational facilities and uses.

The USA Pentathlon Training Facility is expected to include Olympic-quality practice spaces for all pentathlon events (fencing, laser pistol shooting, swimming, running, and obstacle course), training and workout facilities, and locker rooms. Currently, training for the foregoing pentathlon events occurs in two to three separate locations within the City; however, the proposed USA Pentathlon Training Facility would serve to aggregate the training equipment and facilities in a single location. With the exception of swimming and obstacle course training, all other practice events associated with the pentathlon events would be conducted indoors. The facility would occasionally host larger tournaments with participants from outside the City; but regular weekly operations would be anticipated to accommodate 150 athletes on a typical weekday, as well as eight coaches.

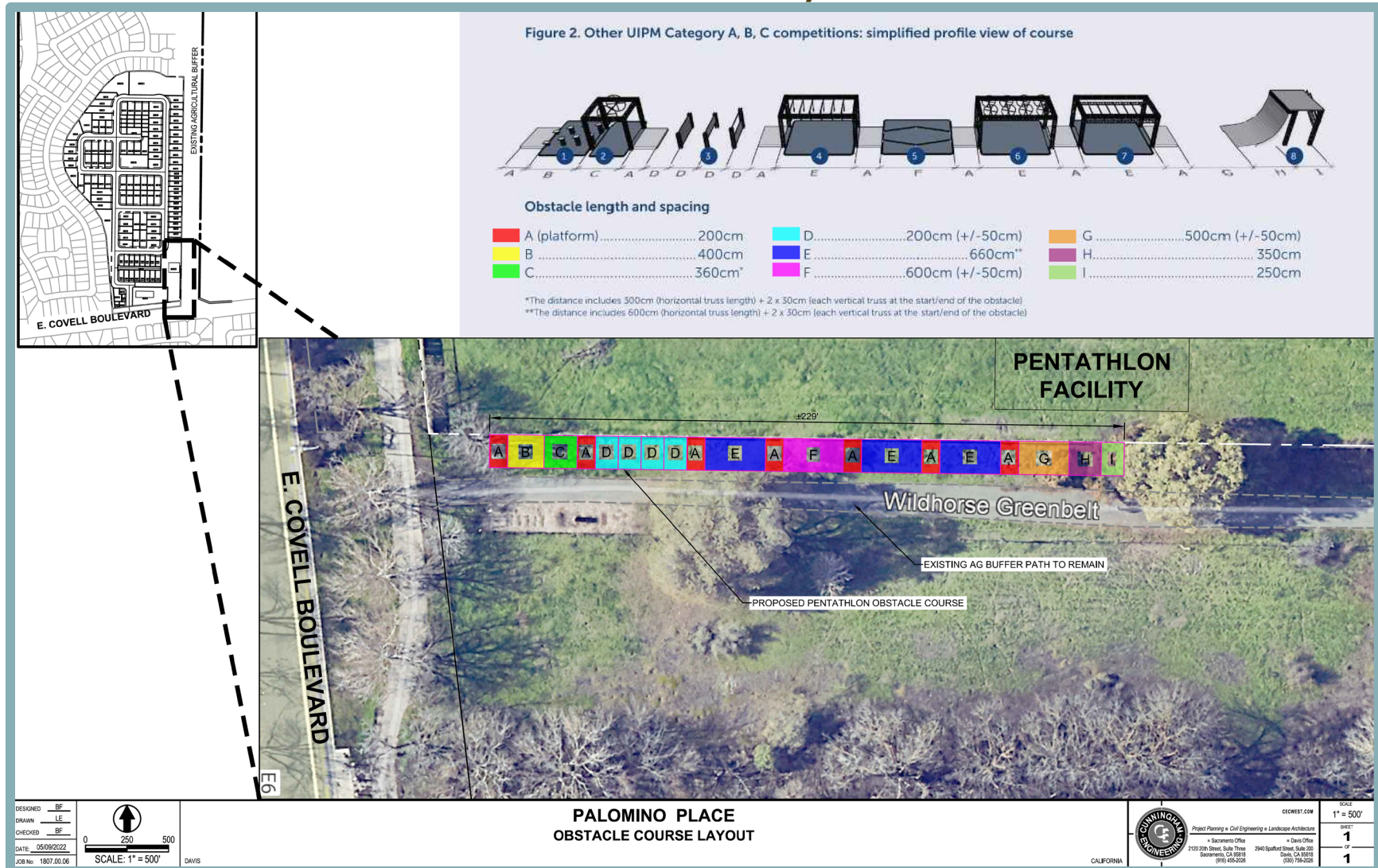
With respect to the proposed pool complex, the project applicant would donate property for a 15-yard by 25-yard training pool that would be located adjacent to the north of the USA Pentathlon Training Facility. The center of the pool complex would be set back approximately 400 feet from the nearest existing residences to the south of East Covell Boulevard and approximately 500 feet from the nearest existing residences to the west of the project site. The pool complex would be available to pentathletes, as well as local swim organizations, and would include privately operated community programming for all ages, including youth groups, senior-focused groups, and recreational and competitive swimming programs.

With respect to the proposed obstacle course, this feature is related to the USA Pentathlon Training Facility, but is proposed in the adjacent Wildhorse Agricultural Buffer. In general, the course would consist of a series of structures for the obstacle training. The total area needed for the course could be accommodated by the 35-foot-wide portion of the buffer open to public access. The Wildhorse Agricultural Buffer would still be available for public use and trail access, and the obstacle course would not affect the current alignment of the existing trail within the buffer (see Figure 3-4). Use of the obstacle course equipment is anticipated to be limited to the hours of 7:00 AM to 9:00 PM.

The proposed USA Pentathlon Training Facility, pool complex, and obstacle course would be sited immediately north of East Covell Boulevard to facilitate public access by locating the facility in close proximity to the grade-separated crossing of East Covell Boulevard near the southeast corner of the project site and the Wildhorse Agricultural Buffer. The recreational facilities have also been sited in the southern portion of the project site to minimize vehicle trips into the proposed residential areas of the project site.



**Figure 3-4  
 Obstacle Course Layout**



With respect to energy use, the USA Pentathlon Training Facility and pool complex would include a PV system on the training facility and/or in the associated surface parking lot.

### **Access, Circulation, and Parking**

Primary site access would be provided from East Covell Boulevard. From the terminus of Monarch Lane at East Covell Boulevard, the project site's existing private driveway would be redeveloped as Palomino Way, the new northern leg of the East Covell Boulevard/Monarch Lane intersection, which would feature a 61-foot-wide right-of-way (ROW), comprised of two 10-foot-wide travel lanes, a 10-foot-wide left-turn lane to accommodate traffic exiting onto East Covell Boulevard, two seven-foot-wide bike lanes, attached curbs and gutters, and two six-foot-wide sidewalks (see Figure 3-5). From the newly constructed Palomino Way, internal access through the project site to the proposed residences and recreational facilities would be provided through a traditional grid street network.

ROWs of streets comprising the internal grid street network would range in width from 42 feet to 48 feet, depending on the location. The majority of streets would include two 10-foot-wide travel lanes, two seven-foot-wide on-street parking lanes, attached curbs and gutters, and two six-foot-wide sidewalks. Signage and traffic-calming measures would be incorporated throughout the project site to reduce vehicle speeds and improve mode-share safety.

In addition, a 20-foot-wide emergency vehicle access (EVA) road would extend into the site from East Covell Boulevard at the southeastern portion of the site to provide first-responder access. All of the proposed streets would be public streets and designed in accordance with the City of Davis Public Works Department Standard Specifications, with the exception of alley access to certain half-plex townhomes.

With respect to parking, a surface parking area would be provided for the proposed cottages in both the southwestern and central portions of the project site (Lots A and B, respectively). The multi-family residential apartments would include 33 parking stalls. The USA Pentathlon Training Facility and pool complex would additionally include a 55-stall surface parking lot for visitors, which would be primarily located to the south of the facility. In addition, the proposed project would include the following electric vehicle (EV) charging features:

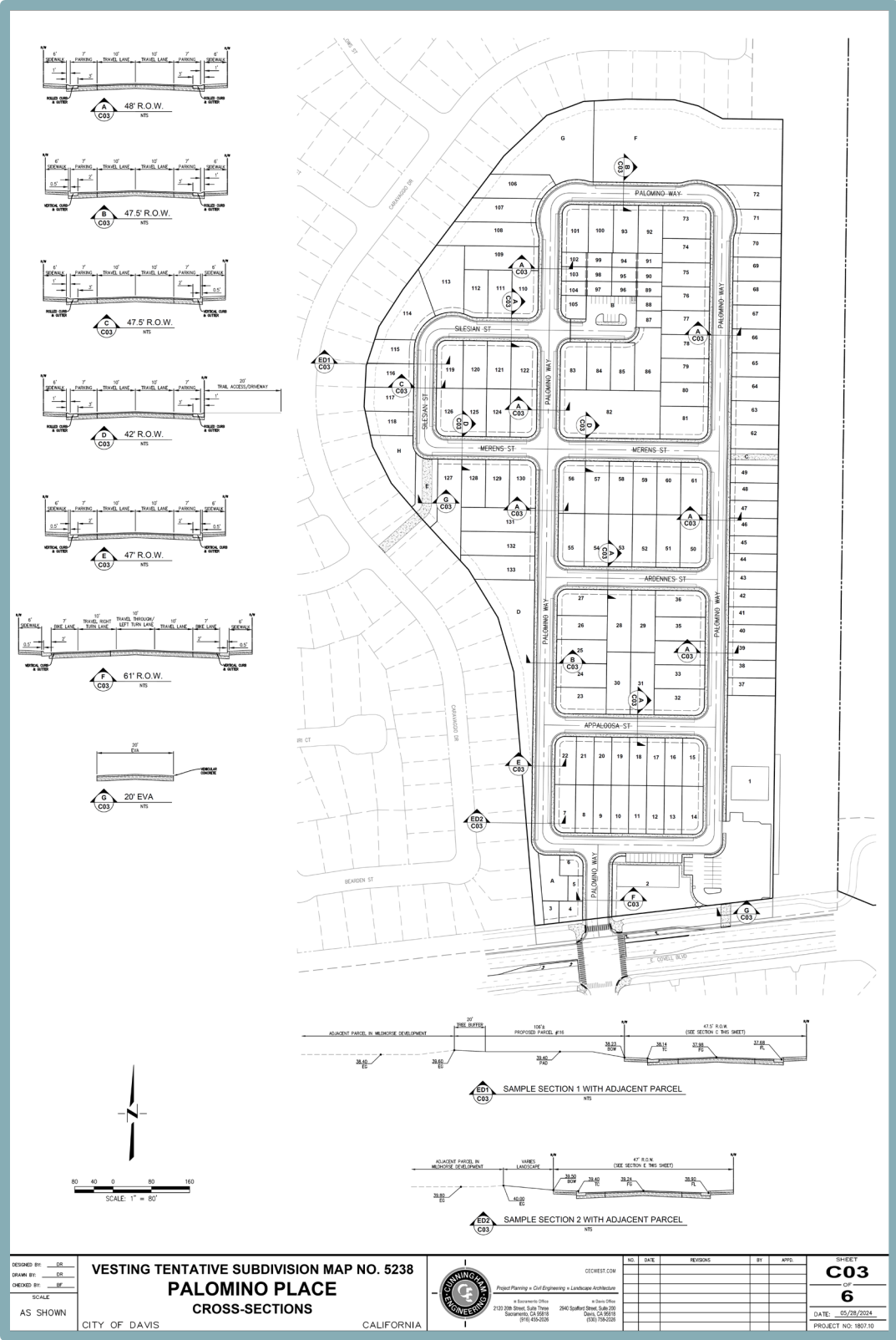
- Cottages: Lot A would include at least one Level 2 EV charging station<sup>3</sup> and Lot B would include at least two Level 2 EV charging stations. Both lots would include preinstalled infrastructure to easily allow for expansion of charging stations to all of the cottage parking stalls.
- Single-Family Residences: All units would support Level 2 EV charging.
- Multi-Family Residential Apartments: The apartments would include two Level 1 EV charging stations, one Level 2 EV charging station, an ability to serve or extend Level 2 charging to nine additional parking spaces, and room in the panel and capacity to serve seven Level 1 EV chargers and two Level 2 EV chargers.
- USA Pentathlon Training Facility and Pool Complex: The USA Pentathlon Training Facility and pool complex would include a minimum of two EV charging stalls.

<sup>3</sup> According to the U.S. Department of Transportation, Level 1 EV equipment provides charging through a common residential 120-volt AC outlet and can require 40 to 50 hours to charge a battery EV to 80 percent from empty and five to six hours to charge a plug-in hybrid EV. Level 2 EV equipment offers higher-rate AC charging through 240-volt (in residential applications) electrical service. Level 2 chargers can charge a battery EV from empty to 80 percent in four to 10 hours and plug-in hybrid EV in one to two hours.





**Figure 3-5  
 Palomino Place Cross-Sections**



With respect to bicycle facilities, as previously discussed, signage and traffic-calming measures would be incorporated as part of the proposed project to improve mode-share safety on internal roadways used by bicyclists. From the internal street network, bicyclists would have access to an existing Class II bicycle lane located along the eastbound lane of East Covell Boulevard, as well as the grade-separated crossing of East Covell Boulevard to the southeast of the project site. With respect to pedestrian facilities, the proposed project would include new sidewalks along the internal grid street network within the project site. Additionally, as discussed further in the Open Space, Landscaping, and Trails section, the proposed project would include open space trail connections to the existing Wildhorse Agricultural Buffer to the east of the project site and the Wildhorse neighborhood to the west.

## **Utilities**

The proposed project would include utility improvements related to water, sanitary sewer, and storm drainage services, as well as dry utility connections, which are discussed further below.

### Water

Water service would be provided by the City of Davis through new connections to the existing water system. From the existing eight-inch water line in Caravaggio Drive to the west of the project site, new eight-inch water lines would be installed and extended into the project site within the new on-site internal streets (see Figure 3-6). From the new water lines, water service would be provided to each structure through new water laterals. All new water infrastructure would be designed consistent with the applicable standards established by the City of Davis Public Works Department Standard Specifications.

### Sewer

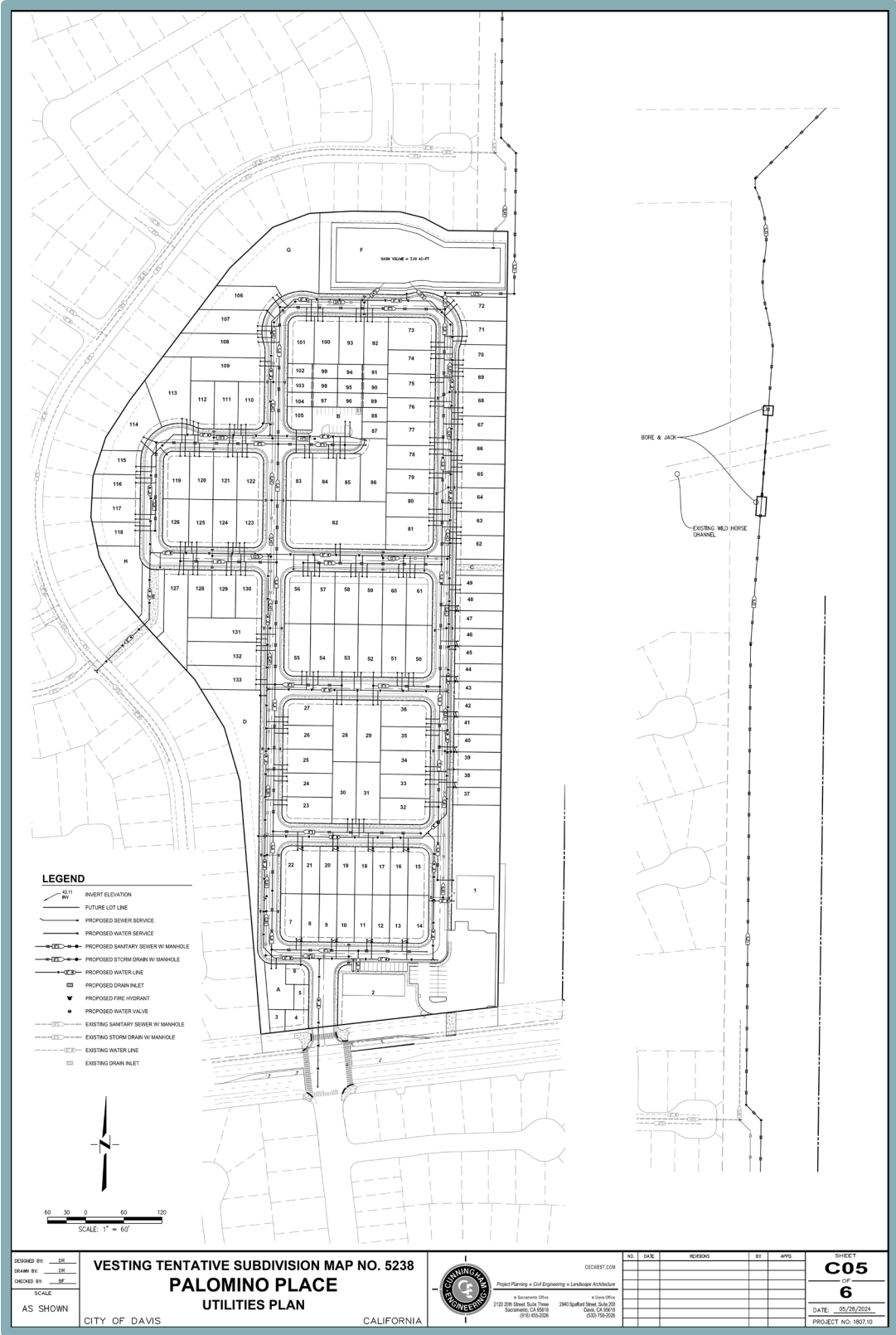
Sanitary sewer service would be provided by the City of Davis through new connections to the existing sewer system. From an existing 42-inch sewer trunk main to the north of the project site, along the northern boundary of the Wildhorse Golf Course, 2,270 lineal feet of new 12-inch sewer line would be extended through the edge of the existing Wildhorse Agricultural Buffer to the project site's northeastern corner. The new sewer line would require a crossing of the Wildhorse Golf Course drainage channel (Channel A), which would be accomplished through a jack-and-bore process. From the new 12-inch sewer line that would extend into the project site through the northeastern corner of the project site, new eight-inch sewer lines would be extended within the new on-site internal streets (see Figure 3-6). From the new eight-inch sewer lines, sewer conveyance services would be provided to each structure through new sewer laterals. All new sewer infrastructure would be designed consistent with the applicable standards established by the City of Davis Public Works Department Standard Specifications.

### Storm Drainage

Storm drainage service would be provided by the City of Davis through new connections to the existing system and a new one-acre on-site stormwater basin. More specifically, stormwater runoff from new impervious surfaces within the project site would be directed to drain inlets installed along the on-site internal streets. From the drain inlets, flows would be conveyed by way of new 12-inch, 18-inch, and 24-inch storm drain lines to the stormwater basin located in the northeast portion of the project site (see Figure 3-6). Following treatment in the stormwater basin, excess flows would be metered to the existing storm drain system in the Wildhorse neighborhood to the north of the project site. New storm drainage infrastructure installed as part of the proposed project would be designed in accordance with the stormwater quality control standards established by Davis Municipal Code Article 30.03.



**Figure 3-6  
 Utilities Plan**



### Dry Utilities

Electricity service would be provided to the project site by Pacific Gas and Electric Co. (PG&E), Valley Clean Energy (VCE), or other service provider through connection to existing infrastructure in the project vicinity along East Covell Boulevard. The proposed project would be all electric and not use natural gas in the residential units or Pentathlon facilities. Telecommunication services, such as telephone and internet services, would be provided by Xfinity and/or other providers through connection to existing infrastructure.

### **Open Space, Landscaping, and Trails**

The proposed project would include approximately 2.76 acres of open space and 0.46-acre of trails. With respect to the open space acreage, the proposed project would include three open space lots (Lots D, H, and G) and a stormwater basin. The 0.60-acre Lot D, located along the southern portion of the western site boundary, would include an area for the planting of an urban forest. The 0.20-acre Lot H, located along the central portion of the western site boundary, would include a tot lot.

The 0.53-acre Lot G, located in the northern portion of the site, would also include an area for the planting of an urban forest. In addition, as previously discussed, a stormwater basin would be located in the northeastern portion of the site in the 1.43-acre Lot F and would be an estimated three to five feet deep, depending on final design. Additionally, the proposed project would include a 20-foot-wide tree buffer located along the western and northern site boundaries within a private easement for tree plantings.

It should be noted that the project applicant would coordinate with a University of California, Davis (UC Davis) horticulturalist to select a plant palette that includes a mix of native, drought-tolerant, climate-ready, and carbon-capturing qualities associated with the new trees, shrubs, and seasonal grasses.

As noted above, the proposed project would include open space trail connections to the existing Wildhorse Agricultural Buffer to the east of the project site and the Wildhorse neighborhood to the west. More specifically, Lot C would include a trail connection between Lots 49 and 62 for pedestrians and bicyclists to access the Wildhorse Agricultural Buffer from the easternmost north-south segment of Palomino Way (see Figure 3-3). Lot F would include a trail connection between Lot 127 and Lot H to the south of the proposed Merens Street/Silesian Street intersection for pedestrians and bicyclists to access Caravaggio Drive.

### **Site Plan and Architectural Review**

Pursuant to Davis Municipal Code Article 40.31, the City's Site Plan and Architectural Review serves to determine compliance with applicable development standards to promote harmonious growth of the City. New development subject to the review process must demonstrate compliance with standards governing the siting of structures; inclusion of landscaping, fencing, and other screening; design of circulation and parking facilities; design and installation of curbs, gutters, sidewalks, and drainage infrastructure; and location of open space, among other requirements. As previously discussed, the proposed project was submitted under a provision of State law commonly referred to as the Builder's Remedy, which provides that the City cannot deny the project on the basis of inconsistency with the City's General Plan or Zoning Code for eligible housing projects. While conditions of approval would impose development standards on the project and site improvements are required to comply with City standards, the residential portions of the project and related improvements are not subject to Site Plan and Architectural Review;



however, development of the USA Pentathlon Training Facility and pool complex would be subject to the Site Plan and Architectural Review process.

### **Affordable Housing Plan**

Pursuant to the City's Affordable Housing Ordinance (Davis Municipal Code Article 18.05) and based upon the proposed mix of residential units and lot sizes, the proposed project is required to provide 26 affordable units. The proposed project would include up to 45 affordable units, as the new multi-family apartment units would be deed-restricted. Because at least 20 percent of the proposed residential units would be affordable to low-income households, the project applicant intends to invoke mandatory incentives and concessions, pursuant to the Density Bonus Law set forth by Government Code Section 65915(d) and (e). Pursuant to subsection (d)(2), a project that provides at least 20 percent of units to low-income households is entitled to two incentives and concessions. The project applicant would use one incentive/concession for a 10 percent reduction to the City's 150-foot-wide agricultural buffer requirement, which would allow the proposed project to use the existing 135-foot-wide Wildhorse Agricultural Buffer to meet the requirement. The project applicant would also reserve the right to propose waivers and reductions of development standards, as allowed by the Density Bonus Law.

## **3.6 PROJECT APPROVALS**

The following section presents the discretionary and ministerial actions that would be required to implement the proposed project.

### **City of Davis Discretionary Approvals**

Implementation of the proposed project would require the following entitlements from the City of Davis:

1. Certification of the SEIR and adoption of the Mitigation Monitoring Plan: Before the City can approve the proposed project, the City must certify that the SEIR was completed in compliance with the requirements of CEQA, that the decision-making body has reviewed and considered the information in the SEIR, and that the SEIR reflects the independent judgment of the City of Davis. Approval of the SEIR also requires adoption of a Mitigation Monitoring Plan (MMP), which specifies the methods for monitoring mitigation measures required to eliminate or reduce the project's significant effects on the environment. The City would also be required to adopt Findings of Fact, and for any impacts determined to be significant and unavoidable, a Statement of Overriding Considerations, as part of project approval.
2. Vesting Tentative Subdivision Map: The proposed project would require approval of a Vesting Tentative Subdivision Map.
3. Site Plan and Architectural Review: The proposed project would be subject to the City's Site Plan and Architectural Review process.
4. Affordable Housing Plan: The proposed project would require approval of an Affordable Housing Plan in accordance with the City's Affordable Housing Ordinance.

### **Other Agency Permits and Approvals**

Subsequent to City of Davis approval of a final Vesting Tentative Subdivision Map, the following agency approvals and permits would likely be required for the project:

1. National Pollutant Discharge Elimination System Construction General Permit – Central Valley Regional Water Quality Control Board (RWQCB).





2. Certificate of Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) Authorization – Yolo Habitat Conservancy.



---

---

## **4. EXISTING ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION**

---

---

---

---

## **4.0 INTRODUCTION TO THE ANALYSIS**

---

---

## 4.0 INTRODUCTION TO THE ANALYSIS

### 4.0.1 INTRODUCTION

The technical chapters of this Subsequent Environmental Impact Report (SEIR) include the analysis of the potential impacts of buildout of the proposed project in comparison to the significant impacts identified in the Wildhorse Ranch Project EIR (2009 EIR).<sup>1</sup> Chapters 4.1 through 4.7 describe the focus of the analysis, references and other data sources for the analysis, the environmental setting related to each specific issue area, project-specific impacts and mitigation measures, and the cumulative impacts for each issue area. The format of each of the technical chapters is described at the end of this chapter. It should be noted that all technical reports are either attached to this SEIR or available from the City by request.

### 4.0.2 DETERMINATION OF SIGNIFICANCE

Under CEQA, a significant effect is defined as a substantial or potentially substantial adverse change in the environment (Public Resources Code [PRC] Section 21068). The CEQA Guidelines require that the determination of significance be based on scientific and factual data. The specific criteria for determining the significance of a particular impact are identified within each chapter and are consistent with significance criteria set forth in the CEQA Guidelines or as based on the professional judgment of the SEIR preparers.

#### **Significance Criteria**

The CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance.” In addition, the Guidelines state, “An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.” (CEQA Guidelines Section 15382).

As presented in Section 4.0.4 below, each impact analysis includes a determination of whether the proposed project would result in a new significant impact or a substantially more severe significant impact beyond what was previously identified in the 2009 EIR. In cases where a new or substantially more severe significant impact is identified, mitigation, if available, is required in order to reduce the specific impact to the maximum extent feasible. The level of significance of the impact following mitigation is then included. The following levels of significance that would occur following implementation of mitigation are used in this SEIR:

- 1) Less than Significant: Impacts that are adverse, but that do not exceed the specified thresholds of significance;
- 2) Significant: Impacts that exceed the defined standards of significance and require mitigation;

---

<sup>1</sup> City of Davis. *Wildhorse Ranch Project Final Environmental Impact Report*. Certified July 2009.



- 3) Less than Cumulatively Considerable: Where cumulative impacts have been identified, but the project's incremental contribution towards the cumulative impacts would not be considered significant;
- 4) Cumulatively Considerable: Where cumulative impacts have been identified and the project's incremental contribution towards the cumulative impacts would be considered significant; and
- 5) Significant and Unavoidable Impact: An impact (project-level or cumulative) that cannot be eliminated or reduced to a less-than-significant or less than cumulatively considerable level through the implementation of feasible mitigations measures.

Each environmental area of analysis uses a distinct set of significance criteria. The significance criteria are identified at the beginning of the Impacts and Mitigation Measures section in each of the technical chapters of this SEIR. Although significance criteria are necessarily different for each resource considered, the provided significance levels ensure consistent evaluation of impacts for all resource areas evaluated.

#### **4.0.3 ENVIRONMENTAL ISSUES ADDRESSED IN THIS SEIR**

This SEIR provides the analysis necessary to address the environmental impacts of the proposed project. The following environmental issues are addressed in separate technical chapters of this SEIR:

- Aesthetics;
- Air Quality, Greenhouse Gas Emissions, and Energy;
- Biological Resources;
- Noise;
- Public Services and Utilities; and
- Transportation.

Chapter 4.7, Other Effects, addresses the remaining environmental issue areas not discussed in an individual technical chapter of the SEIR. See Chapter 5, Statutorily Required Sections, of this SEIR for additional information on the scope of the cumulative impact analysis for each environmental issue addressed in the SEIR.

#### **4.0.4 CHAPTER FORMAT**

Each technical chapter addressing a specific environmental issue begins with an **introduction** describing the purpose of the section. The introduction is followed by a description of any changes to the project's **existing environmental setting** in comparison to the setting presented in the 2009 EIR as the setting pertains to that particular issue. The setting description is followed by the **regulatory context** and the **impacts and mitigation measures** discussion, which contains the **standards of significance**, followed by the **method of analysis**. The method of analysis discussion includes a description of the changes in circumstance and changes to the project that have occurred since the City's certification of the 2009 EIR. The **impact and mitigation** discussion includes impact statements prefaced by a number in bold-faced type (for both project-level and cumulative analyses). An explanation of each impact and an analysis of the impact's significance as compared to the Wildhorse Ranch Project follow each impact statement. All mitigation measures pertinent to each individual impact, including applicable mitigation measures from the 2009 EIR, modified mitigation measures, and new mitigation measures, follow directly after the impact statement (see below). The degree of relief provided by identified mitigation measures is also evaluated. An example of the format is shown below.



## **Project-Specific Impacts and Mitigation Measures**

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance.

### **4.x-1 Statement of Project-Specific Impact**

Discussion of impact for the proposed project, as compared to the Wildhorse Ranch Project, in paragraph format.

A statement of whether the proposed project would result in a new significant impact or substantially more severe significant impact prior to mitigation is included at the end of each impact discussion. If an impact is determined to be a new or substantially more severe significant beyond what was identified in the 2009 EIR, mitigation will be included in order to reduce the specific impact to the maximum extent feasible.

#### **Applicable Mitigation Measure(s) from the 2009 EIR**

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

4.x-1(a)<sup>2</sup> *Mitigation measure(s) applicable to the proposed project from the 2009 EIR presented in italics and listed in consecutive order.*

4.x-1(b) *Additional mitigation measures from the 2009 EIR, if necessary.*

#### **Modified Mitigation Measure(s)**

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

4.x-1(c) *Mitigation measure(s) applicable to the proposed project which have been modified from the 2009 EIR presented in italics and listed in consecutive order. All new text is shown as double underlined and deleted text is shown as ~~struck through~~.*

4.x-1(d) *Additional modified mitigation measures, if necessary.*

#### **New Mitigation Measure(s)**

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

4.x-1(e) *Project-specific mitigation measure(s) not included in the 2009 EIR presented in italics and listed in consecutive order.*

4.x-1(f) *Additional project-specific mitigation measures, if necessary.*

---

<sup>2</sup> It should be noted that all modified mitigation measures, from the 2009 EIR presented in this SEIR will be numbered using the same numbering system applied in the 2009 EIR.



## **Cumulative Impacts and Mitigation Measures**

The following discussion of cumulative impacts is based on implementation of the proposed project in combination with cumulative development within the applicable area or region.

### **4.x-2 Statement of Cumulative Impact**

Discussion of cumulative impacts for the proposed project as compared to the Wildhorse Ranch Project in paragraph format.

As discussed in detail in Chapter 5, Statutorily Required Sections, of this SEIR, the cumulative setting for the proposed project is generally considered to be development anticipated to occur upon buildout of a number of approved or reasonably foreseeable projects within the project region (i.e., the City of Davis and associated Sphere of Influence [SOI]).

A statement of whether a new or substantially more severe significant cumulative impact beyond what was identified in the 2009 EIR would occur is included at the end of each impact discussion. In the event that a cumulative significant impact is identified, a statement of whether the proposed project would result in a cumulatively considerable contribution to the cumulative significant impact, prior to mitigation, is included at the end of each impact discussion. If an impact is determined to potentially be cumulatively considerable, mitigation will be included in order to reduce the specific impact to the maximum extent feasible.

#### **Applicable Mitigation Measure(s) from the 2009 EIR**

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

4.x-2(a) *Mitigation measure(s) applicable to the proposed project from the 2009 EIR presented in italics and listed in consecutive order.*

4.x-2(b) *Additional mitigation measures from the 2009 EIR, if necessary.*

#### **Modified Mitigation Measure(s)**

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

4.x-2(c) *Mitigation measure(s) applicable to the proposed project which have been modified from the 2009 EIR presented in italics and listed in consecutive order. All new text is shown as double underlined and deleted text is shown as ~~struck through~~.*

4.x-2(d) *Additional modified mitigation measures, if necessary.*

#### **New Mitigation Measure(s)**

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.



- 4.x-2(e) *Project-specific mitigation measure(s) not included in the 2009 EIR presented in italics and listed in consecutive order.*
- 4.x-2(f) *Additional project-specific mitigation measures, if necessary.*





---

---

## **4.1 AESTHETICS**

---

---

## 4.1 AESTHETICS

### 4.1.1 INTRODUCTION

Pursuant to CEQA Guidelines Section 15162, the Aesthetics chapter of the Subsequent Environmental Impact Report (SEIR) assesses whether the proposed project would result in a new significant impact not previously identified in the Wildhorse Ranch Project EIR (2009 EIR) or a substantial increase in the severity of a significant impact previously identified in the 2009 EIR. The City of Davis has prepared the SEIR to analyze new or substantially more severe potential adverse effects that could occur as a result of the changes from the Wildhorse Ranch Project to the currently proposed project. For further details related to the proposed project, refer to Chapter 3, Project Description, of this SEIR.

This chapter describes existing aesthetic resources in the area of the proposed project and the broader region and evaluates the potential aesthetic impacts of the project. CEQA describes the concept of aesthetic resources in terms of scenic vistas, scenic resources (such as trees, rock outcroppings, and historic buildings within a State scenic highway), and the existing visual quality or character of the project area. In addition, pursuant to the CEQA Guidelines, this chapter describes potential impacts related to light and glare. The following analysis is based on information drawn from the City of Davis General Plan,<sup>1</sup> the City of Davis General Plan EIR,<sup>2</sup> and the 2009 EIR.

Pursuant to the court ruling in *Preserve Poway v. City of Poway* (2016) 245 Cal. App.4th 560 [199 Cal.Rptr. 3d 600], community character is separate and apart from aesthetic impacts and, thus, is not a CEQA issue. Rather, the analysis of aesthetics should be limited to tangible, physical evidence that a project is visually inconsistent with the surrounding community (rather than a psychological “feel”). Therefore, where applicable, the analysis presented within this chapter focuses on potential physical changes to the visual composition of the project site and surrounding area, rather than overall community character.

Subsequent to the City’s certification of the 2009 EIR, which evaluated the potential for the Wildhorse Ranch Project to alter the existing visual character of the project site, the CEQA Guidelines were updated to differentiate between how urban and non-urban sites proposed for development could result in potential impacts to public views of the sites. Appendix G, Section I, Question c, defines public views as those that are experienced from a publicly accessible vantage point. The sample Initial Study checklist found in Appendix G to the CEQA Guidelines suggests that different aesthetic standards apply in “non-urbanized” and “urbanized areas” respectively. For non-urbanized areas, there is an inquiry asking whether a proposed project “would substantially degrade the existing visual character or quality of public views of the site and its surroundings.” For urbanized areas, the question is whether the project would “conflict with applicable zoning and other regulations governing scenic quality.” Under the CEQA Guidelines, “urbanized area” is a term of art defined in CEQA Guidelines section 15387 as “a central city or a

<sup>1</sup> City of Davis. *City of Davis General Plan*. Adopted May 2001, Amended January 2007.

<sup>2</sup> City of Davis. *Final Program EIR for the City of Davis General Plan Update and Final Project EIR for Establishment of a New Junior High School*. Certified May 2001.



group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile.”

The likely reason that the California Natural Resources Agency (CNRA), in fashioning the inquiries in Appendix G, suggests different approaches to aesthetic analyses in non-urbanized areas and urbanized areas is CNRA did not want purely aesthetic concerns – such as height and mass by themselves – to deter dense, land-efficient development in urbanized areas. In such highly developed areas, additional high-density development can reduce the long-term environmental effects of what is often called sprawl by making an efficient use of areas that are already highly urbanized. Thus, projects proposed in such areas only require an evaluation of consistency with city or county regulations that govern scenic quality, such as design guidelines. (See *Bowman v. City of Berkeley* (2004) 122 Cal.App.4th 572, 592, 594 [“[t]he aesthetic difference between a four-story and a three-story building on a commercial lot on a major thoroughfare in a developed urban area is not a significant environmental impact, even under the fair argument standard”; “[w]here a project must undergo design review under local law that process itself can be found to mitigate purely aesthetic impacts to insignificance”].)

In contrast, in less developed areas, concerns about mass and height, and how they affect existing visual conditions, are more appropriate.

Here, the project site is within an “urbanized area,” as the site and surrounding properties include 1,000 persons per square mile. The City has therefore undertaken the inquiry appropriate for “urbanized areas.” While the 2009 EIR focused on how the Wildhorse Ranch Project would alter the existing visual character of the project site, such an inquiry was appropriate at that time when there was no distinction in Appendix G for non-urbanized and urbanized areas. Therefore, the change in methodology being employed in this SEIR is appropriate given the current Appendix G language and the project’s location within an urbanized area.

A further note on methodology is appropriate here. The 2009 EIR analyzed both public and private views. In actuality, there is no requirement to do so. CEQA case law has established that EIRs are not required to consider impacts on private views and may limit their analysis of aesthetic effects to impacts on public views. For example, in *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 492-494, the court held that a county, in preparing an EIR for a proposed condominium project, acted within its discretion in choosing not to consider private views. The court noted that “California landowners do not have a right of access to air, light and view over adjoining property” and added that “[u]nder CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons.” (*Id.* at p. 492.) In this same vein, another court, in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188, 195, observed that “all government activity has some direct or indirect adverse effect on some persons.” Such conclusions are consistent with the inquiries set forth in Appendix G of the CEQA Guidelines, which, as previously discussed, ask whether projects outside urbanized areas would “substantially degrade the existing visual character or quality of *public* views” of a project site and its surroundings. (Italics added.) In light of these considerations, the extent to which the project could conflict with applicable zoning and other regulations governing scenic quality is considered within the context of those who would view the project from public areas, rather than adjacent private neighborhoods.



#### **4.1.2 EXISTING ENVIRONMENTAL SETTING**

The following setting information provides an overview of the existing conditions of visual resources in the project region and within the vicinity of the project site.

##### **Visual Character of the Region**

The City of Davis' planning area, comprised of approximately 160 square miles, is located 11 miles west of Sacramento and approximately 79 miles northeast of San Francisco. The planning area consists of approximately 160 square miles and is characterized by agricultural/open space landscapes to the north, west, and south; highly developed urban landscapes within the City limits; and open space lands, including the Yolo Bypass Wildlife Area, to the east. Views from agricultural fields are enclosed on the west of the planning area by the Coast Range hills. Views of other directions are open to the horizon, although the Sierra Nevada Mountain range, Sutter Buttes, and Mount Diablo can be seen on clear days. The University of California, Davis (UC Davis) campus is located adjacent to the southwest corner of the City and occupies a total of 2,900 unincorporated acres, including the more-than-100-acre area UC Davis Arboretum, which is comprised of demonstration gardens, scientific collections, and the Putah Creek Riparian Reserve. The Davis General Plan does not designate scenic vistas within the City's planning area.

##### **State Scenic Highways**

Designated State scenic highways are not currently located in the vicinity of the City of Davis, which was similarly the case during the City's preparation and certification of the 2009 EIR. According to the California Department of Transportation (Caltrans) map of designated and eligible scenic routes under the California Scenic Highway Program, the nearest officially designated State scenic highway to the project site is State Route (SR) 160, which is located approximately 11.5 miles southeast of the City limits.<sup>3</sup>

##### **Visual Character of the Project Site and Surrounding Area**

The following information provides an overview of the physical conditions of the project site and surrounding area in relation to visual character.

##### **Project Site**

The approximately 25.8-acre project site is located north of East Covell Boulevard on an existing property known as the Wildhorse Ranch and/or Duffel Horse Ranch in the City of Davis, California. Public views of the project site are primarily afforded from East Covell Boulevard (see Figure 4.1-1) to the south of the site and the Wildhorse Agricultural Buffer (see Figure 4.1-2 and Figure 4.1-3) to the east of the site. Since the City's certification of the 2009 EIR, the majority of the project site has remained undeveloped with ruderal grasses that were previously used as pasture/grazing land; although, agricultural activity does not currently occur on-site. From a gated entrance immediately north of East Covell Boulevard, a paved driveway extends into the site and bisects the majority of the site in a north-to-south direction (see Figure 4.1-4). Ruderal grasses cover the southern portion of the project site on either side of the paved driveway (see Figure 4.1-5 and Figure 4.1-6) Within the central portion of the project site are a ranch home, two duplexes, a horse barn, and an equestrian training facility that is not currently in use (see Figure 4.1-7, Figure 4.1-8, and Figure 4.1-9). Beyond the existing on-site residences and barn, the northern portion of the project site is undeveloped with ruderal grasses (see Figure 4.1-10 and Figure 4.1-11).

<sup>3</sup> California Department of Transportation. *California State Scenic Highway System Map*. Available at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed March 2024.





**Figure 4.1-1**  
**Existing Northerly View of Project Site from East Covell Boulevard**



**Figure 4.1-2**  
**Westerly View of Site from Wildhorse Agricultural Buffer (1 of 2)**





**Figure 4.1-3  
Westerly View of Site from Wildhorse Agricultural Buffer (2 of 2)**



**Figure 4.1-4  
Existing On-Site View of Gated Entrance  
From East Covell Boulevard**





**Figure 4.1-5  
Existing On-Site View of Southwestern Pasture**



**Figure 4.1-6  
Existing On-Site View of Southeastern Pasture**





**Figure 4.1-7  
Existing On-Site View of Ranch Home**



**Figure 4.1-8  
Existing On-Site View of Duplexes in Central Portion of Project Site**





**Figure 4.1-9**  
**Existing On-Site View of Eastern Side of Horse Barn**



**Figure 4.1-10**  
**Existing On-Site View of Wildhorse Neighborhood to the North of Project Site**





**Figure 4.1-11**  
**Existing On-Site View of North Pasture Looking Towards Wildhorse Neighborhood**



The project site is generally flat, but slopes gently to the north, with elevations ranging from 35 feet above mean sea level (amsl) in the northern portion of the project site to approximately 40 feet above amsl in the southern portion of the site. The project site has not undergone substantial changes related to the site's setting or visual character since the certification of the 2009 EIR.

### **Surrounding Areas**

The area surrounding the project site has not undergone significant changes since the City's certification of the 2009 EIR. The following discussions describe the land uses surrounding the project site, which are also shown in Figure 3-2 in the Project Description chapter of this EIR.

The area immediately north of the project site consists of single-family residences associated with the Wildhorse neighborhood, and of Duchamp Park located within the neighborhood. Beyond the residences is the Wildhorse Golf Course to the north. The site is bounded to the east by the 135-foot-wide Wildhorse Agricultural Buffer. Land directly beyond the Wildhorse Agricultural Buffer consists of open agricultural land and is the subject site for the Shriners Property development application, which is currently being processed by the City. The Wildhorse Agricultural Buffer includes a 35-foot-wide greenbelt that contains a gravel pedestrian path/trail known as the Wildhorse Greenbelt.

The project site is bounded to the south by East Covell Boulevard. Single-family residences associated with the Slide Hill Park neighborhood are located immediately to the south of East Covell Boulevard. The area to the west of the project site also consists of single-family residences associated with the Wildhorse neighborhood, the Wildhorse Golf Course, and Robert Arneson Park.

### **Off-Site Improvement Areas**

Off-site improvements associated with the proposed project include an off-site sewer line extension to establish sewer service for the proposed project. From an existing 42-inch sewer trunk main to the north of the project site, along the northern boundary of the Wildhorse Golf Course, 2,270 lineal feet of new 12-inch sewer line would be extended through the edge of the existing Wildhorse Agricultural Buffer to the project site's northeastern corner. The new sewer line would require a crossing of Channel A.

Generally, the portion of the off-site sewer line alignment contains natural features, such as Channel A and its associated riparian vegetation. The Wildhorse Agricultural Buffer includes a gravel pedestrian trail and consists primarily of ruderal grasses and scattered trees and shrubs.

### **Viewer Types**

Viewer types in the vicinity that have public views of the project site include the following:

- **Motorists** along East Covell Boulevard would have existing views of the project site while driving past the site. In addition, motorists travelling north on Monarch Lane would have existing views of the project site.
- **Pedestrians and bicyclists** in the area include nearby residents and visitors that use the public sidewalks and roadways to walk or bike to their destination. Such pedestrians have views of the project site from East Covell Boulevard and Monarch Lane, as well as the trail within the Wildhorse Agricultural Buffer to the east of the project site. Pedestrians and bicyclists also have views of the project site from the grade separated crossing underneath East Covell Boulevard that connects the neighborhood south of the project site to the north



side of East Covell Boulevard and the Wildhorse Agricultural Buffer path. In general, views experienced by pedestrians and bicyclists are similar to views experienced by motorists.

### **Light Pollution and Glare**

Light pollution refers to all forms of unwanted light in the night sky, including glare, light trespass, sky glow, and excessive illumination at an intensity that is inappropriate. Views of the night sky can be an important part of the natural environment, particularly in communities surrounded by extensive open space. Excessive light and glare can also be visually disruptive to humans and nocturnal animal species.

Currently, the project site is primarily characterized by vegetated, unlit landscape, with the only exception being the ranch home, two duplexes, and horse barn located in the central portion of the project site. As such, significant sources of light and glare do not currently occur on the project site. However, the project site is located within the vicinity of existing residential uses to the north, south, and west of the project site. Lighting associated with such development, as well as street lighting along East Covell Boulevard and Monarch Lane and headlights from vehicles traveling on the roadways, contribute to the overall nighttime lighting environment of the project area.

### **4.1.3 REGULATORY CONTEXT**

Applicable federal laws or regulations pertaining to the aesthetic quality of the project area do not exist. The existing State and local laws and regulations applicable to the proposed project are listed below.

#### **State Regulations**

The following is an applicable State regulation related to aesthetic resources.

#### **California Scenic Highway Program**

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. The State Legislature lists highways that are eligible for designation in California Streets and Highways Code Sections 260 through 284. In order for an eligible highway to be officially designated by Caltrans, the local government with jurisdiction over the land that abuts the highway must adopt a program that limits development, outdoor advertising, and earthmoving along the highway segment, pursuant to Caltrans' approval of the program criteria.

#### **Local Regulations**

The following local regulations are applicable to the proposed project.

#### **City of Davis General Plan**

The City of Davis General Plan urban design goals and policies that are applicable to the proposed project are presented below.

#### **Urban Design, Neighborhood Preservation and Community Forest Management Chapter**

Goal UD 1 Encourage community design throughout the City that helps to build community, encourage human interaction and support non-automobile transportation.





- Policy UD 1.1 Promote urban/community design which is human-scaled, comfortable, safe, and conducive to pedestrian use.
- Goal UD 2 Maintain an aesthetically pleasing environment and manage a sustainable community forest to optimize environmental, aesthetic, social, and economic benefits.
- Policy UD 2.1 Preserve and protect scenic resources and elements in and around Davis, including natural habitat and scenery and resources reflective of place and history.
- Policy UD 2.2 Maintain and increase the amount of greenery, especially street trees, in Davis, both for aesthetic reasons and to provide shade, cooling, habitat, air quality benefits, and visual continuity.
- Policy UD 2.3 Require an architectural “fit” with Davis’ existing scale for new development projects.
- Policy UD 2.4 Create affordable and multi-family residential areas that include innovative designs and on-site open space amenities that are linked with public bicycle/pedestrian ways, neighborhood centers, and transit stops.
- Policy UD 2.5 Ensure attractive functional signs.
- Goal UD 3 Use good design as a means to promote human safety.
- Policy UD 3.1 Use good design to promote safety for residents, employees, and visitors to the City.
- Policy UD 3.2 Provide exterior lighting that enhances safety and night use in public spaces, but minimizes impacts on surrounding land uses.
- Goal UD 4 Create an urban design framework that would strengthen the physical form of the city.
- Policy UD 4.1 Develop an urban design framework plan to consolidate and clarify the relevant design concepts in this chapter and other chapters to promote a positive and memorable image for the city and to reinforce the functional systems of the city such as land use, circulation, and open space.

### **Outdoor Lighting Control Ordinance**

The City enacted the Outdoor Lighting Control Ordinance in 1998. The ordinance, set forth by Davis Municipal Code Article 8.17, commonly referred to as the City’s “Dark Sky Ordinance,” provides standards for outdoor lighting in an effort to minimize light pollution, glare, and light trespass caused by inappropriate or misaligned light fixtures, while improving nighttime public safety, utility, security, and preserving the night sky as a natural resource and, thus, facilitating people’s enjoyment of stargazing. The Outdoor Lighting Control Ordinance does not apply to



interior lighting, including lighting at greenhouse facilities. Single-family and duplex residential properties are exempted.

#### **4.1.4 IMPACTS AND MITIGATION MEASURES**

---

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to aesthetics. A discussion of the project's impacts, as well as mitigation measures, where necessary, is also presented.

##### **Standards of Significance**

Consistent with Appendix G of the CEQA Guidelines, an impact related to aesthetics is considered significant if the proposed project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- In a non-urbanized area, 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), or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

##### **Method of Analysis**

The analysis of this SEIR is focused generally on the changes in circumstances and modifications to the former Wildhorse Ranch Project following the City's certification of the 2009 EIR, pursuant to CEQA Guidelines Section 15162. The analysis of this chapter is based on the 2009 EIR and full consideration to the development of the proposed project and the resulting physical changes to the environmental baseline.

As discussed throughout this SEIR, the environmental baseline for this SEIR is appropriately considered to be the approved Wildhorse Ranch Project, which included a 191-unit residential development comprised of 73 detached single-family residences and 78 two- and three-story single-family townhomes on 11.95 acres, as well as 40 attached affordable housing units on 1.92 acres. In addition, the Wildhorse Ranch Project included the dedication of 2.26 acres of additional agricultural buffer, 1.61 acres of interior greenbelt, and 4.4 acres of interior open space.

The standards of significance listed above are used to delineate the significance of any visual alterations of the site, including alterations that would impact views from public viewsheds in the project area.

##### **Project-Specific Impacts and Mitigation Measures**

The following discussion of impacts related to aesthetics is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.



**4.1-1 Have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

Examples of typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing or sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista.

The 2009 EIR did not evaluate potential impacts to scenic vistas; however, the project site did not include scenic vistas, such as the examples listed above, nor were scenic vistas officially designated by the City's General Plan. The 2009 EIR evaluated potential impacts to scenic resources under Impact 4.7-3 and concluded that a less-than-significant impact would occur. As discussed therein, while several trees existed on-site, designated State scenic highways did not occur within the City's vicinity.

The currently proposed project would be developed largely within the same project site boundaries analyzed in the 2009 EIR, with the exception of the off-site sewer line extension, which would be installed underground within the Wildhorse Agricultural Buffer, and the pentathlon facility obstacle course. Considering that new scenic vistas have not been identified within or immediately beyond the project site since the City's certification of the 2009 EIR (including the Wildhorse Agricultural Buffer, which is not considered by the City to be a scenic vista), the currently proposed project would not result in a new substantial adverse effect to a scenic vista not previously identified in the 2009 EIR.

Additionally, State scenic highways have not been designated within the City or in the vicinity of the project site since the City's certification of the 2009 EIR. The nearest designated State scenic highway is SR 160, which is located approximately 11.5 miles southeast of the City limits. Therefore, similar to the analysis of the Wildhorse Ranch Project, the currently proposed project would not result in a substantial adverse effect to scenic resources within the vicinity of a State scenic highway, as such highways continue to not be located within the project vicinity.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to having a substantial adverse effect on a scenic vista or substantially damaging scenic resources within a State scenic highway beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR  
*None applicable.*





Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**4.1-2 In a non-urbanized area, 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) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality. Based on the analysis below and even with implementation of mitigation, the currently proposed project would result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts to altering the existing character of the project site and obstructing views from existing residences under Impact 4.7-1 and concluded that the project would change the character of the project site from an agricultural horse ranch setting to an urban setting. As discussed therein, the Wildhorse Ranch Project included several features to minimize the visual intrusion of the project, including a central greenbelt connecting to the existing Wildhorse Agricultural Buffer; expansion of the Wildhorse Agricultural Buffer to 200 feet in width through dedication of an additional 65 feet; and expansion of backyard areas of homes along the western and northwestern boundary of the project site by an additional 20 feet (relative to the project's other new homes) to increase privacy and open space between existing residences and those proposed by the Wildhorse Ranch Project. Based on the incorporation of such features, the 2009 EIR determined that the landscaping and open space features of the project would have increased the aesthetic quality of the project and reduced the effects of the project's conversion of the site from an agricultural setting to an urban setting. However, because the Wildhorse Ranch Project would have permanently altered the character of the site and blocked partial views towards the east, which are characterized by distinct background views of the Sierra Nevada foothills, the 2009 EIR concluded that a significant and unavoidable impact would have occurred, with feasible mitigation unavailable.

As previously discussed, in accordance with the current CEQA Guidelines, the relevant threshold in this SEIR is whether the proposed project would conflict with applicable zoning and other regulations governing scenic quality, as the project site is located in an urbanized area. Therefore, this analysis of potential impacts related to the visual character of the site does not take the approach employed in the 2009 EIR. The City's General Plan designates the site as Agriculture and the site is zoned Planned Development (PD) 3-89. However, because the proposed project is being processed pursuant to the Builder's Remedy under a settlement agreement between the City and the project applicant, the project is not required as part of project approval to demonstrate consistency with standards established by the Agriculture land use designation and PD 3-89 zoning district, including those associated with scenic quality.



Nonetheless, the proposed project would still be required to comply with all other applicable General Plan policies and Davis Municipal Code regulations related to urban design and scenic quality.

For example, General Plan Policy UD 2.1 requires preservation and protection of scenic resources, including natural habitat and scenery, as well as resources reflective of place and history. The proposed project would comply with the foregoing policy, as the project site generally does not include natural habitat and scenery, nor resources reflective of place and history. Nonetheless, the proposed project would include approximately 2.76 acres of open space and 0.46-acre of trails, including three open space lots (Lots D, H, and G) and a stormwater basin. Lot D, located along the southern portion of the western site boundary, would include an area for the planting of an urban forest. Lot H, located along the central portion of the western site boundary, would include a tot lot, and Lot G, located in the northern portion of the site, would include an area for the planting of an urban forest. The project would also include a 20-foot-wide tree buffer located along the western and northern site boundaries within a private easement for tree plantings. Such design features would serve to preserve and protect open space and trees within the project site. The proposed project would additionally comply with General Plan Policy UD 2.2, which requires maintenance and an increase in greenery. The proposed project would include new plantings of native, drought-tolerant trees, shrubs, and seasonal grasses along the East Covell Boulevard project frontage, internal street network, and northern and western site boundaries. Furthermore, the project would comply with General Plan Policy UD 2.3, which necessitates that new development fit with the existing scale of the City, as the proposed single-family residences along the western site boundary would be single-story homes, consistent with the size of the existing homes located in the adjacent neighborhoods of Wildhorse and Slide Hill Park. Finally, General Plan Policy UD 2.5 requires attractive and functional signs. Signs within the project site would be limited to those associated with the multi-family residential building, as well as the USA Pentathlon Training Facility and pool complex. New signs would be subject to the requirements of the City of Davis Sign Design Guidelines.<sup>4</sup> As required therein, any signs within the project site must be compatible with building architecture, legible, placed appropriately to respect architectural features and create interest, designed with appropriate colors, materials, and illumination. It should be noted that the proposed off-site sewer line extension would be installed underground within the Wildhorse Agricultural Buffer and, therefore, would not affect views of the project site or agricultural buffer.

Additionally, the USA Pentathlon Training Facility would be subject to the City's Site Plan and Architectural Review process. Pursuant to Davis Municipal Code Article 40.31, the City's Site Plan and Architectural Review serves to determine compliance with applicable development standards to promote harmonious growth of the City. New development subject to the review process must demonstrate compliance with standards governing the siting of structures; inclusion of landscaping, fencing, and other screening; design of circulation and parking facilities; design and installation of curbs, gutters, sidewalks, and drainage infrastructure; and location of open space, among other requirements. Because the proposed project was submitted pursuant to Builder's Remedy and without any legislative entitlements, the proposed project is not

---

<sup>4</sup> City of Davis. *Davis Citywide Sign Design Guidelines*. November 18, 2008.



consistent with the project site's designation as Agriculture in the General Plan or the PD 3-89 zoning district. Therefore, the proposed project would conflict with applicable zoning, creating a potentially significant impact on aesthetics that was not previously addressed in 2009 EIR because the Wildhorse Ranch Project did include a General Plan land use designation and zoning amendment. This impact would be potentially significant despite the fact that the proposed project would involve similar development as the Wildhorse Ranch Project, with a net reduction of 16 residential units.

In general, the proposed project would consist of a mixed-use development community, including a total of 175 dwelling units, comprised primarily of single-family units, as well as up to 45 multi-family residences, whereas the Wildhorse Ranch Project would have included 191 units. Therefore, development of the proposed project would be generally similar to what was previously anticipated and approved by the City as part of the Wildhorse Ranch Project. While the currently proposed project would include a 1.4-acre site for the future construction of a USA Pentathlon Training Facility and pool complex, the maximum building height of the training facility would be two stories, which would be less than the maximum height of the three-story single-family townhomes approved for that portion of the Wildhorse Ranch Project. Additionally, although the proposed multi-family apartment building could feature up to four stories, this would not be considered a substantial increase over the previously approved three-story townhomes. Siting the proposed apartment building along East Covell Boulevard would also allow for visually intrusive elements, such as trash enclosures and parking lots, to be sited behind the building and out of public views. Furthermore, the proposed project would include new landscaping trees along the East Covell Boulevard frontage which would help to screen views of the site, including the multi-family apartments, USA Pentathlon Training Facility, and associated surface parking areas, from motorists, bicyclists, and pedestrians traveling along East Covell Boulevard. The selection and placement of the new landscaping trees would be subject to review and approval by the Community Development and Sustainability Director, as established by Davis Municipal Code Section 40.31.040, to ensure that screening is sufficiently provided in accordance with City standards. Thus, development of the proposed project would be, on the whole, visually consistent with the uses anticipated and approved for the site as part of the Wildhorse Ranch Project.

As noted above, the proposed project was submitted pursuant to a settlement agreement with the City that provides that the project will be processed without legislative entitlements, including a General Plan amendment or zoning amendment. Under Builder's Remedy, the City cannot deny the project based on inconsistency with the General Plan or zoning code. For these reasons, this inconsistency cannot be fully mitigated. Notwithstanding, this inconsistency can be partially mitigated by the implementation of new Mitigation Measure SEIR 4.1-2, which would require that the project comply with conditions of approval imposed by the City on the project's Tentative Map in order to ensure visual consistency with adjacent uses to the north, south, and west of the project site.

The properties in the immediate vicinity of the project site within the Wildhorse and Slide Hill Park neighborhoods are currently developed with residential uses. In addition, the Cannery Project was relatively recently developed to the west of the Wildhorse subdivision and includes residential uses, including multi-family, as well as commercial uses. To partially mitigate the aesthetic impact of the proposed project,



the City will require Conditions of Approval that would impose development standards on the proposed project, including, but not limited to, conditions regulating lotting layout, setbacks, building height, structural design, landscaping, and the general appearance of the project. These conditions will be intended to create visual consistency with the surrounding neighborhoods.

Based on the above, the proposed project, unlike the Wildhorse Ranch Project, would be inconsistent with the General Plan land use designation and PD zoning for the project site. Therefore, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to conflicts with zoning and other regulations governing scenic quality beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

Even with the imposition of new Mitigation Measure SEIR 4.1-2, the development of the project site with the currently proposed uses would be inconsistent with the designation of the site in the General Plan as Agricultural and its PD 3-89 zoning, potentially resulting in a *significant and unavoidable* impact.

*SEIR 4.1-2 The project shall comply with Conditions of Approval on the Tentative Map with respect to aspects of project design, including, but not limited to, lotting layout, setbacks, height limitations, structural design, landscaping, and appearance of the project intended to create visual consistency with adjacent uses to the north, south, and west of the project site. Such conditions shall be developed by the City with the intent of imposing development standards on the project similar to what is required for the adjacent Planned Development (PD) zoning districts to ensure aesthetic compatibility with the surrounding areas and scenic quality.*

**4.1-3 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts related to light and glare under Impact 4.7-2 and concluded that development of the new residential units would have generated new sources of light and glare, such as residential lighting, streetlights, and lighting associated with the project's open space amenities. In order to reduce impacts from



light and glare, as well as increase neighborhood cohesion, the applicant proposed the dedication of an additional 20 feet to each property owner adjacent to the north and west boundary of the project. In addition, the project included an orchard and open space area between the existing residences to the west of the project site and the proposed residences. The greenbelt dedication and open space area would have helped to reduce light and glare impacts resulting from the project. In addition, the exterior lighting for the project would have been appropriately shielded, consistent with General Plan Policy UD 3.2. However, because final details regarding proper shielding and placement of all on-site lighting had not yet been prepared, the 2009 EIR determined that a significant impact could occur and required Mitigation Measures 4.7-2(a) and 4.7-2(b), which required preparation a lighting plan subject to review and approval by the Chief Building Official of the City of Davis and preparation of a street lighting plan subject to review and approval by the City Engineer, respectively. Through compliance with the foregoing measures, the 2009 EIR concluded that a less-than-significant impact would occur.

Similar to the Wildhorse Ranch Project, the currently proposed project would also consist of new residences, on-site roadways, associated utility improvements, and open space, landscaping, and trails. Individual homes within the project site would introduce new sources of night lighting in the form of exterior light sources such as porch and patio lights, architectural accent lighting, motion-activated security lighting, driveway lighting, landscape lighting, and interior lighting visible through windows. In addition, the proposed USA Pentathlon Training Facility and pool complex could introduce new sources of night lighting, such as security lighting. New sources of glare would occur primarily from the windshields of vehicles travelling within the project site, as well as through the use of reflective building materials, including polished steel and reflective glass. All exterior lighting installed as part of the proposed project would be designed consistent with General Plan Policy UD 3.2, ensuring shielding fixtures are installed in such a manner as to prevent direct rays from passing property lines or into the public right-of-way. In addition, new lighting would be required to comply with the City's Outdoor Lighting Control Ordinance, which provides standards for outdoor lighting to minimize light pollution, glare, and light trespass. Compliance with General Plan Policy UD 3.2 and the City's Outdoor Lighting Control Ordinance would ensure that development of the currently proposed project results in sources of light and/or glare substantially similar to the lighting approved as part of the Wildhorse Ranch Project. The proposed project would also include a 20-foot-wide buffer along the western and northern site boundaries, similar to the Wildhorse Ranch Project; albeit, the proposed 20-foot-wide tree buffer would be located in an on-site easement instead of within dedicated land to owners of the new residences. Nonetheless, similar to the Wildhorse Ranch Project, the currently proposed project would be subject to Mitigation Measures 4.7-2(a) and 4.7-2(b), as the proposed project would still require submittal and City approval of a lighting plan and a street lighting plan.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to the creation of new sources of substantial light or glare beyond what was previously identified in the 2009 EIR.





### Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

### Modified Mitigation Measure(s)

The following mitigation measures from the 2009 EIR have been modified to correct a minor typographical error and ensure applicability to the currently proposed project. Minor modifications are shown in ~~strike through~~ and double-underline. Implementation of the following mitigation measure from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

4.7-2(a) *Prior to ~~issuance of the first building permit~~ approval of the subdivision improvement plans, the developer shall submit a street lighting plan for review and approval by the City Engineer. ~~Street lightning shall be limited to reduced height low-profile fixtures.~~ The Plan shall comply with Chapter 6 of the Davis Municipal Code- Article VIII: Outdoor Lighting Control, and the most recent edition of City standards and specifications.*

4.7-2(b) *Prior to the issuance of building permits for the multi-family apartments and USA Pentathlon Training Facility, the developer shall submit a lighting plan for the review and approval of the Chief Building Official and the Community Development Director of the City of Davis. ~~The lighting plan shall include shielding on all light fixtures and shall address-limiting light trespass and glare~~ on the multi-family apartment site and the USA Pentathlon Training Facility through the use of shielding and directional lighting methods, including which may include, but is not limited to, fixture location and height. The Plan shall comply with Chapter 6 of the Davis Municipal Code- Article VIII: Outdoor Lighting Control.*

### New Mitigation Measure(s)

*None required.*

## **Cumulative Impacts and Mitigation Measures**

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare or shadows at one location is not worsened by glare or shadows created at another location. Rather these effects are independent, and the determination as to whether they are adverse is specific to the project and location where they are created. Projects that block a public view or affect the visual quality of a site also have localized aesthetic impacts. The impact occurs specific to a site or area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific site.





Two types of aesthetic impacts may be additive in nature and, thus, cumulative, including night sky lighting and overall changes in the visual environment as the result of increasing urbanization of large areas. As development in one area increases and possibly expands over time and meets or connects with development in an adjoining exurban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed. Similarly, as development in one area changes from rural to urban, and this pattern continues to occur throughout the undeveloped areas of a jurisdiction, the changes in visual character may become additive and cumulatively considerable. The proposed project's incremental contribution to night sky lighting and changes in visual character are addressed below.

The cumulative setting for impacts related to aesthetics encompasses development of the proposed project in conjunction with buildout of the Davis General Plan planning area, as well as a list of present and probable future projects. For more details regarding the cumulative setting, refer to Chapter 5, Statutorily Required Sections, of this SEIR.

**4.1-4 Long-term changes in visual character associated with development of the proposed project in combination with future buildout of the City of Davis and present and probable future projects. Based on the analysis below, the currently proposed project would result in a new significant cumulative impact or substantially more severe significant cumulative impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential long-term impacts to the visual character of the region from the Wildhorse Ranch Project in combination with existing and future developments in the Davis area under Impact 4.7-4 and found that a significant and unavoidable impact would occur. As discussed therein, the Wildhorse Ranch Project would have contributed to the cumulative change in visual character of an agricultural area within the City of Davis. The properties in the immediate vicinity of the project site were developed for residential uses with the exception of the land east of the project site, which was used for agricultural purposes. Therefore, in terms of the change in the visual character of the project area, the 2009 EIR determined that development of the Wildhorse Ranch Project would have been typical of what currently exists north, west, and south of the project site. However, the character of the area would have changed from flat fields and roadways to residences with trees and a greenbelt area. Therefore, the 2009 EIR concluded that the conversion of the project site, in addition to other lands in the project area, from a rural to urban setting would result in a substantial change to the visual character of the region, and feasible mitigation did not exist to reduce the impact to a less-than-significant level.

The cumulative analysis in this SEIR is based upon development of the proposed project in conjunction with buildout of the Davis General Plan planning area, as well as a list of present and probable future projects. In addition to the proposed project, present and future probable projects along the Mace Boulevard/East Covell Boulevard corridor include the Davis Innovation and Sustainability Campus (DiSC) 2022 Project, Shriners Property Project, and Village Farms Davis Project.



The sites of the DiSC 2022 and Shriners Property projects are both located on existing agricultural land outside of the City limits along Mace Boulevard/East Covell Boulevard to the east of the project site. The DiSC 2022 Project site consists of 102 acres (plus the 16.5-acre Mace Triangle property) immediately to the east of Mace Boulevard and north of County Road (CR) 32A, northeast of the City limits. The Shriners Property Project site is comprised of 234 acres to the north of East Covell Boulevard, immediately east of the Palomino Place Project site and the Wildhorse neighborhood and adjacent to the northeastern City limits boundary. Given the setting of the two sites, as well as their locations in the unincorporated portion of Yolo County, the sites are considered nonurbanized, and the relevant threshold is whether buildout of the DiSC 2022 and Shriners Property projects would substantially degrade the existing visual character or quality of public views of the sites and their surroundings.

Existing public views of the DiSC 2022 Project site along Mace Boulevard are characterized primarily by active agricultural land. Existing public views of the Shriners Property Project along East Covell Boulevard is similarly characterized by active agricultural land. Though rejected by the voters in November 2022, the City previously approved the DiSC 2022 Project, and the project is currently still eligible to try again for voter approval. The DiSC 2022 Project included a mix of office, research and development, and laboratory uses; advanced manufacturing, prototyping, and product testing uses; ancillary retail; 460 residential units; a hotel and conference center; green space; and a transit plaza. The Shriners Property Project is anticipated to include a variety of residential uses totaling 1,200 units; parks and recreation areas, including a community park; a transit station; and a new trail system. Development of the foregoing uses as part of the DiSC 2022 and Shriners Property projects would result in the urbanization of active agricultural land, which could be considered a cumulatively significant change to the overall landscape along Mace Boulevard and East Covell Boulevard.

With respect to the proposed project, as discussed above under Impact 4.1-2, the project site is considered urbanized and the relevant threshold is whether the proposed project would conflict with applicable zoning and other regulations governing scenic quality, as the project site is located in an urbanized area. As previously discussed, the proposed project would be required to comply with applicable General Plan policies and Davis Municipal Code regulations related to urban design and scenic quality, including General Plan Policies UD 2.1, UD 2.2, UD 2.3, and UD 2.5, among others. The proposed project would be consistent with the foregoing policies, as the project site generally does not include natural habitat, nor resources reflective of place and history. The proposed project would include approximately 2.76 acres of open space and 0.46-acre of trails, a 20-foot-wide tree buffer located along the western and northern site boundaries within a private easement for tree plantings, and new plantings of native, drought-tolerant new trees, shrubs, and seasonal grasses along the East Covell Boulevard project frontage, internal street network, and northern and western site boundaries. The Pentathlon facility would also be subject to the City's Site Plan and Architectural Review process, established by Davis Municipal Code Article 40.31. Furthermore, the proposed project would be subject to Conditions of Approval that would require compliance with the City's objective design standards, as well as consistency with the adjacent uses to the north, south, and west of the project site, which consist primarily of residential uses associated with the Wildhorse and Slide Hill Park neighborhoods. However, because the proposed project was submitted pursuant



to Builder's Remedy and without any legislative entitlements, the proposed project is not consistent with the project site's designation as Agriculture in the General Plan or the PD 3-89 zoning district; and the project is not required as part of project approval to demonstrate consistency with standards established by the Agriculture land use designation and PD 3-89 zoning district, including those associated with scenic quality. Therefore, the proposed project would conflict with applicable zoning, creating a potentially significant impact on aesthetics that was not previously addressed in 2009 EIR because the Wildhorse Ranch Project did include a General Plan land use designation and zoning amendment. This impact would be potentially significant despite the fact that the proposed project would involve similar development as the Wildhorse Ranch Project, with a net reduction of 16 residential units. Under Builder's Remedy, the City cannot deny the project based on inconsistency with the General Plan or zoning code. For these reasons, this inconsistency cannot be fully mitigated. Notwithstanding, this inconsistency can be partially mitigated by the implementation of new Mitigation Measure SEIR 4.1-2, which would require that the project comply with conditions of approval imposed by the City on the project's Tentative Map in order to ensure visual consistency with adjacent uses to the north, south, and west of the project site.

Finally, the Village Farms Davis Project is currently proposed for development on a 497.6-acre site north of East Covell Boulevard, east of F Street, and west of Pole Line Road in a currently unincorporated portion of Yolo County. The Village Farms Davis Project site is located adjacent to existing development, including the Cannery development to the west; single- and multi-family residences, the Nugget Fields sports center, Wildhorse Golf Club, and commercial offices to the east; and commercial uses, single- and multi-family residences, and commercial offices to the south. Thus, the Village Farms Davis Project site is considered to be in an urbanized area. The Village Farms Davis Project would result in development of a mixed-use community, including a total of 1,800 dwelling units, neighborhood services; public, semi-public, and educational uses; associated on-site roadway improvements; utility improvements; parks, open space, and greenbelts; and off-site improvements. The project would require annexation into the City limits and Pre-zoning of the site to the City's PD zone. Similar to the proposed project, the Village Farms Davis Project would be required to demonstrate consistency with applicable policies and regulations governing scenic quality, including General Plan Policies UD 2.1, UD 2.2, UD 2.3, and UD 2.5 and Davis Municipal Code Section 40.22.060. The Village Farms Davis Project's compliance with the foregoing policies and regulations will be evaluated further in the EIR being prepared for the project.

Overall, the landscape along Mace Boulevard and East Covell Boulevard could be considered to be significantly changed through cumulative development within the City of Davis. Based on the above discussion, despite the fact that the proposed project would involve similar development as the Wildhorse Ranch Project, the proposed project's incremental contribution to the significant cumulative effect would be cumulatively considerable due to its inconsistency with the site's General Plan land use designation and zoning district related to agricultural uses. Whereas the 2009 EIR identified a significant and unavoidable aesthetic impact, its focus was on changes in visual character of the site and its surroundings, rather than conflicts with scenic regulations. Therefore, this project's contribution to the significant cumulative aesthetic impact is considered a new significant impact.



Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

Even with the imposition of new Mitigation Measure SEIR 4.1-2, development of the project site with the currently proposed uses would be inconsistent with the designation of the site in the General Plan as Agricultural and its PD 3-89 zoning, potentially resulting in a *cumulatively considerable and significant and unavoidable* impact.

*SEIR 4.1-4 Implement Mitigation Measure SEIR 4.1-2.*

**4.1-5 Creation of new sources of light or glare associated with development of the proposed project in combination with future buildout of the City of Davis and present and probable future projects. Based on the analysis below, the currently proposed project would not result in a new significant cumulative impact or substantially more severe significant cumulative impact beyond what was previously identified in the 2009 EIR.**

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create sky glow. Cumulative development throughout the General Plan planning area, particularly conversion of agricultural or currently vacant sites to urban uses, would increase the sources of light and glare, which would have the potential to contribute to sky glow in the area and result in a significant cumulative impact. Such sources of light would be typical of existing residential development in the project vicinity, such as the residential uses to the north, west, and south of the project site.

The 2009 EIR did not evaluate potential cumulative impacts related to the creation of new sources of light or glare. Nonetheless, cumulative development within the General Plan planning area, including the proposed project and future projects within the project vicinity such as the DiSC 2022, Shriners Property, and Village Farms Davis projects, would be subject to existing regulations and guidelines related to light and glare. For example, all projects proposed for construction within the City's General Plan planning area are required to comply with the applicable requirements established in the City's Outdoor Lighting Control Ordinance (set forth by Davis Municipal Code Article 8.17), which provides standards for outdoor lighting to minimize light pollution, glare, and light trespass. Projects within the cumulative setting would also be subject to General Plan Policy UD 3.2, ensuring shielding fixtures are installed in such a manner as to prevent direct rays from passing property lines or into the public right-of-way. Thus, compliance with the foregoing requirements would ensure that buildout of the City's planning area, as well as present and future probable projects, would not create new sources of substantial light or glare.



In addition, as described under Impact 4.1-3 above, Mitigation Measure 4.7-2(a) from the 2009 EIR requires the project developer to prepare a lighting plan, which would be subject to review and approval by the Chief Building Official of the City of Davis, and Mitigation Measure 4.7-2(b) from the 2009 EIR requires the developer to prepare a street lighting plan, which would be subject to review and approval by the City Engineer. Both the lighting plan and street lighting plan would be required to comply with the Outdoor Lighting Control Ordinance. Therefore, the proposed project would not create new sources of substantial light or glare.

Based on the above, the currently proposed project would not result in a new significant cumulative impact or substantially more severe significant cumulative impact related to the creation of new sources of light or glare beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*



---

---

## **4.2 AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY**

---

---



## 4.2 AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY

### 4.2.1 INTRODUCTION

Pursuant to CEQA Guidelines Section 15162, the Air Quality, Greenhouse Gas Emissions, and Energy chapter of this Subsequent EIR (SEIR) assesses whether the proposed changes to the Wildhorse Ranch Project would result in a new significant impact not previously identified within the adopted 2009 Wildhorse Ranch Project EIR (2009 EIR), or a substantial increase in the severity of a significant impact previously identified in the 2009 EIR related to local and regional air quality emissions, greenhouse gas (GHG) emissions and climate change, and energy.

The chapter is primarily based on information included in the Davis General Plan<sup>1</sup> and associated EIR,<sup>2</sup> the Yolo-Solano Air Quality Management District (YSAQMD) Handbook for Assessing and Mitigating Air Quality Impacts,<sup>3</sup> the City of Davis Climate Action and Adaptation Plan (CAAP),<sup>4</sup> and the 2009 EIR, as well as a technical analysis performed by Raney Planning and Management, Inc. (see Appendix C of this SEIR).

### 4.2.2 EXISTING ENVIRONMENTAL SETTING

With respect to air quality, GHG emissions, and energy, several circumstances have changed since the certification of the 2009 EIR. As such, the following information provides an updated overview of the existing environmental setting in relation to air quality within the proposed project area. Current air basin characteristics, ambient air quality standards (AAQS), attainment status and regional air quality plans, local air quality monitoring, odors, and sensitive receptors are discussed. In addition to the information pertaining to air quality, updated information related to climate change and GHGs, as well as energy, is provided.

#### Air Basin Characteristics

The City of Davis is located in Yolo County, within the Yolo-Solano portion of the Sacramento Valley Air Basin (SVAB), which is under the jurisdiction of the YSAQMD. Air quality in the SVAB is largely the result of the following factors: emissions, geography, and meteorology (wind, atmospheric stability, and sunlight). The Sacramento Valley is often described as a bowl-shaped valley, with the SVAB being bounded by the North Coast Ranges on the west, the northern Sierra Nevada Mountains on the east, and the intervening terrain being flat.

The Sacramento Valley has a Mediterranean climate, characterized by hot, dry summers and mild, rainy winters. During the year, the temperature may range from 20 to 115 degrees Fahrenheit, with summer highs usually in the 90-degree Fahrenheit range and winter lows occasionally below freezing. Average annual rainfall is approximately 20 inches, with snowfall

<sup>1</sup> City of Davis. *Davis General Plan*. Adopted May 2001. Amended through January 2007.

<sup>2</sup> City of Davis. *Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School*. January 2000.

<sup>3</sup> Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.

<sup>4</sup> City of Davis. *Climate Action and Adaptation Plan*. April 18, 2023.



being very rare. The winds in the area are moderate in strength and vary from moist, clean breezes from the south to dry land flows from the north.<sup>5</sup>

The mountains surrounding the Sacramento Valley create a barrier to airflow, which can trap air pollutants in the valley when meteorological conditions are right and a temperature inversion exists. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells lie over the valley. The lack of surface wind during autumn and early winter and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in the air. The surface concentrations of pollutants are highest when these conditions are combined with smoke from agricultural burning, which is regulated through YSAQMD permits, or when temperature inversions trap cool air, fog, and pollutants near the ground.

The ozone season (May through October) in the Sacramento Valley is characterized by stagnant morning air or light winds, with the Delta sea breeze arriving in the afternoon out of the southwest. Usually the evening breeze transports the airborne pollutants to the north out of the Sacramento Valley. However, during approximately half of the days from July to September, a phenomenon called the “Schultz Eddy” prevents the transport from occurring. Instead of allowing for the prevailing wind patterns to move north, carrying the pollutants out of the valley, the Schultz Eddy causes the wind pattern and pollutants to circle back southward. The Schultz Eddy effect exacerbates the pollution levels in the area and increases the likelihood of violating the federal and State air quality standards.

### **Ambient Air Quality Standards**

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established AAQS for common pollutants. The federal standards are divided into primary standards, which are designed to protect the public health, and secondary standards, which are designed to protect the public welfare. The AAQS for each contaminant represent safe levels that avoid specific adverse health effects. Pollutants for which AAQS have been established are called “criteria” pollutants. Table 4.2-1 identifies the major pollutants, characteristics, health effects and typical sources. The national and California AAQS (NAAQS and CAAQS, respectively) are summarized in Table 4.2-2. The NAAQS and CAAQS were developed independently with differing purposes and methods. As a result, the national and State standards differ in some cases. In general, the State of California standards are more stringent than the federal standards, particularly for ozone and particulate matter (PM).

A description of each criteria pollutant and its potential health effects is provided in the following section.

### **Ozone**

Ozone is a reactive gas consisting of three oxygen atoms. In the troposphere, ozone is a product of the photochemical process involving the sun's energy, and is a secondary pollutant formed as a result of a complex chemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>) emissions in the presence of sunlight. As such, unlike other pollutants, ozone is not released directly into the atmosphere from any sources. In the stratosphere, ozone exists naturally and shields Earth from harmful incoming ultraviolet radiation. The primary source of

---

<sup>5</sup> Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.



ozone precursors is mobile sources, including cars, trucks, buses, construction equipment, and agricultural equipment.

**Table 4.2-1  
Summary of Criteria Pollutants**

<b>Pollutant</b>	<b>Characteristics</b>	<b>Health Effects</b>	<b>Major Sources</b>
Ozone	A highly reactive gas produced by the photochemical process involving a chemical reaction between the sun's energy and other pollutant emissions. Often called photochemical smog.	<ul style="list-style-type: none"> <li>• Eye irritation</li> <li>• Wheezing, chest pain, dry throat, headache, or nausea</li> <li>• Aggravated respiratory disease such as emphysema, bronchitis, and asthma</li> </ul>	Combustion sources such as factories, automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	An odorless, colorless, highly toxic gas that is formed by the incomplete combustion of fuels.	<ul style="list-style-type: none"> <li>• Impairment of oxygen transport in the bloodstream</li> <li>• Impaired vision, reduced alertness, chest pain, and headaches</li> <li>• Can be fatal in the case of very high concentrations</li> </ul>	Automobile exhaust, combustion of fuels, and combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	A reddish-brown gas that discolors the air and is formed during combustion of fossil fuels under high temperature and pressure.	<ul style="list-style-type: none"> <li>• Lung irritation and damage</li> <li>• Increased risk of acute and chronic respiratory disease</li> </ul>	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants.
Sulfur Dioxide	A colorless, irritating gas with a rotten egg odor formed by combustion of sulfur-containing fossil fuels.	<ul style="list-style-type: none"> <li>• Aggravation of chronic obstruction lung disease</li> <li>• Increased risk of acute and chronic respiratory disease</li> </ul>	Diesel vehicle exhaust, oil-powered power plants, and industrial processes.
Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> )	A complex mixture of extremely small particles and liquid droplets that can easily pass through the throat and nose and enter the lungs.	<ul style="list-style-type: none"> <li>• Aggravation of chronic respiratory disease</li> <li>• Heart and lung disease</li> <li>• Coughing</li> <li>• Bronchitis</li> <li>• Chronic respiratory disease in children</li> <li>• Irregular heartbeat</li> <li>• Nonfatal heart attacks</li> </ul>	Combustion sources such as automobiles, power generation, industrial processes, and wood burning. Also from unpaved roads, farming activities, and fugitive windblown dust.
Lead	A metal found naturally in the environment as well as in manufactured products.	<ul style="list-style-type: none"> <li>• Loss of appetite, weakness, apathy, and miscarriage</li> <li>• Lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract</li> </ul>	Industrial sources and combustion of leaded aviation gasoline.
<p><b>Sources:</b></p> <ul style="list-style-type: none"> <li>• <b>CARB. California Ambient Air Quality Standards (CAAQS). Available at: <a href="https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards">https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards</a>. Accessed March 2024.</b></li> <li>• <b>Sacramento Metropolitan, El Dorado, Feather River, Placer, and Yolo-Solano Air Districts, Spare the Air website. Air Quality Information for the Sacramento Region. Available at: <a href="http://sparetheair.com">sparetheair.com</a>. Accessed March 2024.</b></li> <li>• <b>CARB. Glossary of Air Pollution Terms. Available at: <a href="https://ww2.arb.ca.gov/glossary">https://ww2.arb.ca.gov/glossary</a>. Accessed March 2024.</b></li> </ul>			



**Table 4.2-2  
Ambient Air Quality Standards**

Pollutant	Averaging Time	CAAQS	NAAQS	
			Primary	Secondary
Ozone	1 Hour	0.09 ppm	-	Same as primary
	8 Hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	8 Hour	9 ppm	9 ppm	-
	1 Hour	20 ppm	35 ppm	
Nitrogen Dioxide	Annual Mean	0.030 ppm	53 ppb	Same as primary
	1 Hour	0.18 ppm	100 ppb	-
Sulfur Dioxide	24 Hour	0.04 ppm	-	-
	3 Hour	-	-	0.5 ppm
	1 Hour	0.25 ppm	75 ppb	-
Respirable Particulate Matter (PM <sub>10</sub> )	Annual Mean	20 ug/m <sup>3</sup>	-	Same as primary
	24 Hour	50 ug/m <sup>3</sup>	150 ug/m <sup>3</sup>	
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Mean	12 ug/m <sup>3</sup>	12 ug/m <sup>3</sup>	15 ug/m <sup>3</sup>
	24 Hour	-	35 ug/m <sup>3</sup>	Same as primary
Lead	30 Day Average	1.5 ug/m <sup>3</sup>	-	-
	Calendar Quarter	-	1.5 ug/m <sup>3</sup>	Same as primary
Sulfates	24 Hour	25 ug/m <sup>3</sup>	-	-
Hydrogen Sulfide	1 Hour	0.03 ppm	-	-
Vinyl Chloride	24 Hour	0.010 ppm	-	-
Visibility Reducing Particles	8 Hour	see note below	-	-

ppm = parts per million  
ppb = parts per billion  
µg/m<sup>3</sup> = micrograms per cubic meter

Note: Statewide Visibility Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Source: CARB. Ambient Air Quality Standards. May 4, 2016. Available at: <https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf>. Accessed March 2024.

Ground-level ozone reaches the highest level during the afternoon and early evening hours. High levels occur most often during the summer months. Ground-level ozone is a strong irritant that could cause constriction of the airways, forcing the respiratory system to work harder in order to provide oxygen. Ozone at the Earth's surface causes numerous adverse health effects and is a major component of smog. High concentrations of ground level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments.

### Reactive Organic Gas

ROG refers to several reactive chemical gases composed of hydrocarbon compounds typically found in paints and solvents that contribute to the formation of smog and ozone by involvement in atmospheric chemical reactions. A separate health standard does not exist for ROG. However, some compounds that make up ROG are toxic, such as the carcinogen benzene.



## Oxides of Nitrogen

NO<sub>x</sub> are a family of gaseous nitrogen compounds and are precursors to the formation of ozone and particulate matter. The major component of NO<sub>x</sub>, nitrogen dioxide (NO<sub>2</sub>), is a reddish-brown gas that discolors the air and is toxic at high concentrations. NO<sub>x</sub> results primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicles and fuel combustion are the major sources of NO<sub>x</sub>. NO<sub>x</sub> reacts with ROG to form smog, which could result in adverse impacts to human health, damage the environment, and cause poor visibility. Additionally, NO<sub>x</sub> emissions are a major component of acid rain. Health effects related to NO<sub>x</sub> include lung irritation and lung damage and can cause increased risk of acute and chronic respiratory disease.

### *Nitrogen Dioxide*

A particular oxide of nitrogen that is of concern to human health is NO<sub>2</sub>. NO<sub>2</sub> is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO<sub>2</sub> in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas.

A large body of health science literature indicates that exposure to NO<sub>2</sub> can induce adverse health effects. The strongest health evidence, and the health basis for the AAQS for NO<sub>2</sub>, results from controlled human exposure studies that show that NO<sub>2</sub> exposure can intensify responses to allergens in allergic asthmatics. In addition, several epidemiological studies have demonstrated associations between NO<sub>2</sub> exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO<sub>2</sub> than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO<sub>2</sub> exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.

### **Carbon Monoxide**

Carbon Monoxide (CO) is a colorless, odorless, poisonous gas produced by incomplete burning of carbon-based fuels such as gasoline, oil, and wood. When CO enters the body, the CO combines with chemicals in the body, which prevents blood from carrying oxygen to cells, tissues, and organs. Symptoms of exposure to CO can include problems with vision, reduced alertness, and general reduction in mental and physical functions. Exposure to CO can result in chest pain, headaches, reduced mental alertness, and death at high concentrations.

### **Sulfur Dioxide**

Sulfur dioxide (SO<sub>2</sub>) is a colorless, irritating gas with a rotten egg odor formed primarily by the combustion of sulfur-containing fossil fuels from mobile sources, such as locomotives, ships, and off-road diesel equipment. SO<sub>2</sub> is also emitted from several industrial processes, such as petroleum refining and metal processing. Similar to airborne NO<sub>x</sub>, suspended sulfur oxide particles contribute to poor visibility. The sulfur oxide particles are also a component of PM<sub>10</sub>.





## Particulate Matter

Particulate matter, also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health impacts. The USEPA is concerned about particles that are 10 micrometers in diameter or smaller (PM<sub>10</sub>) because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, the particles could affect the heart and lungs and cause serious health effects. USEPA groups particle pollution into three categories based on their size and where they are deposited:

- "Inhalable coarse particles (PM<sub>2.5-10</sub>)," which are found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. PM<sub>2.5-10</sub> is deposited in the thoracic region of the lungs.
- "Fine particles (PM<sub>2.5</sub>)," which are found in smoke and haze, are 2.5 micrometers in diameter and smaller. PM<sub>2.5</sub> particles could be directly emitted from sources such as forest fires, or could form when gases emitted from power plants, industries, and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.
- "Ultrafine particles (UFP)," are very, very small particles (less than 0.1 micrometers in diameter) largely resulting from the combustion of fossil fuels, meat, wood, and other hydrocarbons. While UFP mass is a small portion of PM<sub>2.5</sub>, their high surface area, deep lung penetration, and transfer into the bloodstream could result in disproportionate health impacts relative to their mass. UFP is not currently regulated separately, but is analyzed as part of PM<sub>2.5</sub>.

PM<sub>10</sub>, PM<sub>2.5</sub>, and UFP include primary pollutants, which are emitted directly to the atmosphere and secondary pollutants, which are formed in the atmosphere by chemical reactions among precursors. Generally speaking, PM<sub>2.5</sub> and UFP are emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM<sub>10</sub> sources include the same sources plus roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust. Long-term PM pollution, especially fine particles, could result in significant health problems including, but not limited to, the following: increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; decreased lung function; aggravated asthma; development of chronic respiratory disease in children; development of chronic bronchitis or obstructive lung disease; irregular heartbeat; heart attacks; and increased blood pressure.

## Lead

Lead is a relatively soft and chemically resistant metal that is a natural constituent of air, water, and the biosphere. Lead forms compounds with both organic and inorganic substances. As an air pollutant, lead is present in small particles. Sources of lead emissions in California include a variety of industrial activities. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels. The use of leaded fuel has been mostly phased out, with the result that ambient concentrations of lead have dropped dramatically. However, because lead was emitted in large amounts from vehicles when leaded gasoline was used, lead is present in many soils (especially urban soils) as a result of airborne dispersion and could become re-suspended into the air.

Because lead is slowly excreted by the human body, exposures to small amounts of lead from a variety of sources could accumulate to harmful levels. Effects from inhalation of lead above the





level of the AAQS may include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms could include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children. Lead also causes cancer.

### **Sulfates**

Sulfates are the fully oxidized ionic form of sulfur and are colorless gases. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. The sulfur is oxidized to SO<sub>2</sub> during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO<sub>2</sub> to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The sulfates standard established by CARB is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, because they are usually acidic, can harm ecosystems and damage materials and property.

### **Hydrogen Sulfide**

Hydrogen sulfide (H<sub>2</sub>S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. Hydrogen sulfide is extremely hazardous in high concentrations, especially in enclosed spaces (800 ppm can cause death).

### **Vinyl Chloride**

Vinyl chloride (C<sub>2</sub>H<sub>3</sub>Cl, also known as VCM) is a colorless gas that does not occur naturally, but is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloroethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

### **Visibility Reducing Particles**

Visibility reducing particles are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

### **Toxic Air Contaminants**

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are also a category of environmental concern. TACs are present in many types of emissions with varying degrees of toxicity. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Common stationary sources of TACs include gasoline stations, dry cleaners, and diesel backup generators, which are subject to YSAQMD stationary source permit requirements. The other, often more significant, common source type is on-road motor vehicles, such as cars and trucks, on freeways and roads, and off-road sources such as construction equipment, ships, and trains.



Fossil fueled combustion engines, including those used in cars, trucks, and some pieces of construction equipment, release at least 40 different TACs. In terms of health risks, the most volatile contaminants are diesel particulate matter (DPM), benzene, formaldehyde, 1,3-butadiene, toluene, xylenes, and acetaldehyde. Gasoline vapors contain several TACs, including benzene, toluene, and xylenes. Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust, DPM, is composed of carbon particles and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of such chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including ROG and NO<sub>x</sub>. Due to the published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects, the CARB has identified DPM from diesel-fueled engines as a TAC. Although a variety of TACs are emitted by fossil fueled combustion engines, the cancer risk due to DPM exposure represents a more significant risk than the other TACs discussed above.<sup>6</sup>

More than 90 percent of DPM is less than one micrometer in diameter, and, thus, DPM is a subset of PM<sub>2.5</sub>. As a California statewide average, DPM comprises about eight percent of PM<sub>2.5</sub> in outdoor air, although DPM levels vary regionally due to the non-uniform distribution of sources throughout the State. Most major sources of diesel emissions, such as ships, trains, and trucks, operate in and around ports, rail yards, and heavily traveled roadways. Such areas are often located near highly populated areas. Thus, elevated DPM levels are mainly an urban problem, with large numbers of people exposed to higher DPM concentrations, resulting in greater health consequences compared to rural areas.

Due to the high levels of diesel activity, high volume freeways, stationary diesel engines, rail yards and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Construction-related activities also have the potential to generate concentrations of DPM from on-road haul trucks and off-road equipment exhaust emissions.

The size of diesel particulates that are of the greatest health concern are fine particles (i.e., PM<sub>2.5</sub>) and UFPs. The small diameter of UFPs imparts the particulates with unique attributes, such as high surface areas and the ability to penetrate deeply into lungs. Once UFPs have been deposited in lungs, the small diameter allows the UFPs to be transferred to the bloodstream. The high surface area of the UFPs also allows for a greater adsorption of other chemicals, which are transported along with the UFPs into the bloodstream of the inhaler, where the chemicals can eventually reach critical organs.<sup>7</sup> The penetration capability of UFPs may contribute to adverse health effects related to heart, lung, and other organ health.<sup>8</sup> UFPs are a subset of DPM and activities that create large amounts of DPM, such as the operations involving heavy diesel-powered engines, also release UFPs. Considering that UFPs are a subset of DPM, and DPM represents a subset of PM<sub>2.5</sub>, estimations of either concentrations or emissions of PM<sub>2.5</sub> or DPM include UFPs.

Health risks from TACs are a function of both the concentration of emissions and the duration of exposure, which typically are associated with long-term exposure and the associated risk of contracting cancer. Health effects of exposure to TACs other than cancer can include birth

<sup>6</sup> California Air Resources Board. *Reducing Toxic Air Pollutants in California's Communities*. February 6, 2002.

<sup>7</sup> Health Effects Institute. *Understanding the Health Effects of Ambient Ultrafine Particles*. January 2013.

<sup>8</sup> South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.



defects, neurological damage, and death. Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level. The identification, regulation, and monitoring of TACs is relatively new compared to criteria air pollutants that have established AAQS. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an AAQS or emission-based threshold.

### Naturally Occurring Asbestos

Another concern related to air quality is naturally occurring asbestos (NOA). Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest and abdominal cavity), and asbestosis (a non-cancerous lung disease which causes scarring of the lungs). Because asbestos is a known carcinogen, NOA is considered a TAC. Sources of asbestos emissions include: unpaved roads or driveways surfaced with ultramafic rock; construction activities in ultramafic rock deposits; or rock quarrying activities where ultramafic rock is present.

According to mapping prepared by the California Geological Survey, Yolo County is not in an area likely to contain NOA.<sup>9</sup> In addition, the project site is located in a developed area of the City and currently contains some existing development. For the aforementioned reasons, NOA is not expected to be present at the project site.

### Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA) require all areas of California to be classified as attainment, nonattainment, or unclassified as to their status with regard to the NAAQS and/or CAAQS. Areas not meeting the NAAQS presented in Table 4.2-2, above, are designated by the USEPA as nonattainment. Further classifications of nonattainment areas are based on the severity of the nonattainment problem, with marginal, moderate, serious, severe, and extreme nonattainment classifications for ozone. Nonattainment classifications for PM range from marginal to serious. Because of the differences between the national and State standards, the designation of nonattainment areas is different under the federal and State legislation. The FCAA requires areas violating the NAAQS to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures for states to use to attain the NAAQS. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of air basins as reported by the agencies with jurisdiction over them. The USEPA reviews SIPs to determine if they conform to the mandates of the FCAA amendments and would achieve air quality goals when implemented.

The CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California and for implementing the CCAA. The CCAA classifies ozone nonattainment areas as moderate, serious, severe, and extreme based on severity of violations of CAAQS. The CCAA requires local air pollution control districts with air quality that is in violation of CAAQS to prepare air quality attainment plans that demonstrate district-wide emission

---

<sup>9</sup> California Department of Conservation, Division of Mines and Geology. *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos*. August 2000.



reductions of five percent per year averaged over consecutive three-year periods, unless an approved alternative measure of progress is developed.

Table 4.2-3 below presents the current attainment status of the jurisdictional area of the YSAQMD, including Yolo County. As shown in the table, Yolo County is in an area designated as attainment for all State and federal AAQS, with the exception of ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. At the federal level, the area is designated as severe nonattainment for the 8-hour ozone standard, nonattainment for the 24-hour PM<sub>2.5</sub> standard, and attainment or unclassified for all other criteria pollutants. At the State level, the area is designated as a nonattainment area for the 1-hour ozone standard, nonattainment for the 8-hour ozone standard, nonattainment for the PM<sub>10</sub> and PM<sub>2.5</sub> standards, and attainment or unclassified for all other State standards. Although the 1-hour federal ozone standard has been revoked, on October 18, 2012, the USEPA officially determined that the Sacramento Federal Nonattainment Area (SFNA), which includes Sacramento and Yolo counties, Placer and El Dorado counties (except Lake Tahoe Basin portions), Solano County (eastern portion), and Sutter County (southern portion), attained the revoked 1-hour ozone NAAQS. The determination became effective November 19, 2012.

<b>Table 4.2-3 Attainment Status</b>		
<b>Pollutant</b>	<b>Designation/Classification</b>	
	<b>Federal Standards</b>	<b>State Standards</b>
Ozone – 1-Hour	Revoked in 2005	<b>Nonattainment</b>
Ozone – 8-Hour	<b>Nonattainment</b>	<b>Nonattainment</b>
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
PM <sub>10</sub> – 24-Hour	Unclassified	<b>Nonattainment</b>
PM <sub>10</sub> – Annual	--	<b>Nonattainment</b>
PM <sub>2.5</sub> – 24-Hour	<b>Nonattainment</b>	--
PM <sub>2.5</sub> – Annual	Unclassified	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Unclassified
<i>Source: YSAQMD. Attainment Status. Available at: <a href="https://www.ysaqmd.org/plans-data/attainment/">https://www.ysaqmd.org/plans-data/attainment/</a>. Accessed March 2024.</i>		

In compliance with the FCAA and CCAA, due to the nonattainment designations, the YSAQMD, along with the other air districts in the SVAB region, is required to develop plans to attain the federal and State standards for ozone and PM. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution would be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area would meet air quality goals. Each of the attainment plans currently in effect are discussed in further detail in the Regulatory Context discussion of this section.

### **Local Air Quality Monitoring**

Air quality is monitored by CARB at various locations to determine which air quality standards are being violated, and to direct emission reduction efforts, such as developing attainment plans and



rules, incentive programs, etc. The nearest local air quality monitoring station to the project site is the Davis-UCD Campus station, located along Campbell Road between Hutchinson Drive and Garrod Road in Davis, approximately 2.75 miles from the project site. The Davis-UCD Campus station does not have data available for PM<sub>2.5</sub> or PM<sub>10</sub>; thus, the nearest station with PM<sub>2.5</sub> and PM<sub>10</sub> data was used, which was the Woodland-Gibson Road station located at 41929 Gibson Road in Woodland, approximately seven miles northwest of the project site. Table 4.2-4 presents the number of days that the NAAQS and CAAQS were exceeded for the three-year period from 2020 to 2022.

<b>Table 4.2-4 Air Quality Data Summary (2020-2022)</b>				
<b>Pollutant</b>	<b>Standard</b>	<b>Days Standard Was Exceeded</b>		
		<b>2020</b>	<b>2021</b>	<b>2022</b>
1-Hour Ozone	State	0	0	0
	Federal	0	0	0
8-Hour Ozone	State	0	2	1
	Federal	0	1	0
24-Hour PM <sub>2.5</sub>	Federal	4	0	0
24-Hour PM <sub>10</sub>	State	11	4	2
	Federal	1	0	0
1-Hour Nitrogen Dioxide	State	0	0	0
	Federal	0	0	0

*Source: CARB. Aerometric Data Analysis and Management (iADAM) System. Available at <http://www.arb.ca.gov/adam/welcome.html>. Accessed March 2024.*

### **Odors**

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Adverse effects of odors on residential areas and other sensitive receptors warrant the closest scrutiny; but consideration is also be given to other land use types where people congregate, such as recreational facilities, worksites, and commercial areas. The potential for an odor impact is dependent on a number of variables including the nature of the odor source, distance between a receptor and an odor source, and local meteorological conditions.

One of the most important factors influencing the potential for an odor impact to occur is the distance between the odor source and receptors, also referred to as a buffer zone or setback. The greater the distance between an odor source and receptor, the less concentrated the odor emission would be when reaching the receptor.

Meteorological conditions also affect the dispersion of odor emissions, which determines the exposure concentration of odiferous compounds at receptors. The predominant wind direction in an area influences which receptors are exposed to the odiferous compounds generated by a nearby source. Receptors located upwind from a large odor source may not be affected due to the produced odiferous compounds being dispersed away from the receptors. Wind speed also influences the degree to which odor emissions are dispersed away from any area.

Odiferous compounds could be generated from a variety of source types including both construction and operational activities. Examples of common land use types that typically generate significant odor impacts include, but are not limited to, wastewater treatment plants,





sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants.

### **Sensitive Receptors**

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. In the vicinity of the project site, sensitive land uses include residential uses adjacent to the site's northern and western boundaries, as well as residential uses to the south, across East Covell Boulevard. The nearest residence is located approximately 25 feet from the project site's western boundary.

### **Greenhouse Gas Emissions**

GHGs are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the Earth's atmosphere. Some GHGs occur naturally and are emitted into the atmosphere through both natural processes and human activities. Other GHGs are created and emitted solely through human activities. The principal GHGs that enter the atmosphere due to human activities are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated carbons. Other common GHGs include water vapor, ozone, and aerosols. The increase in atmospheric concentrations of GHG due to human activities has resulted in more heat being held within the atmosphere, which is the accepted explanation for global climate change.

The primary GHG emitted by human activities is CO<sub>2</sub>, with the next largest components being CH<sub>4</sub> and N<sub>2</sub>O. A wide variety of human activities result in the emission of CO<sub>2</sub>. Some of the largest sources of CO<sub>2</sub> include the burning of fossil fuels for transportation and electricity, industrial processes including fertilizer production, agricultural processing, and cement production. The primary sources of CH<sub>4</sub> emissions include domestic livestock sources, decomposition of wastes in landfills, releases from natural gas systems, coal mine seepage, and manure management. The main human activities producing N<sub>2</sub>O are agricultural soil management, fuel combustion in motor vehicles, nitric acid production, manure management, and stationary fuel combustion. Emissions of GHG by economic sector indicate that transportation-related activities account for the majority of U.S. emissions. Transportation is the largest single-source of GHG emissions, and electricity generation is the second largest source, followed by industrial activities. The agricultural, commercial, and residential sectors account for the remainder of GHG emission sources.<sup>10</sup>

Emissions of GHG are partially offset by uptake of carbon and sequestration in trees, agricultural soils, landfilled yard trimmings and food scraps, and absorption of CO<sub>2</sub> by the Earth's oceans. Additional emission reduction measures for GHG could include, but are not limited to, compliance with local, State, or federal plans or strategies for GHG reductions, on-site and off-site mitigation, and project design features. Attainment concentration standards for GHGs have not been established by the federal or State government.

---

<sup>10</sup> U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>. Accessed March 2024.





## Global Warming Potential

Global warming potential (GWP) is one type of simplified index (based upon radiative properties) that can be used to estimate the potential future impacts of emissions of various gases. According to the USEPA, the GWP of a gas, or aerosol, to trap heat in the atmosphere is the “cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas.” The reference gas for comparison is CO<sub>2</sub>. GWP is based on a number of factors, including the heat-absorbing ability of each gas relative to that of CO<sub>2</sub>, as well as the decay rate of each gas relative to that of CO<sub>2</sub>. Each gas’s GWP is determined by comparing the radiative forcing associated with emissions of that gas versus the radiative forcing associated with emissions of the same mass of CO<sub>2</sub>, for which the GWP is set at one. Methane gas, for example, is estimated by the USEPA to have a comparative global warming potential 25 times greater than that of CO<sub>2</sub>, as shown in Table 4.2-5.

<b>Gas</b>	<b>Atmospheric Lifetime (years)</b>	<b>GWP (100-year time horizon)</b>
Carbon Dioxide (CO <sub>2</sub> )	See footnote <sup>1</sup>	1
Methane (CH <sub>4</sub> )	12	25
Nitrous Oxide (N <sub>2</sub> O)	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF <sub>4</sub> )	50,000	7,390
PFC: Hexafluoroethane (C <sub>2</sub> F <sub>6</sub> )	10,000	12,200
Sulfur Hexafluoride (SF <sub>6</sub> )	3,200	22,800

<sup>1</sup> For a given amount of CO<sub>2</sub> emitted, some fraction of the atmospheric increase in concentration is quickly absorbed by the oceans and terrestrial vegetation, some fraction of the atmospheric increase will only slowly decrease over a number of years, and a small portion of the increase will remain for many centuries or more.

**Source: USEPA. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019 [Table 1-2]. April 14, 2021.**

As shown in the table, at the extreme end of the scale, sulfur hexafluoride is estimated to have a comparative GWP 22,800 times that of CO<sub>2</sub>. The atmospheric lifetimes of such GHGs are estimated by the USEPA to vary from 50 to 200 years for CO<sub>2</sub>, to 50,000 years for CF<sub>4</sub>. Longer atmospheric lifetimes allow GHG to buildup in the atmosphere; therefore, longer lifetimes correlate with the GWP of a gas. The common indicator for GHG is expressed in terms of metric tons of CO<sub>2</sub> equivalents (MTCO<sub>2</sub>e), which is calculated based on the GWP for each pollutant.

## Effects of Global Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The Intergovernmental Panel on Climate Change’s (IPCC) *Climate Change 2021: The Physical Science Basis* report, indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia.<sup>11</sup>

<sup>11</sup> Intergovernmental Panel on Climate Change. *Climate Change 2021: The Physical Science Basis Summary for Policymakers*. Available at: [https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_SPM.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf). Accessed March 2024.



Signs that global climate change has occurred include:

- Warming of the atmosphere and ocean;
- Diminished amounts of snow and ice;
- Rising sea levels; and
- Ocean acidification.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment (OEHHA) identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernable evidence that climate change is occurring in California and is having significant, measurable impacts in the State. Changes in the State's climate have been observed, including:

- An increase in annual average air temperature with record warmth in recent years;
- More frequent extreme heat events;
- More extreme drought;
- A decline in winter chill; and
- An increase in variability of statewide precipitation.

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers and snowpack—upon which the State depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the State's annual water supply. Impacts of climate on physical systems have been observed, such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters. Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed, including climate change impacts on terrestrial, marine, and freshwater ecosystems. However, it should be noted that the effects of climate change are not fully understood. For example, due to a series of atmospheric rivers that occurred throughout the 2022-2023 winter season, California saw the most snow the State has seen since the record was set in the 1982-1983 winter season. The California Department of Water Resources (DWR) has noted that the snowpack in the Sierra was 205 percent of the average in February 2023,<sup>12</sup> 190 percent of the average for March 2023,<sup>13</sup> 237 percent of the average for April 2023,<sup>14</sup> and 254 percent of the average for May of 2023.<sup>15</sup>

---

<sup>12</sup> California Department of Water Resources. *Second Snow Survey Reflects Boost from Atmospheric Rivers*. Available at: <https://water.ca.gov/News/News-Releases/2023/Feb-23/Second-Snow-Survey-Reflects-Boost-from-Atmospheric-Rivers>. Accessed March 2024.

<sup>13</sup> California Department of Water Resources. *California's Snowpack Shows Huge Gains from Recent Storms*. Available at: <https://water.ca.gov/News/News-Releases/2023/March-23/March-2023-Snow-Survey>. Accessed March 2024.

<sup>14</sup> California Department of Water Resources. *California's Snowpack is Now One of the Largest Ever, Bringing Drought Relief, Flooding Concerns*. Available at: <https://water.ca.gov/News/News-Releases/2023/April-23/Snow-Survey-April-2023>. Accessed March 2024.

<sup>15</sup> California Department of Water Resources. *DWR Conducts May 1 Snow Survey to Continue to Collect Data on Spring Runoff*. Available at: <https://water.ca.gov/News/News-Releases/2023/May-2023/May-2023-Snow-Survey>. Accessed March 2024.



Nonetheless, according to the Climate Change Vulnerability Assessment conducted as part of the City's CAAP, like much of California, the City is already experiencing impacts from extreme heat events, flooding and extreme precipitation, drought and poor air quality caused by wildfire smoke. The Climate Change Vulnerability Assessment identified how such impacts are likely to change through mid-century and end-of-century timeframes. Specifically, projected changes include an increase in the number of extreme heat days, increased wildfire frequency and intensity, more intense precipitation events, and more frequent and/or prolonged droughts.<sup>16</sup>

### **Energy Use in California**

California is one of the highest energy demanding states within the nation. According to the U.S. Department of Energy, the State consumes approximately 303,300 gigawatt-hours (GWh) of electricity per year.<sup>17</sup> Activities such as heating and cooling structures, lighting, the movement of goods, agricultural production, and other facets of daily life consume a variety of energy sources. However, despite California's high rate of energy use, the State has one of the lowest per capita energy consumption levels in the U.S.

In 2022, California was the fourth-largest electricity producer in the nation. Energy within the State is provided primarily to consumers through a mix of sources including natural gas, hydroelectric, non-hydroelectric renewable sources, nuclear, coal, and petroleum. California is the nation's top producer of electricity from solar, geothermal, and biomass energy. Renewable resources, including hydroelectric power and small-scale (less than 1-megawatt [MW]), customer-sited solar photovoltaic (PV) systems, accounted for 49 percent of California's in-state electricity generation; natural gas-fired power plants fueled another 42 percent of the State's energy generation; and nuclear power supplied almost all the rest.

Figure 4.2-1 presents the sources that are used to produce energy in the State. As presented therein, energy is mostly generated from natural gas combustion, followed by non-hydroelectric renewables (such as wind and solar) and hydroelectric. Figure 4.2-2 presents energy consumption within California for the most recent year for which data is available (2021). As shown in the figure, transportation-related activity consumes the largest single share of energy within the State. The second largest consumer is the industrial sector.

Of the total electricity supplied to the State in the year 2022, Yolo County consumed approximately 1,797 GWh,<sup>18</sup> which constitutes approximately 0.6 percent of the total energy consumed annually within the State.

### **Energy Consumption at the Project Site**

Historically, electricity and natural gas has been supplied to the City of Davis by PG&E. However, on October 25, 2016, the Davis City Council adopted Resolution Number 16-153, Series 2016, which approved the Joint Exercise of Powers Agreement with Yolo County to form the Valley Clean Energy Alliance, now referred to as Valley Clean Energy (VCE). The resolution adopted by the City, along with similar resolutions adopted by the City of Woodland and Yolo County, led to the formation of the VCE Joint Powers Authority.

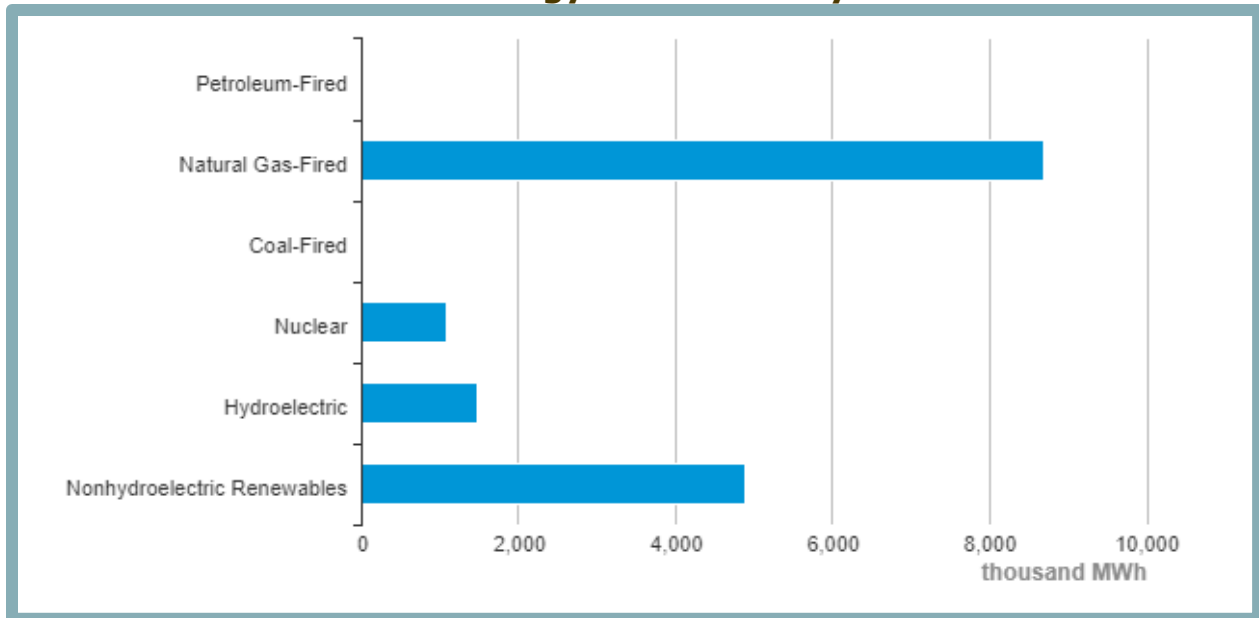
<sup>16</sup> City of Davis. *Climate Action and Adaptation Plan* [pg. 42]. April 18, 2023.

<sup>17</sup> U.S. Department of Energy. *State of California Energy Sector Risk Profile*. March 2021.

<sup>18</sup> California Energy Commission. *Electricity Consumption by County*. Available at: <http://ecdms.energy.ca.gov/electbycounty.aspx>. Accessed March 2024.

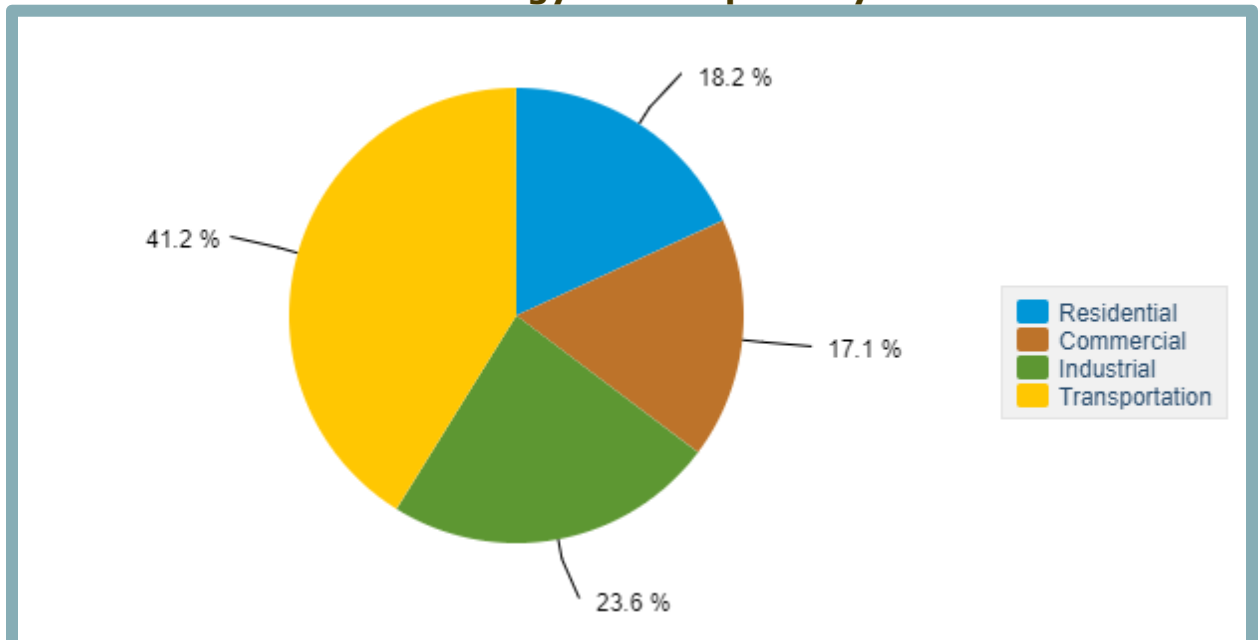


**Figure 4.2-1  
California Energy Generation by Source**



Source: U.S. Energy Information Administration. California: State Profile and Energy Estimates. Available at: <https://www.eia.gov/state/index.php?sid=CA>. Accessed March 2024.

**Figure 4.2-2  
California Energy Consumption by Sector**



Source: U.S. Energy Information Administration. California: State Profile and Energy Estimates. Available at: <https://www.eia.gov/state/index.php?sid=CA>. Accessed March 2024.



Beginning in June 2018, the VCE started serving the electricity needs of the cities of Woodland and Davis, as well as unincorporated areas of Yolo County. Customers within the participating areas have the opportunity to continue receiving service from PG&E or to receive energy procured by VCE. VCE plans to provide energy with a higher renewable content and lower associated GHG emissions than PG&E. While VCE supplies the energy for customers enrolled in the VCE program, VCE electricity is transmitted through PG&E-owned-and-operated distribution and power lines. PG&E will continue to provide natural gas supplies to the City.

Energy demand associated with the project site currently occurs from operation of the existing ranch home and two duplexes. In addition, as discussed throughout this SEIR, the environmental baseline for this SEIR is appropriately considered to be the approved Wildhorse Ranch Project. Energy demand associated with the Wildhorse Ranch Project would have occurred as a result of the operation of the approved 191 residential units. Typical energy use associated with such existing and approved uses include electricity for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, appliances, and more. Maintenance activities, such as landscape maintenance, also involve the use of electric- or gas-powered equipment. In addition to on-site energy use, the existing uses on-site result in transportation energy use associated with vehicle trips generated by residents and visitors.

### **Public Safety Power Shutoffs**

In an effort to prevent fires, PG&E initiated public safety power shutoffs (PSPS) in 2019, which may continue in subsequent years until fire risks associated with power lines are decreased. PSPS events involve PG&E turning off electrical service during times when the weather is predicted to have a heightened fire risk from gusty winds and dry conditions. Dependent on the fire risks, the power outage events may occur in specific areas or for all PG&E customers across the City. Based on the project site's location, the site is located within an area that is more likely to be affected by a PSPS event.<sup>19</sup> However, according to PG&E, zero PSPS events have occurred within the City of Davis since the initiative began in 2019.

### **4.2.3 REGULATORY CONTEXT**

Air quality, GHG emissions, and energy consumption are monitored and regulated through the efforts of various international, federal, State, and local government agencies. Agencies work jointly and individually to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. All regulations identified in the 2009 EIR would remain applicable to the proposed project. The following section contains a summary of the additional applicable federal, State, and local regulations governing air quality, GHG emissions, and energy that have been enacted since the adoption of the 2009 EIR.

### **Federal Regulations Related to Air Quality**

Additional applicable federal regulations governing air quality have not been enacted since the adoption of the 2009 EIR.

### **Federal Regulations Related to GHG Emissions**

The following are the federal regulations relevant to GHG emissions that have been enacted since the adoption of the 2009 EIR.

<sup>19</sup> Pacific Gas & Electric Co. *Interactive PSPS Planning Map*. Available at: [https://vizmap.ss.pge.com/?\\_ga=2.94997403.624386528.1664230975-1068345172.1664230975](https://vizmap.ss.pge.com/?_ga=2.94997403.624386528.1664230975-1068345172.1664230975). Accessed March 2024.



## Federal Vehicle Standards

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, USEPA, and National Highway Traffic Safety Administration (NHTSA) to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards were projected to achieve emission rates as low as 163 grams of CO<sub>2</sub> per mile by model year 2025 on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if the foregoing emissions level was achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200), and NHTSA intended to set standards for model years 2022 through 2025 in future rulemaking.

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program would have applied to vehicles with model years 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards were expected to lower CO<sub>2</sub> emissions by approximately 1.1 billion metric tons (MT), and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

In August 2018, the USEPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new, less-stringent standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards that were previously in place, the 2018 proposal would increase U.S. fuel consumption by approximately 0.5 million barrels per day, and would impact the global climate by 3/1000<sup>th</sup> of 1°C by 2100. California and other states stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures, and committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the USEPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission-vehicle mandates in California. On March 31, 2020, the USEPA and NHTSA issued the Part Two Rule, which sets CO<sub>2</sub> emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. On January 20, 2021, an Executive Order (EO) was issued on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which includes review of the Part One Rule by April 2021 and review of the Part Two Rule by July 2021. In response to the Part One Rule, in December 2021, the U.S. Department of Transportation withdrew its portions of the "SAFE I" rule. As a result, states are now allowed to issue their own GHG emissions standards and zero-emissions vehicle mandates.<sup>20</sup> In addition, the Part Two Rule was adopted to revise the existing national GHG emission standards for passenger cars and light trucks through model year 2026. These standards are the strongest

---

<sup>20</sup> National Highway Traffic Safety Administration. *In Removing Major Roadblock to State Action on Emissions Standards, U.S. Department of Transportation Advances Biden-Harris Administration's Climate and Jobs Goals*. Available at: <https://www.nhtsa.gov/press-releases/cafe-preemption-final-rule>. Accessed March 2024.





vehicle emissions standards ever established for the light-duty vehicle sector and will result in avoiding more than three billion tons of GHG emissions through 2050.<sup>21</sup>

### **Federal Regulations Related to Energy**

Additional applicable federal regulations governing energy have not been enacted since the adoption of the 2009 EIR.

### **State Regulations Related to Air Quality**

The following discussion summarizes applicable State regulations related to air quality, organized by pollutant type. Only the most prominent and applicable California air quality-related legislation that has been enacted since the certification of the 2009 EIR is included below; however, an exhaustive list and extensive details of California air quality legislation can be found at the CARB website (<http://www.arb.ca.gov/html/lawsregs.htm>).

### **Heavy-Duty Diesel Truck and Bus Regulation**

CARB adopted the final Heavy-Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce DPM and NO<sub>x</sub> emissions from heavy-duty diesel vehicles. The rule requires nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure (ATCM) to limit idling of diesel-fueled commercial vehicles on December 12, 2013. The rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than five minutes at any location (13 CCR 2485).

### **California Health and Safety Code Section 41700**

Section 41700 of the Health and Safety Code states that a person must not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. Section 41700 also applies to sources of objectionable odors.

### **State Regulations Related to GHG Emissions**

The statewide GHG emissions regulatory framework is summarized below. The following text describes EOs, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues. The following discussion does not include an exhaustive list of applicable regulations; rather, only the most prominent and applicable California legislation related to GHG emissions and climate change that has been enacted since the certification of the 2009 EIR is included below.

### **State Climate Change Targets**

California has taken a number of actions to address climate change, including EOs, legislation, and CARB plans and requirements, which are summarized below.

---

<sup>21</sup> U.S. Environmental Protection Agency. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed March 2024.



### EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and Assembly Bill (AB) 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achieving this goal, EO B-30-15 called for an update to the CARB's Climate Change Scoping Plan: A Framework for Change (Scoping Plan) to express the 2030 target in terms of million metric tons (MMT) CO<sub>2</sub>e. The CARB's Scoping Plan is discussed in further detail below. The EO also called for State agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

### Senate Bill (SB) 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the State's climate policies. AB 197 also added two members of the Legislature to the Board as non-voting members; requires CARB to make available and update (at least annually via the CARB's website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

### CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code Section 38561[a]), and to update the Scoping Plan at least once every five years. In 2008, CARB approved the first Scoping Plan. The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives. The key elements of the Scoping Plan include the following:

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
2. Achieving a statewide renewable energy mix of 33 percent;
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
5. Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS) (17 CCR Section 95480, et seq.); and
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.



The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15 percent from 2008 levels by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the State's GHG emission reduction priorities for the next five years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuation of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the State's 1990 emissions level using more recent GWPs identified by the IPCC, from 427 MMT CO<sub>2</sub>e to 431 MMT CO<sub>2</sub>e.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40 percent below 1990 levels by 2030 to keep California on a trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, as set forth in EO S-3-05. In summer 2016, the Legislature affirmed the importance of addressing climate change through passage of SB 32 (Pavley, Chapter 249, Statutes of 2016).

In December 2017, CARB adopted California's 2017 Climate Change Scoping Plan (2017 Scoping Plan) for public review and comment. The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the State's climate change priorities to 2030 and beyond. For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15 percent reduction goal with a recommendation to aim for a community-wide goal of no more than six MTCO<sub>2</sub>e per capita by 2030, and no more than two MTCO<sub>2</sub>e per capita by 2050, which are consistent with the State's long-term goals.

The 2022 Scoping Plan Update was adopted by the CARB in December 2022.<sup>22</sup> The 2022 Scoping Plan builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce GHG emissions by 85 percent below 1990 levels by 2045, as directed by AB 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development,

---

<sup>22</sup> California Air Resources Board. *2022 Scoping Plan Documents*. Available at: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>. Accessed March 2024.



increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

### CARB's Regulations for the Mandatory Reporting of GHG Emissions

CARB's Regulation for the Mandatory Reporting of GHG Emissions (17 California Code of Regulations [CCR] 95100–95157) incorporated by reference certain requirements that the USEPA promulgated in its Final Rule on Mandatory Reporting of GHGs (40 Code of Federal Regulations [CFR] Part 98). In general, entities subject to the Mandatory Reporting Regulation that emit more than 10,000 MTCO<sub>2</sub>e per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MTCO<sub>2</sub>e per year threshold are required to have their GHG emission report verified by a CARB-accredited third party.

### SB 1383

SB 1383 establishes specific targets for the reduction of short-lived climate pollutants (SLCPs) (40 percent below 2013 levels by 2030 for CH<sub>4</sub> and hydrofluorocarbons (HFCs), and 50 percent below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its SLCP Reduction Strategy in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH<sub>4</sub>, and fluorinated gases.

### EO B-55-18/AB 1279

EO B-55-18 (September 2018) establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal. On September 16, 2022, AB 1279, also known as the California Climate Crisis Act, codified the carbon neutrality goal established by EO B-55-18.

## **Mobile Sources**

The following regulations relate to the control of GHG emissions from mobile sources. Mobile sources include both on-road vehicles and off-road equipment.

### Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. By 2025, implementation of the rule is anticipated to reduce emissions of smog-forming pollution from cars by 75 percent compared to the average new car sold in 2015. To reduce GHG emissions, CARB, in conjunction with the USEPA and NHTSA, adopted GHG standards for model year 2017 to 2025 vehicles; the standards were estimated to reduce GHG emissions by 34 percent by 2025. The zero-emissions vehicle program acts as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid electric vehicles (EVs) in the 2018 to 2025 model years.



### EO B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed CARB, California Energy Commission (CEC), California Public Utilities Commission (CPUC), and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

### AB 1236

AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of EV charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based on substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and a feasible method to satisfactorily mitigate or avoid the specific, adverse impact does not exist. The bill provided for appeal of that decision to the planning commission, as specified. AB 1236 required EV charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for EV charging stations. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt the ordinance by September 30, 2017.

## **Water**

The following regulations relate to the conservation of water, which reduces GHG emissions related to electricity demands from the treatment and transportation of water.

### EO B-29-15

In response to a drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives subsequently became permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the State. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance (MWELO) that, among other changes, significantly increases the requirements for landscape water use efficiency, and broadens the applicability of the ordinance to include new development projects with smaller landscape areas.

## **Solid Waste**

The following regulations relate to the generation of solid waste and means to reduce GHG emissions from solid waste produced within the State.

### AB 341

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that the policy goal of the State is that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by





2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the State's policy goal.

### **State Regulations Related to Energy**

The primary State regulatory agencies governing energy consumption are the CEC and the CPUC.

The CEC, created by the Legislature in 1974, has seven major responsibilities: forecasting future energy needs; promoting energy efficiency and conservation by setting the State's appliance and building energy efficiency standards; supporting energy research that advances energy science and technology through research, development, and demonstration projects; developing renewable energy resources; advancing alternative and renewable transportation fuels and technologies; certifying thermal power plants 50 MW and larger; and planning for and directing State response to energy emergencies.<sup>23</sup>

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CPUC is responsible for ensuring that customers have safe, reliable utility service and infrastructure at reasonable rates, regulating utility services, stimulating innovation, and promoting competitive markets.<sup>24</sup>

The State has adopted various regulations aimed at reducing energy consumption, increasing energy efficiency, and mandating sourcing requirements for electricity production. The following includes applicable regulations related to energy that have been enacted since the certification of the 2009 EIR.

### **Building Energy**

The following regulations relate to energy efficiency and energy use reductions in the built environment.

#### **Title 24, Part 6**

Title 24 of the CCR, which is known as the California Building Standards Code (CBSC), was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed periodically, and revised if necessary, by the Building Standards Commission and CEC (Public Resources Code [PRC] Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). The regulations are scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, the standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

---

<sup>23</sup> California Energy Commission. *About the California Energy Commission*. Available at: <http://www.energy.ca.gov/about>. Accessed March 2024.

<sup>24</sup> California Public Utilities Commission. *California Public Utilities Commission*. Available at: <https://www.cpuc.ca.gov/about-cpuc>. Accessed March 2024.





The 2022 Title 24 standards are the currently applicable building energy efficiency standards and became effective on January 1, 2023. Compliance with the 2022 Title 24 Building Energy Efficiency Standards will reduce energy use and associated GHG emissions compared to structures built in compliance with the previous 2019 Title 24 standards. The 2022 Title 24 standards focus on four key areas in newly constructed homes and businesses:<sup>25</sup>

- Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units.
- Establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and EV charging options whenever they choose to adopt those technologies.
- Expanding solar PV system and battery storage standards to make clean energy available onsite and complement the state's progress toward a 100 percent clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

### Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as the CALGreen Code, and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and State-owned buildings and schools and hospitals. The original CALGreen standards have been updated several times. The CALGreen 2022 standards, which are the current standards, improved upon the 2019 CALGreen standards, and went into effect on January 1, 2023. The mandatory standards require the following:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' MWEL0;
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of EV charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. According to Section A4.602 of Appendix A4 of the CALGreen Code, CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent

<sup>25</sup> California Energy Commission. *Energy Commission Adopts Updated Building Standards to Improve Efficiency, Reduce Emissions From Homes and Businesses*. Available at: <https://www.energy.ca.gov/news/2021-08/energy-commission-adopts-updated-building-standards-improve-efficiency-reduce-0>. Accessed March 2024.



permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.

### Title 20

Title 20 of the CCR requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and State standards for federally regulated appliances, State standards for federally regulated appliances, and State standards for non-federally regulated appliances.

### Climate Change Scoping Plan

Expanding and strengthening existing energy efficiency programs as well as building and appliance standards is the key element of the Scoping Plan, as introduced above, related to building energy.

### **Transportation/Fuel Energy**

The following regulations relate to fuel efficiency and energy use reductions in the transportation and motorized vehicle sector.

#### EO B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed CARB, CEC, CPUC, and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

#### AB 1346

AB 1346 (October 2021) prohibits non-electric small off-road engines. Small off-road engines, which are used primarily in lawn and garden equipment, emit high levels of air pollutants and, in 2020, California daily criteria pollutant emissions from small off-road engines were higher than emissions from light-duty passenger cars. Thus, by January 1, 2024, regulations shall prohibit engine exhaust and evaporative emissions from new small off-road engines.



### SB 500

SB 500 (September 2021) requires that, beginning January 1, 2030, to the extent allowed by federal law, any autonomous vehicle that is model year 2031 or later, has a gross vehicle weight rating of less than 8,501 pounds, and is equipped with Level 3, 4, or 5 automation (as defined by the International Society of Automotive Engineers) to be a zero-emission vehicle to be operated on California public roads.

### Climate Change Scoping Plan

The key elements of the Scoping Plan, as introduced above, related to transportation energy include the following:

1. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets; and
2. Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the LCFS (17 CCR Section 95480, et seq.).

### **Renewable Energy and Energy Procurement**

The following regulation relates to the source of electricity provided to consumers within the State, as well as standards related to the generation of electricity within the State.

#### Renewable Portfolio Standard (RPS), SB 350, and SB 100

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California's RPS is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Since the inception of the RPS program, the program has been extended and enhanced multiple times. In 2015, SB 350 extended the State's RPS program by requiring that publicly owned utilities procure 50 percent of their electricity from renewable energy sources by 2030. The requirements of SB 350 were expanded and intensified in 2018 through the adoption of SB 100, which mandated that all electricity generated within the State by publicly owned utilities be generated through carbon-free sources by 2045. In addition, SB 100 increased the previous renewable energy requirement for the year 2030 by 10 percent; thus, requiring that 60 percent of electricity generated by publicly owned utilities originate from renewable sources by the year 2030.

### **Local Regulations**

The following are the regulatory agencies and regulations pertinent to the proposed project on a local level.

The most prominent local regulations related to air quality, GHG emissions, and energy are established by the YSAQMD and the City of Davis, as discussed in further detail below.

### **YSAQMD**

Various local, regional, State and federal agencies share the responsibility for air quality management in Yolo County. The YSAQMD operates at the local level with primary responsibility for attaining and maintaining the federal and State AAQS in Yolo County. The YSAQMD is tasked



with implementing programs and regulations required by the FCAA and the CCAA, including preparing plans to attain federal and State AAQS. The YSAQMD works jointly with the USEPA, CARB, SACOG, other air districts in the region, county and city transportation and planning departments, and various non-governmental organizations to improve air quality through a variety of programs. Programs include the adoption of regulations, policies and guidance, extensive education and public outreach programs, as well as emission reducing incentive programs.

### YSAQMD CEQA Guidance

Nearly all development and mining projects in the region have the potential to generate air pollutants that may increase the difficulty of attaining federal and State AAQS. Therefore, for most projects, evaluation of air quality impacts is required to comply with CEQA. In order to help public agencies evaluate air quality impacts, the YSAQMD has developed the Handbook for Assessing and Mitigating Air Quality Impacts.<sup>26</sup> The YSAQMD's handbook includes screening methodology and recommended thresholds of significance, including mass emission thresholds for construction-related and operational criteria pollutants. Although the YSAQMD's handbook includes emissions thresholds and analysis methodology for criteria pollutants, the YSAQMD has not yet established or adopted methodology or thresholds for the assessment of impacts related to GHG emissions.

### YSAQMD Rules and Regulations

All projects under the jurisdiction of the YSAQMD are required to comply with all applicable YSAQMD rules and regulations. In addition, YSAQMD permit requirements apply to most industrial processes (e.g., manufacturing facilities, food processing), many commercial activities (e.g., print shops, drycleaners, gasoline stations), and other miscellaneous activities (e.g., demolition of buildings containing asbestos and aeration of contaminated soils). The YSAQMD regulations and rules include, but are not limited to, the following:

#### *Regulation II – Prohibition, Exceptions - Requirements*

Regulation II is comprised of prohibitory rules that are written to achieve emission reductions from specific source categories. The rules are applicable to existing sources as well as new sources. Examples of prohibitory rules include Rule 2.1 (Control of Emissions), Rule 2.28 (Cutback and Emulsified Asphalts), Rule 2.5 (Nuisance), Rule 2.11 (Particulate Matter Concentration), Rule 2.14 (Architectural Coatings), and Rule 2.40 (Wood Burning Appliances). Considering the relevance of Rule 2.5 and Rule 2.11 to the proposed activities, both rules are discussed in further depth below.

#### Rule 2.5 – Nuisance

Rule 2.5 prohibits the discharge of sufficient quantities of air contaminants or other materials that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. The rule further protects the public from being subject to air contaminants and other materials that could endanger the comfort, repose, health, or safety of any persons, or could damage business or property.

#### Rule 2.11 – Particulate Matter Concentration

Rule 2.11 is intended to protect the ambient air quality within the YSAQMD's jurisdiction by establishing a standard for PM emissions. Per the definitions of Rule 2.11, PM is

<sup>26</sup> Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.



defined as any material that is emitted as a liquid or solid particles, or gaseous materials that becomes liquid or solid particles when collected at standard conditions. PM meeting the foregoing definition, shall not be released from any single source operation, dust, fumes, or other total suspended particulate matter emissions in excess of 0.1 grain per cubic foot of gas at dry standard conditions.

### **Regulations III – Permit System**

Regulation III is intended to provide an orderly procedure for the review of new sources, and modification and operation of existing sources, of air pollution through the issuance of permits. Regulation III primarily deals with permitting major emission sources and includes, but is not limited to, rules such as General Permit Requirements (Rule 3.1), Exemptions (Rule 3.2), Portable Equipment (Rule 3.3), New Source Review (Rule 3.4), Emission Reduction Credits (Rule 3.5), Emission Statements (Rule 3.7), and Toxics New Source Review (Rule 3.13).

### **Air Quality Attainment Plans**

As a part of the SVAB federal ozone nonattainment area, the YSAQMD works with the other local air districts within the Sacramento area to develop a regional air quality management plan under the FCAA requirement. The currently applicable regional air quality management plan is called the SIP which describes and demonstrates how the Sacramento nonattainment area (in which the project site is located) would attain the required NAAQS by the proposed attainment deadline. In accordance with the requirements of the FCAA, the YSAQMD, along with the other air districts in the region, prepared the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (Ozone Attainment Plan) in December 2008. The CARB determined that the Ozone Attainment Plan met FCAA requirements and approved the Plan on March 26, 2009 as a revision to the SIP. An update to the plan, *2017 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2017 Ozone Attainment Plan), was prepared and adopted by CARB on November 16, 2017. An additional update to the plan was prepared and adopted by CARB on October 15, 2018, and known as the *2018 Updates to the California State Implementation Plan*.

The Ozone Attainment Plan, and subsequent updates, demonstrate how existing and new control strategies would provide the necessary future emission reductions to meet the FCAA requirements, including the NAAQS. It should be noted that in addition to strengthening the 8-hour ozone NAAQS, the USEPA also strengthened the secondary 8-hour ozone NAAQS, making the secondary standard identical to the primary standard. The SVAB remains classified as a severe nonattainment area for ozone with an attainment deadline of 2027. On October 26, 2015, the USEPA released a final implementation rule for the revised NAAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACT) and reasonably available control technology (RACT). The USEPA published designations for areas in attainment/unclassifiable for the 2015 ozone standards. The USEPA identified the entire Yolo County as nonattainment for the 2015 ozone standards.<sup>27</sup>

### **City of Davis**

In addition to the City's General Plan goals and policies, the City of Davis has various strategies for reducing the City's air pollution, GHG emissions, and energy demand. In 1999, Davis joined a

<sup>27</sup> U.S. Environmental Protection Agency. *California Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document*. June 3, 2018.





small group of cities calling for local action and a national policy on climate change. In 2006, the City joined the U.S. Conference of Mayors Climate Protection Agreement that called for local and national action to reduce GHG emissions. In a follow-up action in spring 2007, the Davis City Council unanimously adopted a strategy to reduce the City's GHG emissions. Based on the City Council action, the City joined the *Cities for Climate Protection* (CCP) program along with hundreds of other communities across the globe to reduce GHG emissions at the local level. The program is designed to educate and empower local governments to take action on climate change. The CCP is a performance-oriented campaign that offers a framework for local governments to reduce greenhouse gas emissions and improve livability within their municipalities. As part of this effort, the City of Davis has undertaken various actions to reduce GHG emissions within the City of Davis, including the adoption of the City's CAAP, as well as adoption of local GHG reduction targets, carbon budgets, and carbon allowances for residential land uses.

On March 5, 2019, the Davis City Council adopted a resolution declaring a climate emergency, which proposed a regional mobilization effort to reduce the effects of climate change. As part of the regional mobilization effort, the resolution accelerated the City's previously stated goal of achieving carbon neutrality by the year 2050 to a new carbon neutrality target date of 2040.

The following are the City of Davis regulations pertinent to the proposed project related to air quality, GHG emissions, and energy.

### City of Davis General Plan

The City's General Plan includes the following applicable goals, performance objectives, and policies related to air quality, GHG emissions, and energy.

#### *Air Quality Chapter*

Goal AIR 1. Maintain and strive to improve air quality.

Policy AIR 1.1 Take appropriate measures to meet the AQMD's goal for improved air quality.

#### *Transportation Element*

Goal #2 The Davis transportation system will evolve to improve air quality, reduce carbon emissions, and improve public health by encouraging usage of clean, energy-efficient, active (i.e. human powered), and economically sustainable means of travel.

Performance Objective #2.1 Reduce carbon emissions from the transportation sector by 61 percent by 2035.

Performance Objective #2.2 Reduce vehicle miles traveled (VMT) 39 percent by 2035.

Policy TRANS 1.5 Strive for carbon-neutrality or better from the transportation component of new residential development.





Policy TRANS 1.6	Reduce carbon emissions from the transportation system in Davis by encouraging the use of non-motorized and low carbon transportation modes.
Policy TRANS 1.7	Promote the use of electric vehicles and other low-polluting vehicles, including Neighborhood Electric Vehicles (NEV).
Policy TRANS 1.8	Develop and maintain a work trip-reduction program designed to reduce carbon emissions, criteria pollutants, and local traffic congestion.
Policy TRANS 3.3	Require new development to be designed to maximize transit potential.
Policy TRANS 4.4	Provide pedestrian and bicycle amenities.
Policy TRANS 4.5	Establish and implement bicycle parking standards for new developments and significant redevelopment.

### *Energy Chapter*

Goal ENERGY 1. Reduce per capita energy consumption in Davis.

Policy ENERGY 1.3	Promote the development and use of advanced energy technology and building materials in Davis.
Policy ENERGY 1.5	Encourage the development of energy-efficient subdivisions and buildings.

### Davis Climate Action and Adaptation Plan

The City of Davis adopted the Davis 2020-2040 CAAP in April 2023.<sup>28</sup> The CAAP is designed to place the community on a path to achieve carbon neutrality by 2040.

The CAAP includes measurable GHG emissions reduction and climate change adaptation actions that align with the City's net neutrality goals. When implemented, the actions are anticipated to reduce GHG emissions by 37 percent below 2016 levels by 2030 and set the community on a trajectory toward the 2040 carbon neutrality goal. The CAAP actions are intended to prepare the community for climate change impacts, improve public safety, address environmental justice, and enhance the quality of life for residents. Each action achieves a plan goal, organized by sector, as follows: (1) Building Energy and Design; (2) Transportation and Land Use; (3) Water Conservation and Waste Reduction; (4) Climate Adaptation; and (5) Carbon Removal. The CAAP also aims to reduce energy demand by making buildings more efficient, and expanding local renewable energy development and storage.

The Davis CAAP serves as a Qualified GHG Reduction Strategy under Section 15183.5 of the CEQA Guidelines, simplifying development review for new projects that are consistent with the CAAP.

---

<sup>28</sup> City of Davis. *Climate Action and Adaptation Plan*. April 18, 2023.



## City of Davis Municipal Code

The following City of Davis Municipal Code sections would be applicable to the proposed project.

### *Section 8.01.060*

Section 8.01.060 of the Davis Municipal Code includes updated requirements related to energy efficient water heating systems and undergrounding of all electrical and communication service laterals to any new building or structures.

### *Section 8.01.090*

Section 8.01.090 of the Municipal Code requires mandatory compliance with Tier 1 standards of the CALGreen Code, which would otherwise be voluntary under the CBSC. According to Section A4.602 of Appendix A4 of the CALGreen Code, CALGreen's voluntary Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs.

### *Section 8.01.100*

In addition to all requirements of the California Energy Code applicable to new single-family dwellings and new low-rise multi-family dwellings,<sup>29</sup> Section 8.01.100 of the City of Davis Municipal Code requires that all mixed-fuel dwellings<sup>30</sup> comply with the following:

- a) **New single-family dwellings.** New mixed-fuel, single-family dwellings shall be required to meet a Total Energy Design Rating (EDR) margin of 9.5 as defined by the 2022 California Energy Code. In addition, the electrical system design shall provide capacity for a future retrofit to facilitate the installation of all electric appliances. This includes capacity and space at the electrical service panel, prewiring and installed circuit breakers for the following appliances:
  - 1) Heat-pump water heater;
  - 2) Induction stove top and oven;
  - 3) Electric clothes dryer; and
  - 4) Heat-pump for code-required comfort heating.
- b) **New low-rise multi-family dwellings.** New mixed-fuel, low-rise multi-family dwellings shall be required to meet a Total Energy Design Rating (EDR) margin of 10 as defined by the 2022 California Energy Code. In addition, the electrical system design shall provide capacity for a future retrofit to facilitate the installation of all electric appliances. This includes capacity and space at the electrical service panel, pre-wiring and installed circuit breakers for the following appliances:
  - 1) Heat-pump water heater (if applicable);
  - 2) Induction stove top and oven;
  - 3) Electric clothes dryer (if applicable); and
  - 4) Heat-pump for code-required comfort heating.

---

<sup>29</sup> For the purposes of CALGreen, low-rise multi-family is defined as residential buildings that include three stories or less.

<sup>30</sup> A "mixed-fuel dwelling" is a dwelling that uses natural gas or propane as fuel for space heating, water heating (including pools and spas), cooking appliances, or clothes drying appliances or is plumbed for such equipment.



### Section 8.01.110

In addition to all requirements of the CALGreen Code applicable to new non-residential and high-rise multi-family dwellings,<sup>31</sup> Section 8.01.110 of the City of Davis Municipal Code requires the following:

- a) **New non-residential buildings.** New non-residential buildings shall comply with the Tier 1 (ten percent compliance margin) requirement for energy efficiency by employing energy efficiency measures. In addition, a PV system sized to offset a portion of the total building energy use based on TDV energy is required. The PV sizing shall be consistent with the methodology included in the cost effectiveness study provided by TRC. The PV sizing calculations were developed such that PV size would be the lessor of approximately eighty percent offset of the building's modeled annual electric load or fifteen DC watts per square feet of solar zone. The solar zone must have a total area of no less than fifteen percent of the total roof area in accordance with Section 9.3.1 of the 2016 Non-residential Compliance Manual.
- b) **New high-rise multi-family dwellings.** New high-rise multi-family dwellings shall comply with the Tier 1 (ten percent compliance margin) requirement for energy efficiency by employing energy efficiency measures. In addition, a PV system sized to offset a portion of the total building energy use based on TDV energy is required. The PV sizing calculations were developed such that PV size would be the lessor of approximately eighty percent offset of the building's modeled annual electric load or fifteen DC watts per square feet of solar zone. The solar zone must have a total area of no less than fifteen percent of the total roof area in accordance with Section 9.3.1 of the 2016 Non-residential Compliance Manual.
- c) New non-residential and high-rise multi-family buildings shall incorporate EV charging stations as determined by Tables 1 and 2 (see Table 4.2-6 and Table 4.2-7). Each EV charging station installed shall be credited toward the CALGreen Code requirement for charging spaces.

## 4.2.4 IMPACTS AND MITIGATION MEASURES

The standards of significance and methodology used to analyze and determine the potential impacts related to air quality, GHG emissions, and energy are described below. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

### Standards of Significance

Based on Appendix G of the CEQA Guidelines, an impact related to air quality, GHG emissions, or energy would be considered significant if the proposed project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State AAQS;
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;

---

<sup>31</sup> For the purposes of CALGreen, high-rise multi-family is defined as residential buildings that include four stories or greater.



**Table 4.2-6  
Non-residential EV Charging Station Standards**

<b>Non-Residential Land Use Category</b>	<b>Required Parking Spaces</b>	<b>EV Chargers</b>	<b>Land Use (from City Parking Code; City Code Section 40.25.090)</b>
Retail	0-10	0	<ol style="list-style-type: none"> <li>1. Automobile or machinery sales and service garages.</li> <li>2. Banks, post offices, business and professional offices.</li> <li>3. Furniture and appliance stores, household equipment or furniture repair shop.</li> <li>4. Laundrettes.</li> <li>5. Restaurants, beer parlors, nightclubs, and cardrooms.</li> <li>6. Retail stores, shops, etc.</li> <li>7. Rooming and lodging houses.</li> <li>8. Shopping center, neighborhood.</li> <li>9. Shopping center, community.</li> <li>10. Land uses where up to 50% of spaces serving employees.</li> </ol>
	11-51	1	
	52-102	2	
	Every Additional 50	+1	
Non-Retail	0-10	0	<ol style="list-style-type: none"> <li>1. Group care homes.</li> <li>2. Hospitals.</li> <li>3. Hotels and motor hotels, motels.</li> <li>4. Manufacturing plants, research or testing laboratories and bottling plants.</li> <li>5. Medical or dental clinics.</li> <li>6. Rest home, sanatorium, convalescent home or hospital.</li> <li>7. Wholesale establishments, warehouses.</li> <li>8. Land uses where more than 50% of spaces serving employees.</li> </ol>
	11-26	1	
	27-42	2	
	Every Additional 15	+1	
Destination	0-10	0	<ol style="list-style-type: none"> <li>1. Bowling alleys.</li> <li>2. Churches, schools, day care centers and nursery schools.</li> <li>3. Dance halls and assembly halls without fixed seats, exhibition halls except assembly rooms in conjunction with auditorium.</li> <li>4. Funeral home, mortuaries.</li> <li>5. Sports arenas auditoriums, theaters, assembly halls.</li> </ol>
	11-36	1	
	37-62	2	
	Every Additional 25	+1	

Notes:

- (1) All other non-modified Tier 1 standards for nonresidential EV charging apply.
- (2) All required charging is Level 2 with the exception of non-retail (workplace) charging which can be satisfied by fifty percent Level 1 chargers with fifty percent payment-ready Level 2 chargers due to longer dwell times. Note: calculations for total number of chargers shall be rounded up and rounding shall favor Level 2 chargers.
- (3) The first two chargers placed at non-retail (workplace) locations must be payment-ready Level 2 with subsequent chargers optionally Level 1.
- (4) Fifty percent of required non-retail (workplace) chargers to be installed prior to issuance of certificate of occupancy if approved prior to January 1, 2020. Remaining required chargers do not have to be installed at time of construction but must be pre-wired and have adequate electrical panel capacity for each future charger. After January 1, 2020, all required chargers must be fully installed.
- (5) Chargers should be placed to serve multiple parking spaces – see design recommendations in Section 5 of the City of Davis EV Charging Plan.
- (6) EV charging parking spaces shall be included in the required number of parking spaces per Article 40.25 of the City of Davis Zoning Ordinance. If space is available in a parking lot, additional EV charging spaces may be installed beyond the minimum number required subject to review and approval by the department of community development and sustainability.

(Continues on next page)



<b>Table 4.2-6                      Non-residential EV Charging Station Standards</b>			
<b>Non-Residential Land Use Category</b>	<b>Required Parking Spaces</b>	<b>EV Chargers</b>	<b>Land Use (from City Parking Code; City Code Section 40.25.090)</b>
(7) Conversion of existing parking spaces for EV charging purposes shall be reviewed and approved by the director of community development to assure a balance between full-size parking spaces, compact parking spaces and parking spaces for persons with disabilities.			

<b>Table 4.2-7                      Residential EV Charging Station Standards</b>		
<b>Development Type</b>	<b>Tier 1 Modifications</b>	<b>Notes</b>
Single-Family (1-3 units)	1. Single-family residential development required to pre-install 8 gauge wiring plus reserve room in electrical panel necessary to support Level 2 electric vehicle charging.	1. Addresses key barrier for adding Level 2 home EV charger.
Multi-Family (4 or more units)	1. Multi-family residential development projects are required to provide: (1) Level 1 charging at 5% of all required parking spaces with a minimum of 2 parking spaces served; (2) Level 2 charging at 1% of all required parking spaces where more than 20 parking spaces are required with a minimum of 1 parking space served; (3) conduit adequate for Level 2 charging to serve or reasonably be extended in the future to 25% of all parking spaces; and (4) room in panel(s) and capacity to serve 20% of all parking spaces with Level 1 charging and 5% of all parking spaces with Level 2 charging. Notes: (1) properly located, a single charger can serve multiple parking spaces; (2) reasonable future extension of conduit would not include the removal or trenching of hardscaped surfaces or areas where mature trees would be expected to establish (e.g., pavement, tree wells, etc.).	2. Addresses key barrier for EV use in residential rental settings.
Notes: (1) All other non-modified Tier 1 standards for residential EV charging apply. (2) Chargers in multi-family residential settings should be placed to serve multiple parking spaces – see design recommendations in Section 5 of the City of Davis EV Charging Plan. (3) Level 1 in the context above is defined as a 20A 120V circuit and Level 2 is defined as a 40A 208V/240V circuit. (4) Level 1 is defined as a 120V hardwired EVSE not a household outlet. (5) Monitoring equipment to properly charge tenants is encouraged at multi-family locations.		

- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs;
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Pursuant to CEQA Guidelines Section 15064.4(b)(2), the lead agency is charged with determining a threshold of significance that is applicable to the project. For the analysis within this SEIR, the City has elected to use the YSAQMD's thresholds of significance, as well as the City of Davis adopted goal of net carbon neutrality by the year 2040, as set forth in the City's CAAP. The



analysis in this SEIR uses the thresholds for criteria pollutants, localized CO, TAC emissions, and GHG emissions, as discussed below.

**Criteria Pollutant Emissions**

The YSAQMD significance thresholds for emissions of ROG, NO<sub>x</sub>, and PM<sub>10</sub> are presented in Table 4.2-8 below and expressed in maximum tons per year (tons/yr) for ROG and NO<sub>x</sub> and maximum pounds per day (lbs/day) for PM<sub>10</sub>. If the proposed project’s emissions exceed the pollutant thresholds presented in Table 4.2-8, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

<b>Table 4.2-8 YSAQMD Thresholds of Significance</b>		
<b>Pollutant</b>	<b>Construction Threshold</b>	<b>Operational/Cumulative Threshold</b>
ROG	10 tons/yr	10 tons/yr
NO <sub>x</sub>	10 tons/yr	10 tons/yr
PM <sub>10</sub>	80 lbs/day	80 lbs/day
<i>Source: YSAQMD. Handbook for Assessing and Mitigating Air Quality Impacts. July 11, 2007.</i>		

With regard to cumulative emissions of criteria air pollutants, according to the YSAQMD Handbook for Assessing and Mitigating Air Quality Impacts, any project that would individually have a significant air quality impact (i.e., exceed the project level thresholds presented in Table 4.2-8) would also be considered to have a significant cumulative impact.<sup>32</sup> As a result, the cumulative-level emissions thresholds established by YSAQMD are assumed to be identical to the project-level emissions thresholds presented in Table 4.2-8, above.

Ascertaining cancer risk, or similar measurements of health effects from air pollutants, is very difficult for regional pollutants such as the ozone precursors ROG and NO<sub>x</sub>. This challenge was addressed in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 510, 517-522. In that case, the California Supreme Court held generally that an EIR should “make a reasonable effort to substantively connect a project’s air quality impacts to likely health consequences.” A possible example of such a connection would be to calculate a project’s “impact on the days of nonattainment per year.” But the court recognized that there might be scientific limitations on an agency’s ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies. Thus, the court acknowledged that another option for an agency preparing an EIR might be “to explain why it was not feasible to provide an analysis that connected the air quality effects to human health consequences.”

Here, the YSAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of emissions in Yolo County. At present, the YSAQMD has not provided any methodology to assist local governments in reasonably and accurately assessing the specific connection between mass emissions of ozone precursors (e.g., ROG and NO<sub>x</sub>) and other pollutants of concern on a regional basis and any specific effects on public health or regional air quality concentrations that might result from such mass emissions.

<sup>32</sup> Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.





Ozone concentrations, for instance, depend upon various complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground level ozone concentrations related to the NAAQS and CAAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds. To achieve the health-based standards established by the EPA, the air districts prepare air quality management plans that detail regional programs to attain the AAQS. However, if a project within the YSAQMD exceeds the regional significance thresholds, the proposed project could contribute to an increase in health effects in the basin until the attainment standards are met in the SVAB.

Notably, during the litigation process that led to the California Supreme Court decision in *Sierra Club v. County of Fresno*, the San Joaquin Valley Air Pollution Control District (SJVAPCD) submitted an amicus curiae brief that provided scientific context and expert opinion regarding the feasibility of performing regional dispersion modeling for ozone. In the brief, SJVAPCD states that “CEQA does not require an EIR to correlate a project’s air quality emissions to specific health impacts, because such an analysis is not reasonably feasible.” As SJVAPCD explains:

Attainment of a particular NAAQS occurs when the concentration of the relevant pollutant remains below a set threshold on a consistent basis throughout a particular region. For example, the San Joaquin Valley attained the 1-hour ozone NAAQS when ozone concentrations remained at or below 0.124 parts per million Valley-wide on 3 or fewer days over a 3-year period. Because the NAAQS are focused on achieving a particular concentration of pollution region-wide, the Air District’s tools and plans for attaining the NAAQS are regional in nature.

For instance, the computer models used to simulate and predict an attainment date for the ozone or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO<sub>x</sub>, SO<sub>x</sub> and VOCs) and the atmospheric chemistry and meteorology of the Valley. At a very basic level, the models simulate future ozone or PM levels based on predicted changes in precursor emissions Valley wide. Because the NAAQS are set levels necessary to protect human health, the closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant.

The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District’s modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment.

Accordingly, the Air District has based its thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the [SJVAB] can accommodate without affecting the attainment date for the NAAQS. The Air District has tied its CEQA significance thresholds to the level at which stationary pollution sources must “offset” their emissions...Thus, the CEQA air quality analysis for criteria air pollutants is not really a localized, project-level impact analysis but one of regional cumulative impacts.

The brief explains that these CEQA thresholds of significance are not intended to be applied such that any localized human health impact associated with a project’s regional pollutant emissions could be identified. Rather, CEQA thresholds of significance are used to determine whether a project’s emissions would obstruct a region’s capability of attaining the NAAQS and CAAQS according to the emissions inventory prepared in a SIP, which is then submitted and reviewed by CARB and EPA. This sentiment is corroborated in an additional brief submitted by the South



Coast Air Quality Management District. Based on the expert analyses submitted by these leading air districts, the City has concluded that it is not scientifically feasible to predict in a meaningful manner how mass emissions of pollutants of regional concern (e.g., ozone precursors) from a project of the size of the proposed project could lead to specific public health consequences, changes in pollutant concentrations, or changes in the number of days for which the SVAB will be in nonattainment for regional pollutants.

### Localized CO Emissions

The YSAQMD recommends the use of screening thresholds to assess a project's potential to create an impact through the creation of CO hotspots. A violation of the CO standard could occur if either of the following criteria is true of any street or intersection affected by the mitigated project:<sup>33</sup>

- The project would reduce peak-hour level of service (LOS) on one or more streets or at one or more intersections to an unacceptable LOS (typically LOS E or F); or
- The project would increase a traffic delay by 10 or more seconds on one or more streets or at one or more intersections in the project vicinity where a peak hour LOS of F currently exists.

However, considering that the law has changed with respect to how transportation-related impacts may be addressed under CEQA such that unacceptable LOS is no longer considered a significant impact on the environment under CEQA, the analysis herein related to localized CO emissions uses guidance from the nearby Sacramento Metropolitan Air Quality Management District (SMAQMD) and Placer County Air Pollution Control District (PCAPCD). According to the SMAQMD's CEQA Guide,<sup>34</sup> emissions of CO are generally of less concern than other criteria pollutants, as operational activities are not likely to generate substantial quantities of CO, and the SVAB has been in attainment for CO for multiple years. Thus, SMAQMD no longer recommends an analysis of localized CO emissions. The PCAPCD, which has jurisdiction over a portion of the SVAB and is adjacent to the YSAQMD, has a screening level for localized CO impacts. According to the PCAPCD screening level, a project could result in a significant impact if the project would result in CO emissions from vehicle operations in excess of 550 lbs/day.<sup>35</sup>

### TAC Emissions

For TAC emissions, if a project would introduce a new source of TAC or a new sensitive receptor near an existing source of TAC that would not meet the CARB's minimum recommended setback, a detailed health risk assessment may be required. As such, in addition to the thresholds of significance presented above for criteria air pollutants, YSAQMD has also developed thresholds for potential exposure of the public to TACs from new stationary sources. Exposure of the public to TACs from new stationary sources in excess of the following thresholds would be considered a significant impact:

- Probability of contracting cancer for the Maximally Exposed Individual (MEI) equals to 10 in one million or more; and

<sup>33</sup> Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [p. 21]. July 11, 2007.

<sup>34</sup> Sacramento Metropolitan Air Quality Management District. *CEQA Guide*. April 2020.

<sup>35</sup> Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. November 21, 2017.



- Ground-level concentrations of non-carcinogenic TACs would result in a Hazard Index equal to 1 for the MEI or greater.

Although the YSAQMD has established thresholds for exposure to TACs from new stationary sources, a threshold for exposure of the public to mobile TAC emissions, such as emissions associated with DPM from heavy-duty diesel trucks or off-road construction equipment, does not currently exist. In the absence of a specified threshold for assessing impacts of mobile sources of TACs on a sensitive land use, the industry standard is to use the stationary source threshold of an increase in cancer risk of 10 in one million and a Hazard Index greater than one, which is the standard that has been used throughout the State for similar health risk analyses.

### **GHG Emissions**

With respect to establishing significance thresholds for GHG emissions, CEQA Guidelines Section 15064.4 states:

- (a) The determination of the significance of GHG emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project.
- (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from GHG emissions on the environment:
  - (1) The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;
  - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
  - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Thus, one threshold that is commonly used to analyze a project's GHG emissions is whether the project would conflict with or obstruct the goals, strategies, or governing regulation (Health & Safety Code, Section 38500-38599) of the California Global Warming Solutions Act of 2006 (AB 32) and the GHG reduction targets in SB 32.

The YSAQMD, in their Handbook for Assessing and Mitigating Air Quality Impacts, acknowledges that new emissions generated by development projects could potentially conflict with existing GHG emissions reductions targets, and thus, a need for development of GHG emissions thresholds exists. However, the YSAQMD has not yet established or adopted any GHG emissions thresholds. The YSAQMD is currently recommending GHG analysis consistent with the SMAQMD adopted thresholds of significance. While SMAQMD recognizes that emissions from a single project cannot be determined to substantially impact overall GHG emissions levels in the atmosphere, an emissions threshold is useful to trigger further project review and assess mitigation. As such, SMAQMD has developed thresholds for project construction and operational GHG emissions that allow for review of proposed projects to ensure consistency with the emissions-reduction goals of AB 32, SB 32, the Scoping Plan, and relevant executive orders.



Although SMAQMD has developed thresholds for project CEQA review, SMAQMD further specified that where cities have adopted city-specific climate action plans or GHG reduction plans, proposed projects should be assessed in relation to those city-specific plans, rather than SMAQMD's thresholds. As discussed in further depth below, the City of Davis has adopted a CAAP, which is considered the relevant GHG reduction program for operational GHG emissions of existing and proposed developments within the City.

The 2020 Yolo County Regional GHG Emissions Inventory Update for the Cities of Davis, Winters and Woodland – Draft Technical Memorandum (2020 GHG Emissions Inventory), includes an estimation of citywide 2016 emissions levels, which were used as the basis for the City of Davis's citywide GHG reduction target thresholds.<sup>36</sup> The emissions reductions targets provide a desired rate of reduction, which are more ambitious than the State's most recent target set in EO B-55-18, and include achievement of citywide carbon neutrality by 2040.

The CAAP includes measurable GHG emissions reduction and climate change adaptation actions that align with the City's net neutrality goals. When implemented, the actions are anticipated to reduce GHG emissions within the City by 37 percent below 2016 levels by 2030 and set the community on a trajectory toward the 2040 carbon neutrality goal. As such, projects that were considered within the 2020 GHG Emissions Inventory can be addressed through the CAAP GHG emissions reduction and climate change adaptation actions.

As discussed above, the project site was previously approved by the City for development of the Wildhorse Ranch Project, which included buildout of the site with of up to 191 residential units. The environmental baseline for this SEIR is appropriately considered to be the approved Wildhorse Ranch Project. In order to maintain the emissions reductions trajectory anticipated by the CAAP and mandated by the City's climate emergency declaration, the proposed project would be required to demonstrate that operations on the site would not exceed the previously anticipated emissions levels associated with the Wildhorse Ranch Project (i.e., baseline conditions). Should the proposed project result in increased on-site operational emissions relative to baseline conditions, the project would be responsible for reducing operational emissions to a level equal to baseline conditions (i.e., no net increase as compared to baseline conditions). By ensuring that emissions from the proposed project remain at or below baseline conditions, the project would provide a proportionate share of emissions reductions and would not inhibit attainment of citywide net carbon neutrality by the year 2040, nor would the project conflict with the City's CAAP.

Therefore, the proposed project would be considered to conflict with the City's GHG reduction targets, if the project would result in net positive operational GHG emissions by the year 2040. It should be noted that conformance with the City's goal of net carbon neutrality by 2040 would demonstrate compliance with the City's CAAP and consistency with the statewide reduction targets of AB 32 and SB 32.

Although the City has adopted clear GHG reductions goals, which the City has elected to use as operational thresholds for the proposed project in this EIR, the City has not specifically adopted goals or thresholds to analyze GHG emissions associated with construction of proposed projects. As discussed above, the YSAQMD is currently recommending GHG analysis consistent with the SMAQMD adopted thresholds of significance. For construction-related GHG emissions, the SMAQMD has adopted a threshold of significance of 1,100 MTCO<sub>2</sub>e/yr. As such, if construction

<sup>36</sup> Yolo County Department of Community Services. *Yolo County Regional Greenhouse Gas Emissions Inventory Update for the Cities of Davis, Winters and Woodland – Draft Technical Memorandum*. April 30, 2020.



of the proposed project would result in emissions that exceed 1,100 MTCO<sub>2</sub>e/yr, then construction of the proposed project could be considered to result in a potentially significant impact and mitigation measures would be required.

## Energy

Quantitative thresholds for the analysis of potential impacts related to energy consumption have not been adopted by any local, regional, or statewide entities. Consequently, potential impacts of the project related to energy will be determined based on whether the project would result in wasteful, inefficient, or unnecessary use of energy. In addition, the potential for the project to conflict with or obstruct a State or local plan for renewable energy generation or energy efficiency is considered. The analysis of energy consumption includes consideration of energy demand during both project construction and operations.

## Method of Analysis

In cases where an approved project has already undergone environmental review, and the environmental document has been adopted by the lead agency, the lead agency can restrict the current review to the incremental effects of the modified project, rather than having to reconsider the overall impacts of the project. In such cases, as the project under review constitutes only a modification of a previously approved project, the “baseline” for the purposes of CEQA is adjusted such that the originally approved project is assumed to exist.<sup>37</sup> Thus, the environmental baseline for this SEIR is appropriately considered to be the approved 2009 Wildhorse Ranch Project, and the analysis included herein is focused on the potential for the proposed project to result in new significant air quality, GHG emissions, and energy impacts not previously identified in the 2009 EIR, or a substantial increase in the severity of significant impacts previously identified in said 2009 EIR.

A comparison of project-related emissions to the emissions that would result from buildout of the site under the conditions approved in the 2009 EIR, as well as to the thresholds discussed above, shall determine the significance of the potential impacts related to air quality, GHG emissions, and energy usage resulting from the proposed project. Emissions attributable to the proposed project that would result in a net increase compared to the emissions anticipated in the 2009 EIR and exceed the applicable thresholds of significance could have a significant effect on regional air quality and the attainment of the federal and State AAQS, and could significantly contribute to increases of GHG emissions that are associated with global climate change. Where new or more severe potentially significant air quality, GHG emissions, and energy impacts are identified, mitigation measures are identified that would reduce the impact to at or below the level anticipated in the 2009 EIR.

## Construction Criteria Pollutants and GHG Emissions

The 2009 EIR estimated construction emissions using the URBEMIS2002 model, which is now obsolete. Therefore, in order to determine whether construction of the proposed project would result in new or substantially more severe significant impacts as compared to what was identified for the approved project in the 2009 EIR, construction emissions have been estimated for both the Baseline Conditions and Proposed Project scenarios using the web-based California

---

<sup>37</sup> See Michael H. Remy et al. *Guide to CEQA, 11th Edition*. Point Arena: Solano Press Books (2007), pg. 207; Stephen L. Kostka and Michael H. Zischke. *Practice Under the Environmental Quality Act, Second Edition* (Vol. 1). Oakland: Continuing Education of the Bar (2018), pgs. 12-32; *Benton v. Board of Supervisors* (1st Dist. 1991) 226 Cal. App. 3d 1467.





Emissions Estimator Model (CalEEMod) Version 2022, which is the most up-to-date statewide industry standard model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses; however, where project-specific data was available, such data was input into the model (e.g., construction phases and timing, inherent site or project design features, compliance with applicable regulations, etc.).

The following construction-related inherent design features and project-specific information were included in the modeling conducted for the Baseline Conditions Scenario:

- Construction would begin in April 2026, and occur over approximately two years; and
- Approximately 21,700 square feet (sf) of building materials associated with existing on-site development would be demolished and removed from the site.

The following construction-related inherent design features and project-specific information were included in the modeling conducted for the Proposed Project Scenario:

- Construction would begin in April 2026, and occur over approximately three years;
- Approximately 21,700 sf of building materials associated with existing on-site development would be demolished and removed from the site; and
- A total of 10,000 cubic yards (CY) of soil would be exported from the project site during site preparation activities, and a total of 63,800 CY of soil would be imported to the site during grading activities in order to facilitate the proposed drainage system for the project, whereby the site would be graded to direct stormwater runoff to the northerly portion of the site where the detention basin would be located.

The net change in construction emissions that would occur as a result of the Proposed Project Scenario in comparison to the Baseline Conditions Scenario were compared to the standards of significance discussed above in order to determine the associated level of impact. Results of the modeling are expressed in tons/yr for ROG and NO<sub>x</sub> emissions, lbs/day for PM<sub>10</sub> emissions, and MTCO<sub>2</sub>e/yr for GHG emissions, which allows for comparison between the model results and the thresholds of significance. All CalEEMod modeling results are included in Appendix C to this EIR.

### **Operational Criteria Pollutants and GHG Emissions**

Similarly, the 2009 EIR estimated operational emissions using the URBEMIS2002 model, which is now obsolete. Therefore, in order to determine whether operation of the proposed project would result in new or substantially more severe significant impacts as compared to what was identified for the approved project in the 2009 EIR, operational emissions have been estimated for both the Baseline Conditions and Proposed Project scenarios using the web-based CalEEMod, Version 2022, which is the most up-to-date statewide industry standard model.

Based on the modeling, the Baseline Conditions Scenario was assumed to be fully operational by the year 2028, while the Proposed Project Scenario was assumed to be fully operational by the year 2029. The modeling performed for both scenarios included compliance with the latest Building Energy Efficiency Standards Code. Compliance with such would be verified as part of the City's building permit application review process. In addition, Fehr & Peers provided specific trip generation rates and VMT for the land uses that would be developed under the Baseline Conditions Scenario and the Proposed Project Scenario, which were applied to the project modeling. Finally, based on project-specific data provided by the project applicant, 50 percent of





the energy demand associated with the Proposed Project Scenario would be generated by on-site renewable sources.

The net change in operational emissions that would occur as a result of the Proposed Project Scenario in comparison to the Baseline Conditions Scenario were compared to the standards of significance discussed above in order to determine the associated level of impact. Results of the modeling are expressed in tons/yr for ROG and NO<sub>x</sub> emissions and lbs/day for PM<sub>10</sub> emissions, which allows for comparison between the model results and the thresholds of significance. In addition, while the thresholds of significance for operational GHG emissions are qualitative, operational GHG emissions are presented herein to determine whether the Proposed Project Scenario would result increased on-site operational emissions relative to the Baseline Conditions Scenario, and are expressed in MTCO<sub>2</sub>e/yr. All CalEEMod modeling results are included in Appendix C to this EIR.

### **Project-Specific Impacts and Mitigation Measures**

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above. It should be noted that GHG emissions are inherently cumulative; thus, the discussion of GHG impacts is included under the Cumulative Impacts and Mitigation Measures section below.

#### **4.2-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM<sub>10</sub> emissions. As construction of the proposed project would generate emissions of criteria air pollutants, including ROG, NO<sub>x</sub>, and PM<sub>10</sub> intermittently within the site and in the vicinity of the site, until all construction has been completed, construction is a potential concern, as the proposed project is located in a nonattainment area for ozone and PM.

The Wildhorse Ranch Project was determined to be below the applicable YSAQMD thresholds for ROG and NO<sub>x</sub> during construction (see Table 4.4-4 of the 2009 EIR). However, PM<sub>10</sub> emissions were determined to exceed the applicable YSAQMD threshold during construction. The 2009 EIR included Mitigation Measure 4.4-1, which required preparation and implementation of a dust control plan to reduce PM<sub>10</sub> emissions. Implementation of Mitigation Measure 4.4-1 was determined to reduce PM<sub>10</sub> emissions to below the applicable YSAQMD thresholds of significance, and, therefore, with implementation of Mitigation Measure 4.4-1, the 2009 EIR determined that the



project would result in a less-than-significant impact associated with construction-related criteria pollutant emissions.

As described in the Method of Analysis section above, the 2009 EIR estimated construction emissions using the URBEMIS2002 model, which is now obsolete. Therefore, in order to determine whether construction of the proposed project would result in new or substantially more severe significant impacts as compared to what was identified for the approved project in the 2009 EIR, emissions have been estimated for both the Baseline Conditions and Proposed Project scenarios using CalEEMod. The maximum (i.e., worst-case) unmitigated construction emissions associated with the aforementioned scenarios are presented in Table 4.2-9.

Regulations pertaining to air quality emissions, including, but not limited to, State and federal vehicle standards, are much more stringent than the regulations in place at the time the 2009 EIR was drafted. Such regulations have been taken into account within the most current version of the CalEEMod software. Therefore, as presented in Table 4.2-9, construction-related ROG, NO<sub>x</sub>, and PM<sub>10</sub> emissions associated with the Baseline Conditions Scenario, as estimated using the CalEEMod software, are now estimated to be below the applicable YSAQMD thresholds of significance. Implementation of the Proposed Project Scenario would result in a decrease in construction-related ROG emissions and an increase in NO<sub>x</sub> and PM<sub>10</sub> emissions, as compared to the Baseline Conditions Scenario. Nonetheless, the total construction-related emissions associated with the Proposed Project Scenario would be below the applicable YSAQMD thresholds of significance for all criteria pollutants.

<b>Table 4.2-9 Maximum Unmitigated Construction Emissions</b>			
	<b>ROG (tons/yr)</b>	<b>NO<sub>x</sub> (tons/yr)</b>	<b>PM<sub>10</sub> (lbs/day)</b>
Baseline Conditions Scenario	0.83	1.73	11.3
Proposed Project Scenario	0.60	2.76	11.7
<i>Net Change</i>	-0.23	+1.03	+0.40
<b>YSAQMD Threshold of Significance</b>	<b>10.00</b>	<b>10.00</b>	<b>80.00</b>
<b>Exceeds Threshold?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<i>Source: CalEEMod, March 2024 (see Appendix C).</i>			

Given that construction-related PM<sub>10</sub> emissions associated with both the Baseline Conditions Scenario and the Proposed Project Scenario, as estimated using the most current version of the CalEEMod software, are below the applicable YSAQMD threshold of significance, Mitigation Measure 4.4-1 included in the 2009 EIR, which required preparation and implementation of a dust control plan to reduce PM<sub>10</sub> emissions, would no longer be applicable to the proposed project. However, the proposed project would still be required to comply with all YSAQMD requirements for dust control.

Furthermore, while all projects within the YSAQMD, including the proposed project, are required to comply with all YSAQMD rules and regulations for construction, including Rule 2.1 (Control of Emissions), Rule 2.28 (Cutback and Emulsified



Asphalts), Rule 2.5 (Nuisance), Rule 2.14 (Architectural Coatings), and Rule 2.11 (Particulate Matter Concentration), the proposed project was modeled without the inclusion of such rules and regulations to provide a conservative, worst-case emissions scenario. Even under the conservative assumptions used for this analysis, emissions of PM<sub>10</sub> would remain below the YSAQMD's thresholds of significance.

The YSAQMD also encourages all projects to implement best management practices (BMPs) to reduce dust emissions and avoid localized health impacts. The YSAQMD's BMPs for dust include, but are not necessarily limited to, the following:

- Watering of all active construction sites at least twice daily;
- Maintenance of at least two feet of freeboard in haul trucks;
- Covering of all trucks hauling dirt, sand, or loose materials;
- Application of non-toxic binders to exposed areas after cut and fill operations and hydroseeding of area, as applicable and/or necessary;
- Application of chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days), as applicable and/or necessary;
- Planting of vegetative ground cover in disturbed areas as soon as possible;
- Covering of inactive storage piles;
- Sweeping of streets if visible soil material is carried out from the construction site; and
- Treatment of accesses to distance of 100 feet from the paved road with a six- to 12-inch layer of wood chips, mulch, or gravel.

Compliance with the aforementioned rules and regulations related to construction, as well as implementation of BMPs for dust, would help to further reduce emissions generated during construction activities.

Based on the above, the proposed project would not result in a new significant impact or substantially more severe significant impact related to contributing to the region's nonattainment status for ozone or PM or obstructing implementation of an applicable air quality plan during construction beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

As discussed above and shown in Table 4.2-9, under both the Baseline Conditions Scenario and the Proposed Project scenario, PM<sub>10</sub> emissions would be below the YSAQMD threshold of significance. Therefore, Mitigation Measure 4.4-1 included in the 2009 EIR would no longer be applicable to the proposed project.

#### Modified Mitigation Measure(s)

*None required.*

#### New Mitigation Measure(s)

*None required.*



**4.2-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

Due to the nonattainment designations of the area, the YSAQMD has developed plans to attain the State and federal standards for ozone and PM. The currently applicable air quality plan is the Ozone Attainment Plan. Adopted YSAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with the applicable air quality plan. Thus, if a project's operational emissions exceed the YSAQMD's mass emissions thresholds for operational emissions of ROG, NO<sub>x</sub>, or PM<sub>10</sub>, a project would be considered to conflict with or obstruct implementation of the YSAQMD's air quality planning efforts.

Emissions of ROG, NO<sub>x</sub>, and PM<sub>10</sub> would be generated during operations of the proposed project from both mobile and stationary sources such as architectural coatings, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, detergents, hair spray, cleaning products, spray paint, insecticides, floor finishes, polishes, etc.). The most significant source of emissions related to the proposed project would be from mobile sources. As discussed in the Method of Analysis section above, to capture the potential emissions related to mobile sources from the proposed project, the project-specific trip generation rates and VMT estimates from Fehr & Peers were applied to the project modeling.

The Wildhorse Ranch Project was determined to result in operational emissions below the applicable YSAQMD thresholds for ROG, NO<sub>x</sub>, and PM<sub>10</sub> (see Table 4.4-5 of the 2009 EIR). Therefore, the 2009 EIR concluded that the Wildhorse Ranch Project would result in a less-than-significant impact related to operational criteria pollutant emissions.

As described in the Method of Analysis section above, the 2009 EIR estimated construction emissions using the URBEMIS2002 model, which is now obsolete. Therefore, in order to determine whether operation of the proposed project would result in new or substantially more severe significant impacts as compared to what was identified for the approved project in the 2009 EIR, emissions have been estimated for both the Baseline Conditions and Proposed Project scenarios using CalEEMod. The maximum unmitigated operational emissions associated with the aforementioned scenarios are presented in Table 4.2-10.

As demonstrated in Table 4.2-10, the Proposed Project Scenario would result in a net increase in operational emissions of NO<sub>x</sub> and a net decrease in operational emissions of ROG and PM<sub>10</sub>, as compared to the Baseline Conditions Scenario. Operational emissions of ROG, NO<sub>x</sub>, and PM<sub>10</sub> associated with the Proposed Project Scenario would be below the applicable YSAQMD thresholds of significance.



<b>Table 4.2-10 Maximum Unmitigated Operational Emissions</b>			
	<b>ROG (tons/yr)</b>	<b>NO<sub>x</sub> (tons/yr)</b>	<b>PM<sub>10</sub> (lbs/day)</b>
Baseline Conditions Scenario	2.98	2.06	17.7
Proposed Project Scenario	1.12	2.23	11.3
<i>Net Change</i>	<i>-1.86</i>	<i>+0.17</i>	<i>-6.4</i>
<b>YSAQMD Threshold of Significance</b>	<b>10.00</b>	<b>10.00</b>	<b>80.00</b>
<b>Exceeds Threshold?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<i>Source: CalEEMod, March 2024 (see Appendix C).</i>			

Based on the above, the proposed project would not result in a new significant impact or substantially more severe significant impact related to contributing to the region's nonattainment status for ozone or PM or obstructing implementation of an applicable air quality plan during operations beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**4.2-3 Expose sensitive receptors to substantial pollutant concentrations. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The major pollutant concentrations of concern are localized CO emissions, TAC emissions, and criteria pollutant emissions, which are addressed in further detail below.

Localized CO Emissions

Emissions of CO result from the incomplete combustion of carbon-containing fuels such as gasoline or wood and are particularly related to traffic levels. Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. As older, more polluting vehicles are retired and replaced with newer, cleaner vehicles, the overall rate of emission of CO for vehicle fleets throughout the State has been and is expected to continue to decrease.

Localized CO emissions were analyzed under Impact 4.4-3 of the 2009 EIR. As discussed therein, and presented in Table 4.4-6 of the 2009 EIR, development of the Wildhorse Ranch Project was determined to increase CO concentrations at



intersections in the project area; however, the concentrations were determined to remain below the AAQS in place at the time for localized CO emissions. Therefore, project impacts related to local CO concentrations were determined to be less than significant.

As discussed in the Method of Analysis section above, considering that the law has changed with respect to how transportation-related impacts may be addressed under CEQA, such that unacceptable LOS is no longer considered a significant impact on the environment under CEQA, the analysis herein uses guidance from the nearby SMAQMD and PCAPCD, which both have jurisdiction over a portion of the SVAB and are adjacent to the YSAQMD.

According to the SMAQMD's CEQA Guide, emissions of CO are generally of less concern than other criteria pollutants, as operational activities are not likely to generate substantial quantities of CO, and the SVAB has been in attainment for CO for multiple years. Thus, SMAQMD no longer recommends an analysis of localized CO emissions.

The PCAPCD has a numerical screening level for localized CO impacts. According to the PCAPCD screening levels, a project could result in a significant impact if the project would result in CO emissions from vehicle operations in excess of 550 lbs/day. According to the modeling performed for the proposed project, the Proposed Project Scenario would result in maximum unmitigated operational mobile source CO emissions of 89.4 lbs/day, which is a reduction of 11.6 lbs/day as compared to the 101 lbs/day of operational mobile source CO emissions that would be generated by the Approved Conditions Scenario (see Appendix C). Consequently, CO emissions related to mobile sources associated with operation of the proposed project would be below the 550 lbs/day screening threshold used by PCAPCD, and, according to the PCAPCD's screening methodology for localized CO emissions, the proposed project would not be expected to generate localized CO emissions that would contribute to an exceedance of AAQS or expose sensitive receptors to substantial concentrations of localized CO.

Based on the above, the proposed project would not result in new significant impacts or substantially more severe significant impacts related to localized CO concentrations.

### TAC Emissions

Another category of environmental concern is TACs. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. The CARB's Handbook provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, gas dispensing facilities (GDFs), chrome plating operations, distribution centers, and rail yards. The CARB has identified DPM from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM.





The 2009 EIR noted that diesel-powered vehicles and equipment used during the construction of the Wildhorse Ranch Project would generate TACs; however, because the YSAQMD does not have permitting authority over mobile sources of TACs, and a standard of significance had not been established for mobile source emissions of TACs, further discussion of construction-related TACs was not included in the 2009 EIR. An analysis of operational TAC emissions was not included in the 2009 EIR. Therefore, the analysis herein is focused on the potential for any new significant impacts to occur associated with TAC emissions generated by the proposed project.

Operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy truck traffic or idling. The proposed land uses would not involve long-term or frequent operations of any stationary diesel engines and would not involve heavy truck traffic or idling. Thus, the proposed project would not expose sensitive receptors to substantial concentrations of DPM during operations.

Impacts of the environment on a project (as opposed to impacts of a project on the environment) are beyond the scope of required CEQA review.<sup>38</sup> The analysis under CEQA is focused on the proposed project's effects on the surrounding physical environment. Therefore, the following analysis does not consider exposure of future on-site residents to potential TAC emissions, as such an analysis is not required pursuant to CEQA.

Construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. The construction period would be temporary and would occur over a relatively short duration in comparison to the operational lifetime of the proposed project. While methodologies for conducting health risk assessments are associated with long-term exposure periods (e.g., over a 30-year period or longer), construction activities associated with the proposed project were estimated to occur over an approximately three-year period. In addition, only portions of the site would be disturbed at a time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day, rather than continuously at any one location on the project site.

All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as

---

<sup>38</sup> “[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project.” (*Ballona Wetlands Land Trust v. Town of Los Angeles*, (2011) 201 Cal.App.4th 455, 473 (Ballona).) The California Supreme Court held that “CEQA does not generally require an agency to consider the effects of existing environmental conditions on a proposed project’s future users or residents. What CEQA does mandate... is an analysis of how a project might exacerbate existing environmental hazards.” (*California Building Industry Assn. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 392; see also *Mission Bay Alliance v. Office of Community Investment & Infrastructure* (2016) 6 Cal.App.5th 160, 197 [“identifying the effects on the project and its users of locating the project in a particular environmental setting is neither consistent with CEQA’s legislative purpose nor required by the CEQA statutes”], quoting *Ballona*, *supra*, 201 Cal.App.4th at p. 474.)



standards relating to fleet average emissions and the use of Best Available Control Technologies.

Considering the intermittent nature of construction equipment operating within an influential distance to the nearest sensitive receptors, the duration of construction activities in comparison to the operational lifetime of the project, the typical long-term exposure periods associated with conducting health risk assessments, and compliance with regulations, the likelihood that any one nearby sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low.

Furthermore, as discussed above, the proposed project's construction-related emissions would be below the applicable mass emissions thresholds of significance for PM<sub>10</sub>. According to CARB, more than 90 percent of DPM is less than one micrometer in diameter,<sup>39</sup> and, thus, DPM is a subset of PM<sub>2.5</sub>, which comprises a portion of PM<sub>10</sub>. As a California statewide average, DPM comprises about eight percent of PM<sub>2.5</sub> in outdoor air,<sup>40</sup> and would represent an even smaller percentage of PM<sub>10</sub> emissions. Considering that the proposed project's construction-related PM<sub>10</sub> emissions, which include emissions of DPM, would be below the YSAQMD's thresholds of significance, construction of the proposed project would not be expected to generate substantial DPM emissions such that an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 would occur.

Based on the above, the proposed project would not expose sensitive receptors to substantial concentrations of DPM during construction.

### Criteria Pollutants

As discussed in the Existing Environmental Setting section and summarized in Table 4.2-1, criteria pollutant emissions can cause negative health effects. With regard to the proposed project, the principal criteria pollutants of concern are localized CO, ozone, and PM. The proposed project is not anticipated to result in impacts related to localized exposure of sensitive receptors to substantial concentrations of CO. Unlike CO and many TACs, due to atmospheric chemistry and dynamics, ozone and atmospheric PM typically act to impact public health on a cumulative and regional level, rather than a localized level. Due to the cumulative and regional nature of effects from criteria pollutants, the analysis of potential health effects of criteria pollutants is further discussed in Impact 4.2-6.

### Conclusion

The proposed project would not cause any substantial levels of localized CO concentrations or other TACs. Thus, the proposed project would not result in a new significant impact or a substantially more severe significant impact beyond what was previously identified in the 2009 EIR.

<sup>39</sup> California Air Resources Board. *Inhalable Particulate Matter and Health (PM<sub>2.5</sub> and PM<sub>10</sub>)*. Available at: <https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health>. Accessed March 2024.

<sup>40</sup> California Air Resources Board. *Overview: Diesel Exhaust & Health*. Available at: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. Accessed March 2024.



Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**4.2-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

Pollutants of principal concern include emissions leading to odors, emissions that have the potential to cause dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in Impacts 4.3-1 through 4.3-3 above. Therefore, the following discussion focuses on emissions of odors and dust.

It should be noted that an analysis of other emissions such as odors and dust was not explicitly included in the 2009 EIR. Therefore, the analysis herein is focused on the potential for any new significant impacts to occur associated with odor and dust emissions generated by the proposed project.

Odors

As discussed above, due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative analysis to determine the presence of a significant odor impact is difficult. According to the YSAQMD, common types of facilities that are known to produce odors include, but are not limited to, wastewater treatment facilities, chemical or fiberglass manufacturing, landfills, composting facilities, food processing facilities, refineries, dairies, and asphalt or rendering plants.<sup>41</sup> The proposed project is not located in the vicinity of any such existing or planned land uses, and would not introduce any uses that would be expected to create objectionable odors that would affect a substantial number of people.

Construction activities often include diesel-fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, construction activities would be temporary, and operation of construction equipment would be regulated in accordance with the In-Use Off-Road Diesel Vehicle Regulation, as discussed above. In addition, as required by Mitigation Measure 4.5-3 of the 2009 EIR, construction activities would be limited to normal daytime working hours (i.e., 7:00 AM to 7:00 PM Monday through Friday and 8:00 AM

<sup>41</sup> Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [pg. 14]. July 11, 2007.



to 8:00 PM Saturday and Sunday). The proposed project would also be required to comply with all applicable YSAQMD rules and regulations, including, but not limited to, Rule 2.1, Rule 2.28, and Rule 2.5, which would help to control construction-related odorous emissions. Considering the size of the development area, construction equipment would operate at various locations throughout the project site intermittently, and the distances from the nearest sensitive receptors would allow for dispersal of diesel odors. Accordingly, substantial objectionable odors would not be expected to occur during construction activities.

The YSAQMD also regulates objectionable odors through Rule 2.5 (Nuisance), which prohibits any person or source from emitting air contaminants or other material that result in any of the following: cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; endanger the comfort, repose, health, or safety of any such persons or the public; or have a natural tendency to cause injury or damage to business or property. Rule 2.5 is enforced based on complaints. If complaints are received, the YSAQMD is required to investigate the complaint, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made after the proposed project is developed, the YSAQMD would ensure that such odors are addressed, and any potential odor effects reduced to less than significant.

#### Dust

The proposed project is required to comply with all applicable YSAQMD rules and regulations for construction, including, but not limited to, Rule 2.1 (Control of Emissions), Rule 2.5 (Nuisance), and Rule 2.11 (Particulate Matter Concentration). Furthermore, all projects are required to implement the YSAQMD's BMPs for dust, as described in Impact 4.3-1, above. Compliance with YSAQMD rules and regulations and BMPs would help to ensure that dust is minimized during project construction. Following project construction, vehicles operating within the project site would be limited to paved areas of the site, which would not have the potential to create substantial dust emissions. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

#### Conclusion

For the aforementioned reasons, project construction and operations would not result in substantial emissions, such as those leading to odors or dust, which could adversely affect a substantial number of people. Therefore, the proposed project would not result in a new significant impact or a substantially more severe significant impact beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

#### Modified Mitigation Measure(s)

*None required.*

#### New Mitigation Measure(s)

*None required.*



**4.2-5 Result in the inefficient or wasteful use of energy, or conflict with a State or local plan for renewable energy or energy efficiency. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

Because Appendix G of the CEQA Guidelines did not previously include a specific section on energy, the 2009 EIR did not include a specific analysis of the Wildhorse Ranch Project's potential energy-related impacts; however, as efficient use of energy was included in Appendix F of the CEQA Guidelines, the issue was still considered in the evaluation of the Wildhorse Ranch Project. Specifically, Section 4.10, Climate Change, of the 2009 EIR included a list of energy efficiency measures in place at the time with which the Wildhorse Ranch Project would be required to comply. Furthermore, the 2009 EIR noted that implementation of such energy efficiency measures would reduce energy use well below the Title 24 standards in place at the time the 2009 EIR was prepared.

Regulations pertaining to energy use, including, but not limited to, State and federal vehicle standards and Building Energy Efficiency Standards, are more stringent than the regulations in place at the time the 2009 EIR was adopted. As a result, energy use associated with the proposed project would likely be reduced from what was anticipated for the Wildhorse Ranch Project.

The following discussion includes an analysis of energy use associated with construction of the proposed project, as well as building energy use and transportation energy use associated with operations of the proposed project, as compared to current regulations pertaining to energy use.

Construction Energy Use

Construction of the proposed project would involve increased energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met through a hookup to the existing electricity grid; however, grid power would be used as opposed to diesel generators, where feasible.

Typically, at construction sites, electricity from the existing grid is used to power portable and temporary lights or office trailers. Because grid electricity would be used primarily for steady sources such as lighting, not sudden, intermittent sources such as welding or other hand-held tools, the increase in electricity usage at the site during construction would not be expected to cause any substantial peaks in demand. Construction of the proposed project, which would result in temporary increases in electricity demand, would not cause a permanent or substantial increase in demand that would exceed PG&E's demand projections or exceed the ability of PG&E's existing infrastructure to handle such an increase. Therefore, project construction would not result in any significant impacts on local or regional electricity supplies, the





need for additional capacity, or on peak or base period electricity demands. In addition, standards or regulations specific to construction-related electricity usage do not currently exist.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated pursuant to the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing a five-minute limit on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. Furthermore, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. Engine tiers are used to describe the emissions intensity and efficiency of an engine. Construction equipment with Tier 0 or Tier 1 engines are the least efficient, and Tier 4 is the most efficient. In November 2021, the CARB began developing standards for Tier 5 engines. All fleets are currently prohibited from adding Tier 0, Tier 1, or Tier 2 vehicles to the fleet. In addition, starting January 1, 2024, fleets with a total horsepower over 2,501, excluding non-profit training centers, may not add any Tier 3 or Tier 4 Interim vehicles.<sup>42</sup> The In-Use Off-Road Diesel Vehicle Regulation would, therefore, help to improve fuel efficiency for equipment used in construction of the proposed project.

The CARB enforces off-road equipment regulations through their reporting system, Diesel Off-road Online Reporting System (DOORS). Each construction fleet is required to update their DOORS account within 30 days of buying or selling a vehicle, and DOORS automatically calculates the fleet average index for each fleet. The fleet average index is an indicator of a fleet's overall emission rate, and is based on each vehicle's engine horsepower and model year, and whether it is equipped with a Verified Diesel Emission Control Strategy (VDECS). If a fleet cannot, or does not want to, meet the fleet average target in a given year, the fleet may instead choose to comply with the Best Available Control Technology (BACT) requirements. A fleet may meet the BACT requirements each year by turning over or installing VDECS on a certain percentage of its total fleet horsepower. 'Turnover' means retiring a vehicle, designating a vehicle as permanent low-use (a vehicle used less than 200 hours per year), repowering a vehicle with a higher tier engine, or rebuilding the engine to a more stringent emission standard. By each compliance date (annually on January 1<sup>st</sup>), the fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the BACT requirements.<sup>43</sup> The project would be required to comply with such regulations, which would ensure that construction equipment meets all State efficiency requirements.

<sup>42</sup> California Air Resources Board. Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation. August 29, 2023.

<sup>43</sup> California Air Resources Board. *Frequently Asked Questions, Regulation for In-Use Off-Road Diesel-Fueled Fleets (Off-Road Regulation)*. August 2014.





Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction. Over time, as technology progresses and more stringent emissions standards are put in place, construction equipment engines become increasingly efficient. Project construction would also be required to comply with all applicable YSAQMD rules and regulations, which are indirectly related to energy efficiency, which would help to further reduce energy use associated with the proposed project.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

### Building Energy Demand

The proposed project would include development of residential and recreational uses. Energy use associated with operation of the proposed project would be typical of such uses, requiring electricity for interior and exterior building lighting, HVAC systems, electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment.

The proposed project is required to comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, including the CBSC and CARB standards, which would ensure that the future uses would be designed to be energy efficient to the maximum extent practicable. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed development on-site would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. As required by Section 8.01.090 of the Municipal Code, the proposed project would comply with Tier 1 standards of the CALGreen Code, which would otherwise be voluntary under the CBSC. The proposed project would also be subject to the requirements included in Sections 8.01.060, 8.01.100, and 8.01.110 of the Municipal Code, and all applicable CAAP measures related to energy demand, as discussed in the Regulatory Context section, above. In addition, the 2022 CBSC has begun phasing in the provision of zero net energy by requiring residential projects to meet 100 percent of their electricity needs through rooftop solar. Therefore, residential development associated with the proposed project would include rooftop solar to meet 100 percent of each project's electricity demand. The 2022 Building Energy Efficiency Standards also requires that newly constructed non-residential buildings, including grocery stores, offices, financial institutions, unleased tenant space, retail space, schools, warehouses, auditoriums, convention centers, hotel/motels, libraries, medical office building/clinics, and theaters, be developed to include a solar PV system. Therefore, approximately 50 percent of the electricity demand associated with the non-residential development of the proposed project would be met by on-site renewable energy.



State regulations promote the generation of renewable energy and encourage energy efficiency through requirements placed on utility providers and strict development standards. For instance, the RPS requires utilities, including PG&E and VCE, to procure an increasing proportion of electricity from renewable sources. Ultimately the RPS requirements mandate that all electricity produced within the State be renewably sourced by the year 2045.

Based on the air quality modeling prepared for the proposed project, and after taking into consideration on-site renewable energy generation, the proposed project is anticipated to result in a total electricity consumption of approximately 0.25 GWh annually during operations. Compared to the electricity consumption for all of Yolo County, the proposed project's contribution would represent a 0.01 percent increase in electricity demand as compared to current conditions. Although the project would increase electricity demand in the project area, the increased demand is not anticipated to conflict with PG&E's or VCE's ability to meet the RPS requirements or exceed PG&E's or VCE's capacity such that the proposed project's energy demands would not be met. It should also be noted that the proposed residential units would not include the use of natural gas.

Increased energy does not necessarily mean that a project would have an impact related to energy resources. Based on Appendix F of the CEQA Guidelines, a proposed project would result in an impact related to energy resources if a project would result in the inefficient use or waste of energy. As stated above, the proposed project would be required to comply with the efficiency standards set forth in the CBSC, CALGreen Code, Building Energy Efficiency Standards, CARB, the City's Municipal Code, and the City's CAAP, and the proposed project would not conflict or obstruct with any State or local plans related to renewable energy.

With regard to landscaping and maintenance equipment, AB 1346 requires all new small off-road engines sold after January 1, 2024 to be all-electric. By the time the project is operational, a reasonable assumption can be made that at least a portion of the landscaping and maintenance equipment that would be used on-site would be electric. Given that electricity from PG&E and VCE is partially generated from renewable sources, the use of electric landscaping and maintenance equipment would be considered more energy efficient than diesel- or gas-powered landscaping and maintenance equipment.

### Transportation Energy Demand

In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by residents and visitors travelling to and from the project site.

The average fuel economy for the U.S. passenger vehicle fleet was 24.8 miles per gallon (mpg) in 2022, the most recent year such data is available.<sup>44</sup> In addition, petroleum refineries in the U.S. typically produce approximately 20 gallons of gasoline from one 42-gallon barrel of crude oil. Using an average of 24.8 mpg and an annual

<sup>44</sup> U.S. Energy Information Administration. *Total Energy, Table 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy*. Available at: <https://www.eia.gov/totalenergy/data/browser/?tbl=T01.08#/?f=A&start=200001>. Accessed March 2024.



VMT of approximately 5,679,857,<sup>45</sup> the project would result in the consumption of approximately 11,487 barrels of crude oil a year, which is a reduction of 10,660 barrels as compared to the 22,147<sup>46</sup> barrels of crude oil a year that would be consumed under buildout of the Wildhorse Ranch Project. California is estimated to consume approximately 605 million barrels of petroleum per year.<sup>47</sup> Based on the annual consumption within the State, vehicle trips generated by the proposed project would result in a 0.002 percent increase in the State's current consumption of gasoline, a decrease as compared to the 0.004 percent increase that would be associated with the Wildhorse Ranch Project.

The calculation above is likely an overestimate, as the estimate does not account for the increasing ownership of EVs. California leads the nation in registered alternatively fueled and hybrid vehicles. In fact, under SB 500, the State has required that, starting in the year 2030, all cars sold shall be zero-emission/EVs. In addition, State-specific regulations encourage fuel efficiency and reduction of dependence on oil. Improvements in vehicle efficiency and fuel economy standards help to reduce consumption of gasoline and reduce the State's dependence on petroleum products. The 2022 CBSC and Section 8.01.110 of the City of Davis Municipal Code also require new developments to include the necessary electrical infrastructure for EV charging stations. Based on the above, the actual consumption of gasoline associated with the proposed project is anticipated to be even lower than the 0.001 percent statewide contribution noted above.

The proposed project would be required to comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, signage and traffic-calming measures would be incorporated as part of the proposed project to improve mode-share safety on internal roadways used by bicyclists. From the internal street network, bicyclists would have access to an existing Class II bicycle lane located along the eastbound lane of East Covell Boulevard, as well as the grade-separated crossing of East Covell Boulevard to the southeast of the project site. With respect to pedestrian facilities, the proposed project would include new sidewalks along the internal grid street network within the project site. Additionally, the proposed project would include open space trail connections to the existing Wildhorse Agricultural Buffer to the east of the project site and the Wildhorse neighborhood to the west. Such improvements would provide pedestrian and bicycle connectivity within the project site and adjacent areas, thereby helping to discourage driving and reduce vehicle trips and associated transportation energy demand.

### Conclusion

Based on the above, the proposed project would not be considered to result in a wasteful, inefficient, or unnecessary use of energy, and the proposed project is not anticipated to conflict with a State or local plan for renewable energy or energy

---

<sup>45</sup> The annual VMT estimate presented herein is based on the Transportation Impact Study prepared for the proposed project by Fehr & Peers.

<sup>46</sup> Estimated using the annual VMT estimate for the Wildhorse Ranch Project of 10,985,150, as provided by Fehr & Peers.

<sup>47</sup> U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Available at: [https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep\\_fuel/html/fuel\\_use\\_pa.html&sid=US&sid=CA](https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA). Accessed March 2024.



efficiency. Therefore, the proposed project would not result in a new significant impact or a substantially more severe significant impact beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

### **Cumulative Impacts and Mitigation Measures**

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

A project’s emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The geographic context for the cumulative air quality analysis includes Yolo County and surrounding areas within the portion of the SVAB that is designated nonattainment for ozone and PM<sub>10</sub>.

Climate change occurs on a global scale, and emissions of GHGs, even from a single project, contribute to the global impact. However, due to the existing regulations within the State, for the purposes of this analysis, the geographic context for the analysis of GHG emissions presented in this SEIR is California.

Finally, a project’s impacts related to energy use may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The following discussion of energy impacts is based on the implementation of the proposed project in combination with buildout of the adopted City of Davis General Plan. Additional detail regarding the cumulative project setting can be found in Chapter 5, Statutorily Required Sections, of this SEIR.

**4.2-6 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Based on the analysis below, the currently proposed project would not result in a new significant cumulative impact or substantially more severe significant cumulative impact beyond what was previously identified in the 2009 EIR.**



Impacts related to cumulative criteria pollutant emissions were analyzed under Impact 4.4-4 of the 2009 EIR. As discussed therein, the Wildhorse Ranch Project was not determined to result in a potentially significant impact because the project's estimated operational emissions would not be in excess of the applicable YSAQMD thresholds. In addition, the 2009 EIR determined that the Wildhorse Ranch Project would ultimately result in a less-than-significant impact related to air quality as a result of construction emissions with implementation of Mitigation Measure 4.4-1. Therefore, the Wildhorse Ranch Project's incremental contribution to the long-term cumulative air quality impact was determined to be less than cumulatively considerable.

Buildout of the proposed project would lead to the release of emissions that would contribute to the cumulative regional air quality setting. The following section includes a discussion of the proposed project's contribution to the cumulative operational emissions associated with implementation of the proposed project, and the cumulative health effects of exposure to criteria pollutants, as compared to the Wildhorse Ranch Project.

### Cumulative Emissions

The proposed project is within an area currently designated as nonattainment for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. By nature, air pollution is largely a cumulative impact. Thus, the proposed project, in combination with other proposed and pending projects in the region would significantly contribute to air quality effects within the SVAB, resulting in an overall significant cumulative impact. However, any single project is not sufficient enough in size to, alone, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's incremental impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, YSAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the significance thresholds, as identified by the YSAQMD and shown in Table 4.2-8 above, that project's emissions would be cumulatively considerable, resulting in a significant adverse air quality impact to the region's existing air quality conditions.<sup>48</sup>

Accordingly, if the proposed project would result in an increase of ROG, NO<sub>x</sub>, or PM<sub>10</sub>, in excess of the YSAQMD's cumulative-level emissions threshold, which are equivalent to the YSAQMD's project-level operational emissions thresholds, the project could potentially result in a significant incremental contribution towards cumulative air quality impacts. Similarly, the proposed project's unmitigated cumulative contribution to regional emissions is equivalent to the project's unmitigated emissions, as presented in Table 4.2-9 Table 4.2-10.

As presented in Table 4.2-9, implementation of the Proposed Project Scenario would result in a decrease in construction-related ROG emissions and an increase in NO<sub>x</sub> and PM<sub>10</sub> emissions, as compared to the Baseline Conditions Scenario. Nonetheless, the total construction-related emissions associated with the Proposed Project

---

<sup>48</sup> Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [pg. 7]. July 11, 2007.





Scenario would be below the applicable YSAQMD thresholds of significance for all criteria pollutants. Therefore, Mitigation Measure 4.4-1 included in the 2009 EIR, which required preparation and implementation of a dust control plan to reduce PM<sub>10</sub> emissions, would not be applicable to the proposed project.

As shown in Table 4.2-10, the Proposed Project Scenario would result in a net increase in operational emissions of NO<sub>x</sub>, and net decrease in emissions of ROG and PM<sub>10</sub> as compared to the Baseline Conditions Scenario. Operational emissions of all criteria pollutants associated with the Proposed Project Scenario would be below the applicable YSAQMD's thresholds of significance.

Therefore, the proposed project would not result in a new significant impact or substantially more severe significant impact related to a cumulatively considerable net increase of criteria pollutant emissions for which the region is in nonattainment under an applicable federal and State AAQS beyond what was previously identified in the 2009 EIR.

### Cumulative Health Effects of Criteria Pollutants

The AAQS presented in Table 4.2-2 are health-based standards designed to ensure safe levels of criteria pollutants that avoid specific adverse health effects. Because the YSAQMD is designated as nonattainment for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>, the YSAQMD, along with other air districts in the SVAB region, has adopted federal and State attainment plans to demonstrate progress towards attainment of the AAQS. Full implementation of the attainment plans would ensure that the AAQS are attained and sensitive receptors within the SVAB are not exposed to excess concentrations of criteria pollutants. The YSAQMD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS and are designed to aid the district in implementing the applicable attainment plans to achieve attainment of the AAQS. Thus, if a project's criteria pollutant emissions exceed the YSAQMD's mass emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the YSAQMD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM standards. However, as noted above, ascertaining cancer risk, or similar measurements of health effects from air pollutants, is very difficult for regional pollutants such as the ozone precursors ROG and NO<sub>x</sub>, as there might be scientific limitations on an agency's ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies. For example, ozone concentrations depend upon various complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground level ozone concentrations related to the NAAQS and CAAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds.

Nonetheless, as discussed in Impacts 4.2-1 and 4.2-2, the proposed project would not result in emissions that exceed the YSAQMD's thresholds of significance during





construction or operations. Consequently, the proposed project would not result in a new significant impact or substantially more severe significant impact related to conflicting with the YSAQMD's adopted attainment plans or inhibit attainment of regional AAQS, and implementation of the proposed project would not contribute towards regional health effects associated with the existing nonattainment status of ozone and PM standards beyond what was previously identified in the 2009 EIR.

#### Conclusion

Based on the above, the proposed project would not result in a new significant cumulative impact or a substantially more severe significant cumulative impact related to a cumulatively considerable net increase of criteria pollutant emissions for which the region is in nonattainment under an applicable federal and State AAQS, conflicting with the YSAQMD's adopted attainment plans or inhibiting attainment of regional AAQS, or contributing towards regional health effects associated with the existing nonattainment status of ozone and PM standards beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

#### Modified Mitigation Measure(s)

*None required.*

#### New Mitigation Measure(s)

*None required.*

**4.2-7 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Based on the analysis below, the currently proposed project would not result in a new significant cumulative impact or substantially more severe significant cumulative impact beyond what was previously identified in the 2009 EIR.**

An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO<sub>2</sub> and, to a lesser extent, other GHG pollutants, such as CH<sub>4</sub> and N<sub>2</sub>O. Sources of GHG emissions include area sources, mobile sources or vehicles, utilities (electricity), water usage, wastewater generation, and the generation of solid waste.



At the time the 2009 EIR was drafted, the City was still in the process of establishing GHG reduction targets for new development projects. As discussed within the 2009 EIR, the City had not yet established a threshold of significance against which the Wildhorse Ranch Project could be evaluated. The 2009 EIR further noted that although the project would implement several design standards to reduce energy use well beyond 2009 Title 24 standards, as well as ensure overall consistency with the GHG reduction measures identified by the California Attorney General at the time, a single project cannot, on its own, feasibly mitigate impacts associated with the large-scale issue of global climate change. Therefore, impacts related to GHG emissions and global climate change were determined to be significant in the 2009 EIR, and Mitigation Measure 4.10-1, which required preparation and implementation of a sustainability plan was required. However, because implementation of Mitigation Measure 4.10-1 would not reduce the impact to a less-than-significant level, the 2009 EIR concluded that the impact would remain significant and unavoidable.

Since the adoption of the 2009 EIR, regulations pertaining to GHG emissions have become more stringent, and methodology and thresholds for evaluating new development projects' GHG emissions have been established. Therefore, as described in the Method of Analysis section above, project-related construction and operational GHG emissions have been estimated for both the Baseline Conditions and Proposed Project scenarios using CalEEMod.

### Construction Emissions

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. As discussed above, the City has not specifically adopted goals or thresholds to analyze GHG emissions from construction of proposed projects. As such, the YSAQMD is currently recommending GHG analysis consistent with the SMAQMD adopted thresholds of significance. For construction related GHG emissions, the SMAQMD has adopted a threshold of significance of 1,100 MTCO<sub>2</sub>e/yr.

Maximum unmitigated construction-related GHG emissions have been estimated for both the Baseline Conditions and Proposed Project scenarios, as presented in Table 4.2-11, below.

<b>Table 4.2-11</b>	
<b>Maximum Unmitigated Construction GHG Emissions</b>	
	<b>GHG Emissions (MTCO<sub>2</sub>e/yr)</b>
Baseline Conditions Scenario	232
Proposed Project Scenario	785
<i>Net Change</i>	+553
<b>Threshold of Significance</b>	<b>1,100</b>
<b>Exceeds Threshold?</b>	<b>NO</b>

*Source: CalEEMod, March 2024 (see Appendix C).*

As shown in Table 4.2-11, while the Proposed Project scenario would result in a net increase in construction GHG emissions as compared to the Baseline Conditions



Scenario, the total unmitigated construction GHG emissions would be below the SMAQMD 1,100 MTCO<sub>2e</sub>/yr threshold of significance (as recommended by YSAQMD). As a result, implementation of the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG during construction.

Based on the above, the proposed project would not result in new significant impacts or substantially more severe significant impacts related to construction GHG emissions as compared to the Wildhorse Ranch Project.

### Operational Emissions

As discussed above, the City of Davis has adopted a CAAP, as well as emissions reductions targets and emissions allowances for projects within the City. In March of 2019, the City adopted a resolution declaring a climate change emergency and accelerating the City’s previously identified emissions reductions goal to a new goal of carbon neutrality by the year 2040. In recognition of the City Council’s actions and emissions reductions efforts and policies enacted by the City’s CAAP, for the purposes of this EIR, the proposed project would be considered to have a significant impact if emissions from the Proposed Project Scenario would result in net positive operational emissions as compared to the Baseline Conditions Scenario. Should the project be shown to reach net neutrality compared to the Baseline Conditions Scenario, the project would be considered to provide a proportional share of emissions reductions and would not inhibit attainment of citywide net carbon neutrality by the year 2040, nor would the project conflict with the City’s CAAP.

Maximum unmitigated operational GHG emissions for the first year of operation for the proposed project were estimated as presented in Table 4.2-12.

<b>Table 4.2-12</b>			
<b>Maximum Unmitigated Operational GHG Emissions</b>			
<b>Emission Source</b>	<b>GHG Emissions (MTCO<sub>2e</sub>/yr)</b>		
	<b>Baseline Conditions Scenario</b>	<b>Proposed Project Scenario</b>	<b>Net Change</b>
Mobile	3,362	2,081	-1,281
Area	2.37	2.38	+0.01
Energy	298	265	-33
Water	13.1	12.7	-0.4
Waste	42.4	68.8	+26.4
Refrigerants	0.31	0.33	+0.02
<b>Total Annual GHG Emissions</b>	<b>3,718</b>	<b>2,430</b>	<b>-1,288</b>

*Source: CalEEMod, March 2024 (see Appendix C).*

As shown in the table, the Proposed Project Scenario would result in a net reduction in operational GHG emissions as compared to operational GHG emissions that would be generated under the Baseline Conditions Scenario. Therefore, the project would be considered to provide a proportional share of GHG emissions reductions and would not inhibit attainment of citywide net carbon neutrality by the year 2040. However, in



order to ensure that the proposed project would not conflict with the City's CAAP, the proposed project would be required to implement all applicable GHG emissions reduction actions included in the City's CAAP. The proposed project's consistency with the reduction actions set forth in the CAAP is discussed in further detail below.

### **City of Davis Climate Action and Adaptation Plan**

The primary goal of a CAAP is to provide a plan for reducing GHG emissions. The City of Davis CAAP identifies reduction actions intended to reduce future GHG emissions to 37 percent below 2016 levels by 2030 and set the community on a trajectory toward the 2040 carbon neutrality goal.

The majority of the reduction actions included within the City's CAAP are targeted for implementation at the City-level, and are, therefore, not applicable to the proposed project. For example, under CAAP Action BE.6, the City would establish a carbon mitigation fund to collect voluntary and/or mandatory payments to mitigate local emissions activities, with collected funds used to support a range of local, climate-change-related projects. The proposed project could be subject to the referenced program, should any such program be adopted by the City in the future. However, CAAP Action BE.6, and many of the other measures included in the CAAP, are not directly applicable to the proposed project.<sup>49</sup>

The proposed project would be generally consistent with the remaining CAAP actions that are applicable to the proposed project. Specifically, Action TR.11 aims to increase housing opportunities, including high-density, mixed-use, transit-oriented, and affordable options, to support the jobs/housing balance and decrease VMT within the City. The proposed residential community would be comprised of up to 175 units, including new cottages, half-plex townhomes, single-family residences (medium and large), and multi-family apartments. Pursuant to the City's Affordable Housing Ordinance (Davis Municipal Code Article 18.05) and based upon the proposed mix of residential units and lot sizes, the proposed project is required to provide a minimum of 26 affordable units. The proposed project would include up to 45 affordable units, as the new multi-family apartment units would be deed-restricted. In addition, at least nine existing bus stops are located less than 0.25-mile from the project site along East Covell Boulevard, Monarch Lane, Temple Drive, and Alhambra Drive. The transit stops are served by Unitrans (Lines L, P, and Q) and Yolobus (Routes 42 and 43).

As discussed above, the proposed residential units would not include the use of natural gas and, thus, the proposed project would be consistent with Action BE.4 related to all-electric new construction. All on-site residents would also have the opportunity to

---

<sup>49</sup> Additional CAAP actions not applicable to the proposed project include voluntary Actions BE.1 and BE.2 related to existing buildings; actions related to implementation of future policies and programs that have not yet been developed within the City, such as Action BE.3, BE.8, TR.3, TR.4, TR.6, TR.7, TR.9, TR.10, WW.1, AD.1, AD.3, AD.5, CR.1, and CR.2; actions related to implementation of existing City programs not applicable to the proposed project such as Action TR.1, which aims to implement specifically-located EV charging projects, as identified in the City's EV Charging Plan (none of which are located on or near the project site), and Action TR.8, which aims to implement parking improvements in the downtown area; and Actions, such as BE.7, TR.2, AD.4, and AD.6 related to requirements associated with City-owned facilities and transportation fleets or critical public infrastructure such as hospitals. Similar to the future program proposed by Action BE.6, should any program or policy be adopted by the City in the future related to the aforementioned actions, the proposed project could be subject to such requirements, as applicable.



opt into receiving energy from VCE, ensuring that the proposed project would be consistent with Action BE.5.

Several CAAP actions, such as Action TR.5, which is directly applicable to the proposed project, and Citywide actions such as Actions TR.3, TR.4, TR.6, and TR.7, are related to increasing the use of alternative transportation modes within the City. The proposed project would include several improvements to the bicycle and pedestrian network within the City, such as incorporation of signage and traffic-calming measures to improve mode-share safety on internal roadways used by bicyclists, as well as open space trail connections to the existing Wildhorse Agricultural Buffer to the east of the project site and the Wildhorse neighborhood to the west. The aforementioned improvements would facilitate the use of alternative transportation modes within the City. Therefore, the proposed project would be generally consistent with Action TR.5, and, while not directly applicable to the proposed project, would generally be consistent with the goals Citywide Actions TR.3, TR.4, TR.6, and TR.7.

Finally, with regard to Action AD.2, which aims to expand urban forest in parks, greenbelts, and open space with climate-ready species that provide shade, the 0.60-acre Lot D, located along the southern portion of the western site boundary, would include an area for the planting of an urban forest. In addition, the 0.53-acre Lot G, located in the northern portion of the site, would include an area for the planting of an urban forest. The proposed project would also include a 20-foot-wide tree buffer located along the western and northern site boundaries within a private easement for tree plantings. Therefore, the proposed project would be generally consistent with Action AD.2.

It should also be noted that while, as discussed above, several actions included in the CAAP are related to implementation of future citywide policies and programs that have not yet been developed within the City, the proposed project would include several design features that would generally be consistent with the goals of such actions. For example, the proposed project would be built in compliance with the requirements of the CalGreen Tier 1 standards, as required by Section 8.01.090 of the Municipal Code, and would include the provision of on-site renewable energy as well as EV charging infrastructure, generally consistent with the goals of Actions BE.3, TR.10, and AD.1. In addition, the proposed project would integrate Low Impact Development (LID) measures and volume-based BMPs, such as bioretention, infiltration features, and pervious pavement, and flow-based BMPs, such as vegetated swales and stormwater planters throughout the site to provide stormwater quality treatment, consistent with the City of Davis Storm Water Quality Control Standards, generally consistent with the goals of Action AD.3. With regard to on-site landscaping improvements, the project applicant would coordinate with a University of California, Davis (UC Davis) horticulturalist to select a plant palette that includes a mix of native, drought-tolerant, climate-ready, and carbon-capturing qualities associated with the new trees, shrubs, and seasonal grasses, generally consistent with the goals of Action WW.1. Finally, as discussed in Chapter 4.6, Transportation, of this EIR, the proposed project would implement a series of transportation demand management (TDM) strategies, as recommended by the California Air Pollution Control Officers Association (CAPCOA) Handbook for Assessing GHG Emission Reductions, Climate Vulnerabilities, and



Health and Equity (December 2021), to reduce project-generated VMT to the maximum extent feasible, generally consistent with the goals of Action TR.11.

Therefore, implementation of the proposed project would be consistent with the overarching goal of the CAAP, which is to reduce GHG emissions.

### **Conclusion**

Based on the above, the proposed project would not result in a new significant cumulative impact or a substantially more severe significant cumulative impact related to generating GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs beyond what was previously identified in the 2009 EIR.

### **Applicable Mitigation Measure(s) from the 2009 EIR**

The 2009 EIR included Mitigation Measure 4.10-1, which required preparation and implementation of a sustainability plan to ensure consistency with EO S-3-05, the Attorney General's suggested global warming mitigation measures, and/or City of Davis Resolution No. 08-166. However, such regulations pertaining to GHG emissions are no longer relevant, as new, more stringent regulations pertaining to GHG emissions have since been adopted (i.e., AB 32, SB 32, EO B-55-18, the City's goal of net carbon neutrality by the year 2040, and the City of Davis CAAP). Thresholds for evaluating new development projects' GHG emissions have also been established since preparation of the 2009 EIR.

As discussed above, total unmitigated construction emissions would be below the SMAQMD 1,100 MTCO<sub>2</sub>e/yr threshold of significance. In addition, the Proposed Project Scenario would result in a net reduction in operational GHG emissions as compared to operational GHG emissions that would be generated under the Baseline Conditions Scenario, and implementation of the project would be consistent with the overarching goal of the CAAP, which is to reduce GHG emissions. Therefore, the project would be considered to provide a proportional share of GHG emissions reductions and would not inhibit attainment of citywide net carbon neutrality by the year 2040, nor would the project conflict with the City's CAAP.

As the actions included in the City's CAAP are intended to meet the current, more stringent, GHG regulations, such measures would supersede the measures included in Mitigation Measure 4.10-1 of the 2009 EIR. As such, Mitigation Measure 4.10-1 of the 2009 EIR would no longer be applicable to the proposed project.

### **Modified Mitigation Measure(s)**

*None required.*

### **New Mitigation Measure(s)**

*None required.*





**4.2-8 Result in a cumulatively considerable inefficient or wasteful use of energy or conflict with a State or local plan for renewable energy or energy efficiency. Based on the analysis below, the currently proposed project would not result in a new significant cumulative impact or substantially more severe significant cumulative impact beyond what was previously identified in the 2009 EIR.**

Impact 4.2-5 discusses the proposed project's consumption of energy on a project-level, within the context of existing State plans and regulations, as well as local plans. As discussed previously, the project would involve consumption of diesel, gasoline, and electricity throughout construction and operations. However, all proposed structures would be built in compliance with existing statewide mandatory energy efficiency standards, such as those contained in the California Building Energy Efficiency Standards and the CALGreen Code. Compliance with the energy efficiency standards would reduce the amount of electricity consumed by the proposed development. State regulations would also help to reduce the amount of energy consumed by on-road vehicles over time. For instance, State and federal emissions standards and fuel economy standards result in increased fuel efficiency for on-road vehicles. Overall, as concluded above, the proposed project would not result in a new significant impact or a substantially more severe significant impact related to energy beyond what was previously identified in the 2009 EIR.

Similar to the proposed project, all future development within the City of Davis would be required to comply with applicable State and local regulations related to energy efficiency, including all applicable CAAP measures related to energy demand, as discussed above. Increased efficiency would be ensured in the future as cumulative development occurs due to compliance with the State's robust energy efficiency requirements. For example, the 2022 CBSC has begun phasing in the provision of zero net energy by requiring residential projects to include on-site solar to meet the annual electricity usage of each residence. Cumulative residential development would include on-site solar to meet the annual electricity usage of each project's electricity demand and, pursuant to the 2022 Building Energy Efficiency Standards, newly constructed non-residential buildings, including grocery stores, offices, financial institutions, unleased tenant space, retail space, schools, warehouses, auditoriums, convention centers, hotel/motels, libraries, medical office building/clinics, and theaters are required to install a solar PV system. Furthermore, energy efficiency regulations have been getting progressively more stringent over time. Thus, as cumulative development occurs under the increasingly stringent regulations, the energy use associated with such cumulative development is anticipated to be increasingly energy efficient over time as well.

Based on the above, the proposed project, in combination with other cumulative development in the project region, would not result in a new significant cumulative impact or a substantially more severe significant cumulative impact related to the wasteful or inefficient use of energy beyond what was previously identified in the 2009 EIR.



Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*



---

---

## **4.3 BIOLOGICAL RESOURCES**

---

---

## 4.3 BIOLOGICAL RESOURCES

### 4.3.1 INTRODUCTION

Pursuant to CEQA Guidelines Section 15162, the Biological Resources chapter of the Subsequent Environmental Impact Report (SEIR) assesses whether the proposed project would result in a new significant impact not previously identified in the Wildhorse Ranch Project EIR (2009 EIR) or a substantial increase in the severity of a significant impact previously identified in the 2009 EIR. The City of Davis has prepared the SEIR to analyze new or substantially more severe potential adverse effects that could occur as a result of the changes from the former Wildhorse Ranch Project to the currently proposed project. For further details related to the proposed project, refer to Chapter 3, Project Description, of this SEIR.

This chapter describes the existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities that could occur within the project region. In addition, the chapter evaluates the currently proposed project's potential impacts to biological resources and identifies measures to eliminate or substantially reduce impacts to a less-than-significant level. The information contained in the analysis is primarily based on a Biological Resources Assessment (BRA) prepared for the proposed project by Madrone Ecological Consulting (Madrone) (see Appendix D of this SEIR).<sup>1</sup> Further information was sourced from the City of Davis General Plan,<sup>2</sup> the City of Davis General Plan EIR,<sup>3</sup> the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP),<sup>4</sup> and the 2009 EIR.

### 4.3.2 EXISTING ENVIRONMENTAL SETTING

The following sections describe the regional biological setting in which the project site is located, the biological setting of the project site, and the special-status species known to occur within the project site and surrounding environs.

#### Regional Setting

The project site consists of approximately 25.8 acres on an existing property known as the Wildhorse Ranch and/or Duffel Horse Ranch, located north of East Covell Boulevard in the City of Davis, California. The City of Davis experiences a Mediterranean-type climate with cool, wet winters, and hot, dry summers. Temperatures in the project region fluctuate from average highs in July of 93 degrees Fahrenheit, with average lows in December of 39 degrees Fahrenheit.<sup>5</sup> Nearly all precipitation occurs between October and April in the form of rainfall, with February typically the wettest month, averaging 4.1 inches.

<sup>1</sup> Madrone Ecological Consulting. *Biological Resources Assessment, Palomino Place, Yolo County, California*. June 13, 2024.

<sup>2</sup> City of Davis. *City of Davis General Plan*. Adopted May 2001, Amended January 2007.

<sup>3</sup> City of Davis. *Final Program EIR for the City of Davis General Plan Update and Final Project EIR for Establishment of a New Junior High School*. Certified May 2001.

<sup>4</sup> Yolo Habitat Conservancy. *Yolo Habitat Conservation Plan/Natural Community Conservation Plan*. April 2018.

<sup>5</sup> Weather Spark. *Climate and Average Weather Year Round in Davis*. Available at: <https://weatherspark.com/y/1120/Average-Weather-in-Davis-California-United-States-Year-Round>. Accessed April 2024.



The City of Davis is located within the Central Valley region of California, within southeastern Yolo County. The Central Valley is a north-south oriented valley that extends approximately 430 miles from southern Tehama County to south-central Kern County in southern California. Elevations in the Central Valley range from approximately zero to 400 feet above mean sea level (amsl). In general, the borders of the Central Valley are areas where alluvial soils grade into bedrock features. Biological communities in the Central Valley once supported vast areas of grassland, marshes, and riparian woodland. The landscape is currently dominated by woodland biological communities, typically referred to as the foothills, with land uses that are predominantly agricultural. In addition, the Central Valley is situated in the Pacific Flyway, a major migration route for waterfowl and other birds in North America.

### **Project Setting**

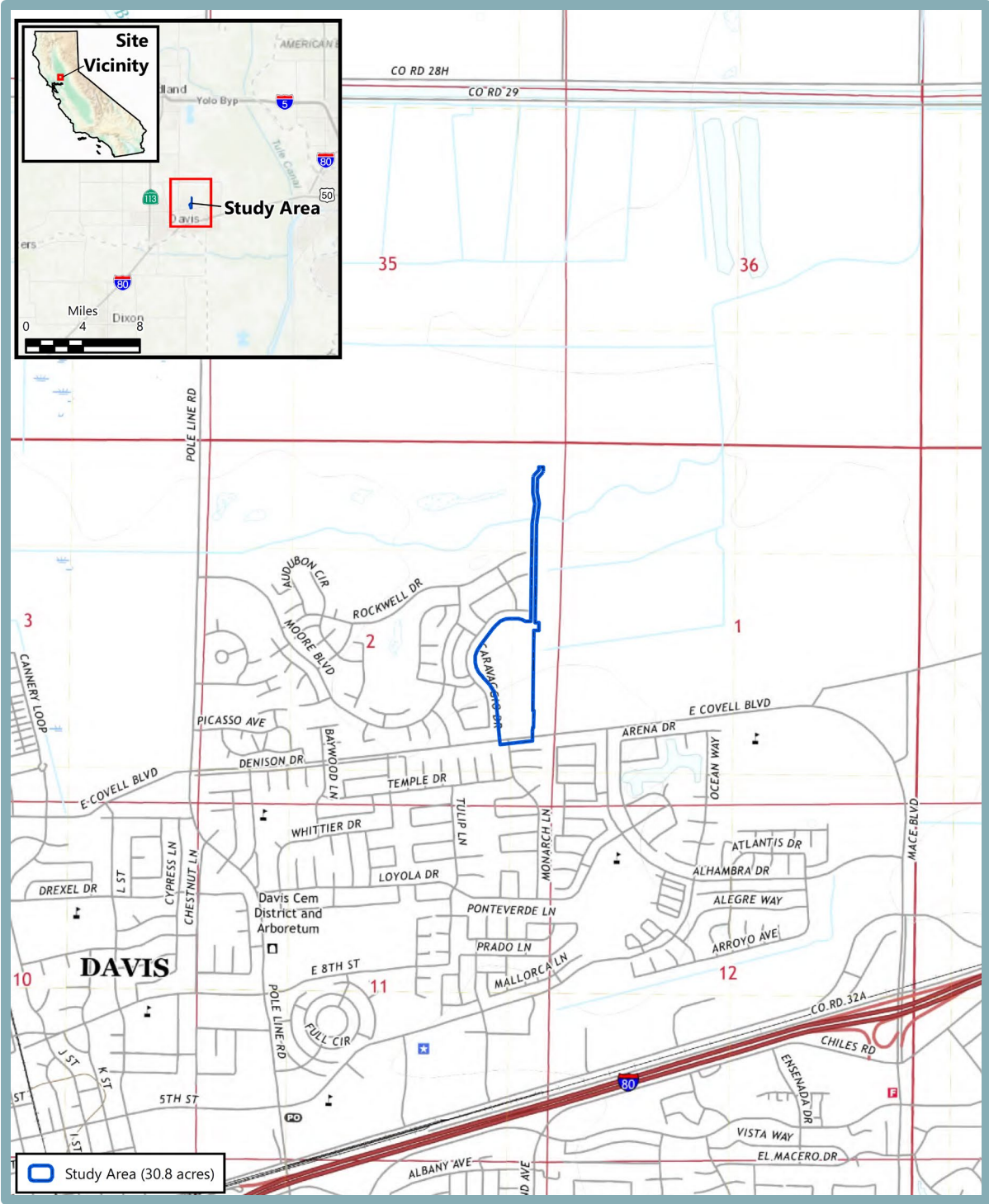
The approximately 31-acre study area evaluated as part of the project-specific BRA consists of the 25.8-acre project site, as well as off-site improvement areas, including the segment of East Covell Boulevard immediately south of the project site and an approximately three-acre portion of the Wildhorse Agricultural Buffer. The portion of the Wildhorse Agricultural Buffer was included within the BRA study area due to the proposed installation of an obstacle course adjacent to the project site boundaries, as well as 2,270 lineal feet of new 12-inch sewer line necessary for establishing sewer service to the proposed project (see Figure 4.3-1). Within the central portion of the project site, the site includes a ranch home, two duplexes, a horse barn, and an equestrian training facility that is not currently in use. The remaining portion of the property was previously used as pasture/grazing land, but now supports ungrazed ruderal vegetation that has been partially mowed for fire-control purposes. Based on review of aerial imagery and the presence of substantial existing infrastructure, the study area was likely used to support horses and potentially other livestock, with the majority of the ruderal portions of the site historically grazed. The terrain within the study area is mostly flat at an elevation of approximately 30 to 40 feet amsl.

Vegetation within the on-site ruderal areas is dominated by non-native ruderal grasses and forbs, including wild oats (*Avena barbata* and *Avena fatua*), black mustard (*Brassica nigra*), Italian thistle (*Carduus pycnocephalus*), yellow star-thistle (*Centaurea solstitialis*), shortpod mustard (*Hirschfeldia incana*), perennial pepperweed (*Lepidium latifolium*), and milk thistle (*Silybum marianum*). Other vegetation growing within the ruderal areas includes field bindweed (*Convolvulus arvensis*), Bermuda grass (*Cynodon dactylon*), stinkwort (*Dittrichia graveolens*), and fennel (*Foeniculum vulgare*). Numerous planted trees occur throughout the ruderal area, including Italian cypress (*Cupressus sempervirens*), fig trees (*Ficus carica*), English walnut (*Juglans regia*), olive trees (*Olea europaea*), Chinese pistache (*Pistacia chinensis*), plum trees (*Prunus* sp.), pomegranate trees (*Punica granatum*), and Mexican fan palm (*Washingtonia robusta*).

The northern portion of the BRA study area is comprised of the Wildhorse Agricultural Buffer, which is an Urban Agricultural Transition Area created pursuant to Davis Municipal Code Article 40A.01.050 as a buffer between the existing residential development north of the project site and the adjacent farmland to the east of the site and includes native landscaping, wildlife habitat, and a pedestrian trail. The Wildhorse Agricultural Buffer area consists of annual grassland dominated by non-native annual grasses and forbs, such as wild oats, ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), Medusa head grass (*Elymus caput-medusae*), perennial ryegrass (*Festuca perennis*), wall barley (*Hordeum murinum*), rose clover (*Trifolium hirtum*), and winter vetch (*Vicia villosa*).



**Figure 4.3-1  
Study Area Evaluated Under the BRA**





Other species within the annual grassland include native perennial bunchgrasses, such as creeping wildrye (*Leymus triticoides*), purple needle grass (*Nassella pulchra*), deer grass (*Muhlenbergia rigens*), and slender wheatgrass (*Elymus trachycaulus*). In addition, the BRA identifies grasses such as yellow star-thistle, perennial pepperweed, field bindweed, narrow-leaf milkweed (*Asclepias fascicularis*), horseweed (*Erigeron canadensis*), prickly lettuce (*Lactuca serriola*), and alkali mallow (*Malvella leprosa*). Scattered trees occur along the trail, dominated by Valley oak (*Quercus lobata*).

Other associated tree and shrub species include California buckeye (*Aesculus californica*), toyon (*Heteromeles arbutifolia*), Northern California black walnut (*Juglans hindsii*), western sycamore (*Platanus racemosa*), interior live oak (*Quercus wislizeni*), and California rose (*Rosa californica*).

### Yolo HCP/NCCP Land Cover Types

Madrone identified the following Yolo HCP/NCCP land covers within the study area: Bulrush-Cattail Freshwater Marsh Alliance, Mixed Willow Alliance, Urban, Urban Ruderal with Covered Species Habitat (ruderal areas), Vegetated Corridor, and California Annual Grassland Alliance, as shown in Figure 4.3-2 and summarized in Table 4.3-1. The study area’s land cover types are discussed in further detail below. It should be noted that, subsequent to the certification of the 2009 EIR, the Yolo HCP/NCCP was adopted in January 2019 (as discussed further in the Regulatory Context section of this chapter). Thus, the 2009 EIR did not include discussions of Yolo HCP/NCCP land cover types.

Land Covers	Acres
Bulrush-Cattail Freshwater Marsh Alliance	0.05
Mixed Willow Alliance	0.04
Urban	4.9
Urban Ruderal with Covered Species Habitat	22.6
Vegetated Corridor	0.3
California Annual Grassland Alliance	3.0
<b>Total</b>	<b>30.8</b>

*Source: Madrone Ecological Consulting, 2024.*

#### Bulrush-Cattail Freshwater Marsh Alliance

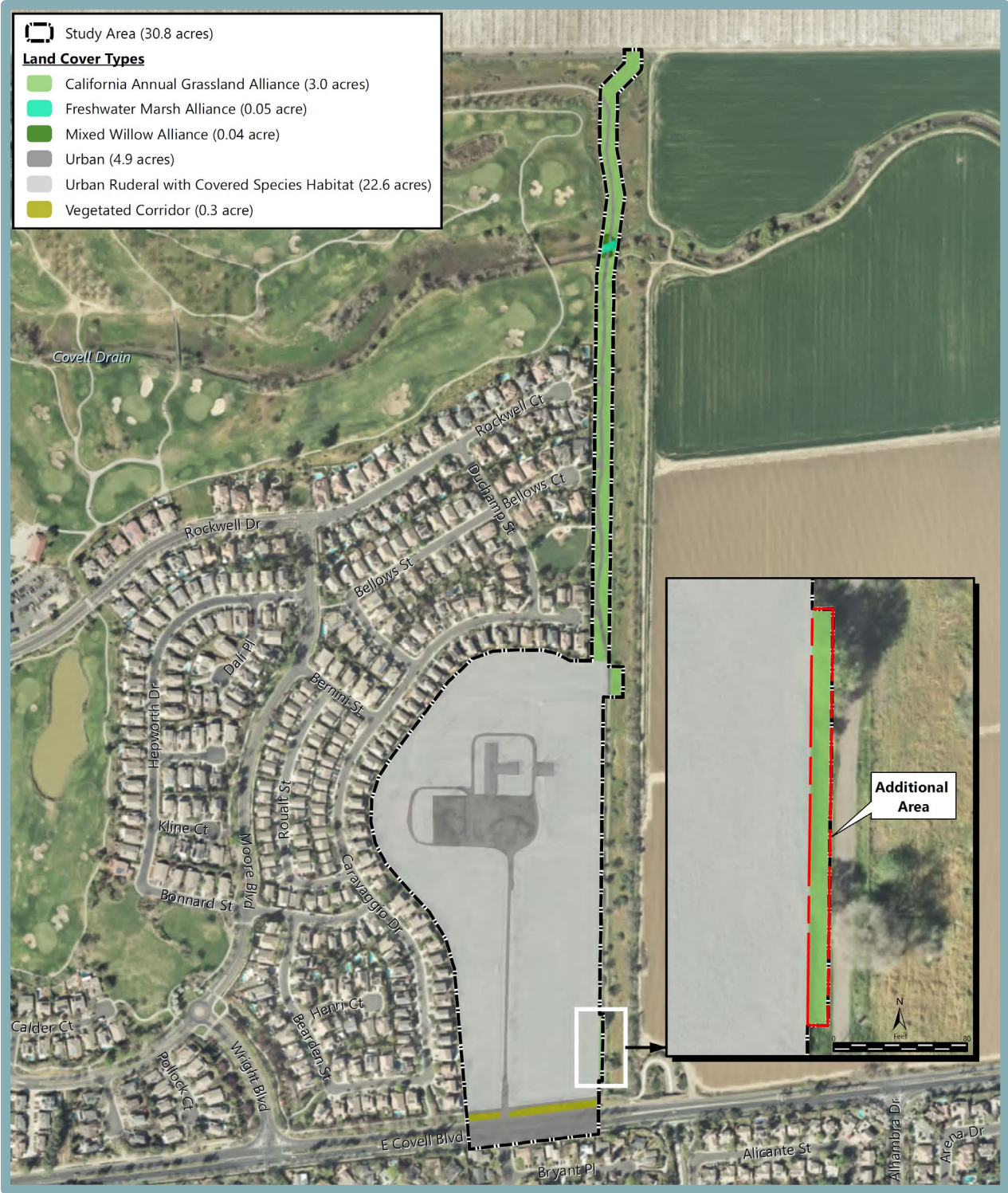
A total of 0.05-acre of aquatic resources occurs within the off-site portion of the study area to the north of the project site. The Bulrush-Cattail Freshwater Marsh Alliance land cover occurs within an intermittent drainage known as Channel A and is dominated by emergent wetland vegetation, including Baltic rush (*Juncus balticus*) and common tule (*Schoenoplectus acutus*). Other species within the drainage include tall nut-sedge (*Cyperus eragrostis*), panicled willowherb (*Epilobium brachycarpum*), common knotweed (*Persicaria lapathifolia*), curly dock (*Rumex crispus*), and cattail (*Typha* sp.).

#### Mixed Willow Alliance

Small patches of Mixed Willow Alliance land cover totaling 0.04-acre occur off-site, along Channel A where the drainage crosses through the study area. The areas are dominated by Goodding’s black willow (*Salix gooddingii*), along with other riparian vegetation, including Fremont cottonwood (*Populus fremontii*) and California wild grape (*Vitis californica*).



**Figure 4.3-2**  
**Yolo HCP/NCCP Land Cover Types**



### Urban

The Urban land cover type consists of several patches of mostly unvegetated development within the central portion of the study area, including the on-site residences and structures, paved/gravel roads, grass lawns, and other associated infrastructure. In addition, a portion of East Covell Boulevard occurs at the southern portion of the study area, and a gravel walking trail extends through the Wildhorse Agricultural Buffer. The Urban land cover totals approximately 4.9 acres.

### Urban Ruderal with Covered Species Habitat

Approximately 22.6 acres of the ruderal areas are located within the study area. The ruderal areas appear to be regularly disturbed and occur throughout the main portion of the project site. Vegetation is predominantly dominated by non-native ruderal grasses and forbs, including wild oats, black mustard, Italian thistle, yellow star-thistle, shortpod mustard, perennial pepperweed, and milk thistle. Several species of planted ornamental trees also occur within the ruderal areas. Portions of the ruderal areas contain extremely tall and robust vegetation (likely due to an absence of livestock grazing), while other areas contain shorter vegetation that appears to be regularly mowed.

### Vegetated Corridor

Approximately 0.3-acre of Vegetated Corridor land cover occurs within the study area. The Vegetated Corridor land cover areas consist of maintained ornamental tree and shrub species planted along East Covell Boulevard along the southern boundary of the project site.

### California Annual Grassland Alliance

The approximately three acres of California Annual Grassland Alliance land cover occurs throughout the northern portion of the study area within the Wildhorse Agricultural Buffer, outside of the project site boundaries. The understory includes non-native annual grasses such as wild oats, ripgut brome, perennial ryegrass, and perennial pepperweed. Native California grasses and forbs such as purple needlegrass, creeping wildrye, blue wildrye, narrow-leaf milkweed and Spanish clover are also found on-site. Although portions of the annual grassland adjacent to the walking trail that extends through the Wildhorse Agricultural Buffer have been mowed, the three acres of California Annual Grassland Alliance land cover is significantly less disturbed and features less ruderal vegetation than the ruderal areas in the project site. Native trees and shrubs have been planted throughout the site, including along the walking trail within the Wildhorse Agricultural Buffer.

### **Aquatic Resources**

Pursuant to the BRA, a total of 0.052-acre of aquatic resources has been mapped within the study area as part of two Aquatic Resources Delineations (ARDs) (see Figure 4.3-3 and Table 4.3-2), as discussed further below. It should be noted that the 2009 EIR did not identify the need for an off-site sewer line connection to the north, the alignment for which crosses Channel A. Thus, the 2009 EIR did not identify aquatic resources within the biological resources study area, as inclusion of the Wildhorse Agricultural Buffer within the previous study area was not warranted.

<b>Table 4.3-2</b>	
<b>Aquatic Resources Delineated Within the Study Area</b>	
<b>Resource Type</b>	<b>Acreage</b>
Intermittent Drainage (Channel A)	0.052
<i>Source: Madrone Ecological Consulting, 2024.</i>	





**Figure 4.3-3  
Aquatic Resources**



### Channel A – Intermittent Drainage

Channel A flows from west to east through a northerly portion of the study area outside of the project site boundaries, and is generally sparsely vegetated, although dense patches of vegetation occur in portions of the drainage and along the edges of the channel. A wooden plank bridge crosses Channel A within the study area as part of the walking trail within the Wildhorse Agricultural Buffer. Riparian vegetation occurs at the bridge crossing and is dominated by Goodding's black willow, along with Fremont cottonwood and California wild grape (*Vitis californica*). The upland areas along the banks of the Channel A consist of mugwort (*Artemisia douglasiana*) and Dallis grass (*Paspalum dilatatum*), as well as vegetation similar to the annual grasslands within the Wildhorse Agricultural Buffer.

### **Special-Status Species**

Special-status species are species that have been listed as threatened or endangered under the federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or are of special concern to federal resource agencies, the State, or private conservation organizations. A species may be considered to have special status due to declining populations, vulnerability to habitat change, or restricted distributions. A general description of the criteria and laws pertaining to special-status classifications is described below.

Special-status plant and wildlife species may meet one or more of the following criteria:

1. Listed as threatened or endangered, or proposed or candidates for listing by the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS);
2. Listed as threatened or endangered and candidates for listing by the California Department of Fish and Wildlife (CDFW);
3. Identified as Fully Protected species, Species of Special Concern, or Watch List species by CDFW;
4. Identified as a Bird of Conservation Concern by the USFWS;
5. Identified as Medium or High priority species by the Western Bat Working Group (WBWG);
6. Plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS) and CDFW (California Rare Plant Rank [CRPR] 1, 2, and 3):
  - a. CRPR 1A: Plants presumed extinct.
  - b. CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
  - c. CRPR 2A: Plants extirpated in California, but common elsewhere.
  - d. CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
  - e. CRPR 3: Plants about which the CNPS needs more information – a review list.
7. Identified as a Covered Species in the Yolo HCP/NCCP.

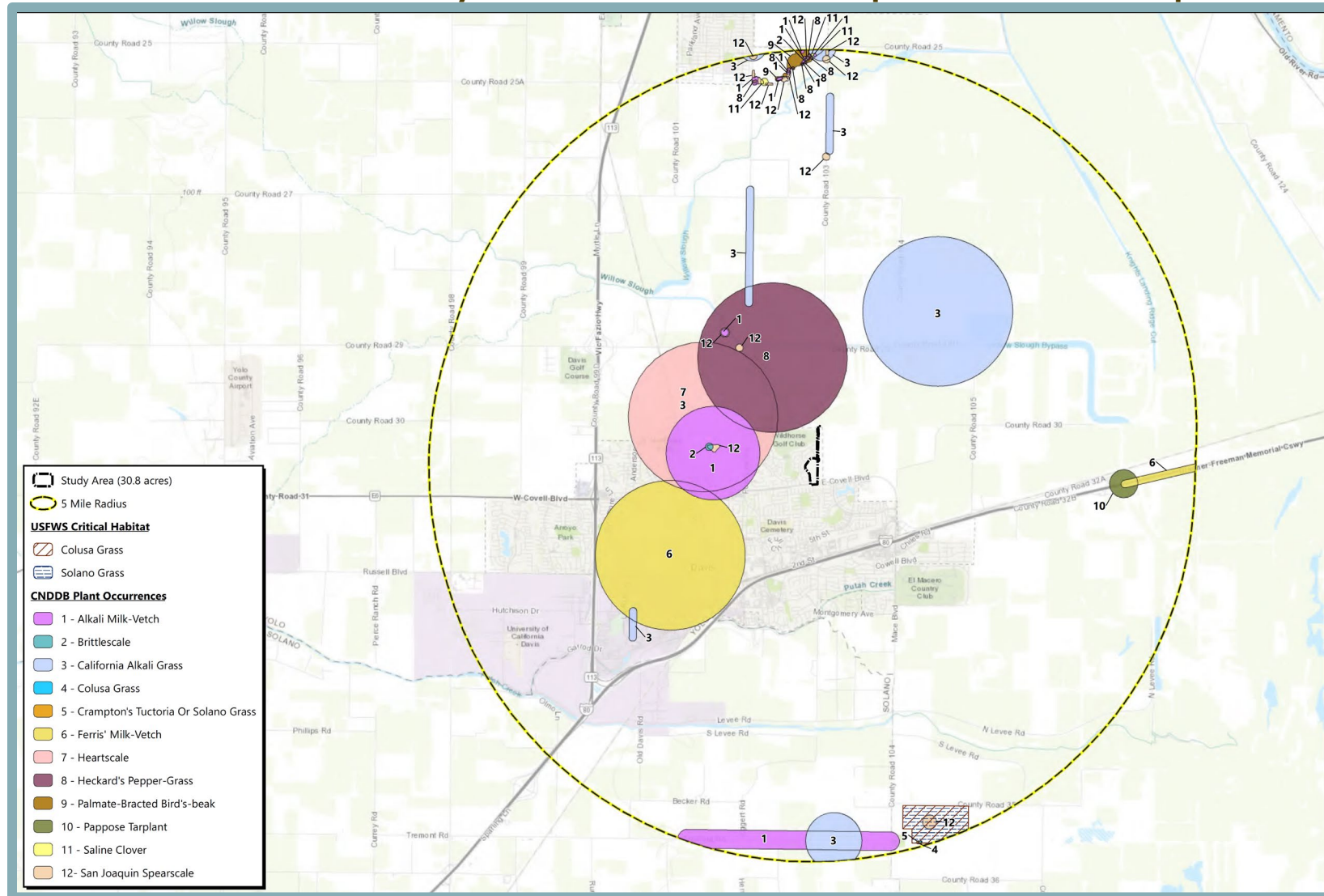
### Listed and Special-Status Plant Species

According to the records of the California Natural Diversity Database (CNDDDB) maintained by the CDFW, 23 special-status plant species have the potential to occur on or within five miles of the study area (see Figure 4.3-4). Based on field observations and literature review (detailed further in this chapter in the Method of Analysis section), two of the 23 special-status plant species have potential to occur within the study area.





**Figure 4.3-4  
 California Natural Diversity Database Occurrences of Special-Status Plant Species**





As part of determining the potential for special-status plant and wildlife species to occur within the study area, the following set of criteria was used:

- Present: Species occurs within the study area based on CNDDDB records and/or was observed within the study area during the field surveys;
- High: The study area is within the known range of the species and suitable habitat exists within the study area;
- Moderate: The study area is within the known range of the species and very limited suitable habitat exists within the study area;
- Low: The study area is within the known range of the species and marginally suitable habitat exists within the study area or the species was not observed during protocol-level surveys conducted within the study area; or
- Absent/Habitat Not Present: The study area does not contain suitable habitat for the species, or the study area is outside the known range of the species.

As shown below in Table 4.3-3, based on protocol-level plant surveys and literature review (detailed further in this chapter under the Method of Analysis section), two of the 23 special-status plant species were determined to have potential to occur within the study area. The species considered to have *low* potential to occur in the project study area include bristly sedge and San Joaquin spearscale. It should be noted that the 2009 EIR did not identify any special-status plant species with potential for occurrence within the project site. The following discussions provide further details of the two special-status plant species identified by the BRA with potential to occur within the study area.

#### *Bristly Sedge*

Bristly sedge (*Carex comosa*) is not listed pursuant to either FESA or CESA and is not covered under the Yolo HCP/NCCP, but is designated as a CRPR List 2B.1 species. Bristly sedge is a rhizomatous perennial that occurs in coastal prairie and in marshy lake margins at elevations ranging from sea level to approximately 2,050 feet amsl. The species blooms from May through September (although sedges are only identifiable when in fruit in late summer and early fall).

Marginally suitable habitat for the species is present in the Channel A, which is located off-site. Pursuant to the CNDDDB, the species has not been documented within five miles of the study area. In addition, bristly sedge was not observed during the protocol-level plant surveys of the study area, which were conducted in September 2022 when the species would have been identifiable. Thus, bristly sedge has *low* potential for occurrence within the study area.

#### *San Joaquin Spearscale*

San Joaquin spearscale (*Extriplex joaquinana*) is not listed pursuant to either FESA or CESA and is not covered under the Yolo HCP/NCCP. The species is classified as a CRPR List 1B.2 plant. San Joaquin spearscale is an annual herbaceous species endemic to California. The species occurs in chenopod scrub, meadows and seeps, playas, and grasslands, often in alkaline soils at elevations ranging from sea level to approximately 2,740 feet amsl. San Joaquin spearscale blooms from April through October.

Marginally suitable habitat for this species is present in ruderal areas in the southeastern portion of the study area, which feature Tyndall soils. Ten CNDDDB records of San Joaquin spearscale occur within five miles of the study area, the nearest of which is located approximately one mile west of the study area (CNDDDB Occurrence #40).



**Table 4.3-3  
Special-Status Species with Potential to Occur Within the Study Area**

Scientific Name (Common Name)	Federal Status	State Status	Yolo HCP/NCCP Covered Species	Habitat Requirements	Potential for Occurrence
<b>Plants</b>					
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	--	CRPR 1B.1	No	Occurs in alkaline flats and vernal moist meadows within valley/foothill grasslands. Usually occurs in wetlands.	<b>Habitat Not Present.</b> Mesic alkaline areas are not present within the study area.
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	--	CRPR 1B.2	No	Favors alkaline playas and vernal pools within valley and foothill grasslands with adobe clays. Also occurs in open, alkaline and seasonally moist meadows from zero to 200 feet amsl. Usually occurs in wetlands.	<b>Habitat Not Present.</b> Mesic alkaline areas are not present within the study area.
<i>Atriplex cordulata</i> var. <i>cordulata</i> Heartscale	--	CRPR 1B.2	No	Occurs in saline or alkaline chenopod scrub, meadows and seeps, or grasslands with sandy soils.	<b>Habitat Not Present.</b> Soils within the study area do not have sufficient alkalinity for the species.
<i>Atriplex depressa</i> Brittlescale	--	CRPR 1B.2	No	Prefers meadows or grasslands with alkaline or saline clay soils.	<b>Habitat Not Present.</b> Soils within the study area do not have sufficient alkalinity for the species.
<i>Carex comosa</i> Bristly sedge	--	CRPR 2B.1	No	Occurs in coastal prairie and marshy lake margins.	<b>Low.</b> Channel A within the study area represents marginally suitable habitat for the species. Protocol-level surveys for the species were negative.
<i>Centromadia parryi</i> var. <i>parryi</i> Pappose tarplant	--	CRPR 1B.2	No	Found on alkaline soils in coastal prairie, meadows, seeps, coastal salt marshes, and vernal mesic areas in valley/foothill grasslands.	<b>Habitat Not Present.</b> Mesic alkaline areas are not present within the study area.
<i>Chloropyron palmatum</i> Palmate-bracted bird's beak	FE	CE, CRPR 1B.1	Yes	Prefers alkaline chenopod scrub or valley/foothill grasslands.	<b>Habitat Not Present.</b> Soils within the study area do not have sufficient alkalinity for the species.
<i>Eryngium jepsonii</i> Jepson's coyote- thistle	--	CRPR 1B.2	No	Clay soils of valley and foothill grassland and vernal pools from 10 to 9,850 feet amsl.	<b>Habitat Not Present.</b> Clay soils are not present within the study area.

(Continues on next page)



**Table 4.3-3  
Special-Status Species with Potential to Occur Within the Study Area**

Scientific Name (Common Name)	Federal Status	State Status	Yolo HCP/NCCP Covered Species	Habitat Requirements	Potential for Occurrence
<i>Etriplex joaquinana</i> San Joaquin sparscale	--	CRPR 1B.2	No	Found on alkaline soils in chenopod scrub, meadows and seeps, playas, and valley/foothill grasslands.	<b>Low.</b> Ruderal areas within Tyndall soils represent marginally suitable habitat for the species. Protocol-level surveys for the species were negative.
<i>Fritillaria pluriflora</i> Adobe-lily	--	CRPR 1B.2	No	Grows in chaparral, cismontane woodland, or foothill grasslands with clay or serpentine soils.	<b>Habitat Not Present.</b> Serpentine and clay soils are not present within the study area.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> Woolly rose-mallow	--	CRPR 1B.2	No	Occurs in freshwater marshes along the edges of rivers and sloughs in the Central Valley. Often found in riprap on the sides of levees.	<b>Habitat Not Present.</b> The species requires perennial moisture, which does not occur within the study area.
<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's pepper-grass	--	CRPR 1B.2	No	Prefers mesic areas in valley and foothill grasslands with alkaline soils.	<b>Habitat Not Present.</b> Mesic alkaline areas are not present within the study area.
<i>Lessingia hololeuca</i> Woolly-headed lessingia	--	CRPR 3	No	Found in coastal scrub, broad-leaved upland forest, montane coniferous forest, and grassland, on serpentine and clay soils ranging from 50 to 1,000 feet amsl.	<b>Habitat Not Present.</b> Serpentine and clay soils are not present within the study area.
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	--	CRPR 1B.1	No	Prefers brackish or freshwater swamps, intertidal marshes, and riparian scrub at or 35 feet below amsl.	<b>Habitat Not Present.</b> The species occurs in tidally influenced areas, which are not present within the study area.
<i>Myosurus minimus</i> spp. <i>apus</i> Little mousetail	--	CRPR 3.1	No	Occurs in alkaline vernal pools.	<b>Habitat Not Present.</b> Alkaline depressional wetlands are not present within the study area.
<i>Navarretia leucocephala</i> spp. <i>bakeri</i> Baker's navarretia	--	CRPR 1B.1	No	Grows in vernal pools and mesic areas in cismontane woodland, lower montane coniferous forest, meadows and seeps, and valley and foothill grasslands.	<b>Habitat Not Present.</b> Depressional wetlands (vernal pools or seasonal wetlands) are not present within the study area.

(Continues on next page)



**Table 4.3-3  
Special-Status Species with Potential to Occur Within the Study Area**

Scientific Name (Common Name)	Federal Status	State Status	Yolo HCP/NCCP Covered Species	Habitat Requirements	Potential for Occurrence
<i>Neostapfia colusana</i> Colusa grass	FT	CE, CRPR 1B.1	No	Occurs in the dry bottoms of large/deep vernal pools and other seasonally flooded features.	<b>Habitat Not Present.</b> Depressional wetlands (vernal pools or seasonal wetlands) are not present within the study area.
<i>Plagiobothrys hystriculus</i> Bearded popcornflower	--	CRPR 1B.1	No	Occurs in vernal pools or other seasonal wetlands.	<b>Habitat Not Present.</b> Depressional wetlands (vernal pools or seasonal wetlands) are not present within the study area.
<i>Puccinellia simplex</i> California alkali grass	--	CRPR 1B.2	No	Grows on alkaline sinks, flats, and lake margins, vernal pools, meadows, seeps, and riparian wetlands.	<b>Habitat Not Present.</b> Mesic alkaline areas are not present within the study area.
<i>Sidalcea keckii</i> Keck's checkerbloom	FE	CRPR 1B.1	No	Found in cismontane woodland, valley/foothill grasslands. Also often found in serpentine soils at elevations between 240 and 2,150 feet amsl.	<b>Habitat Not Present.</b> Serpentine soils are not present within the study area.
<i>Symphyotrichum lentum</i> Suisun Marsh aster	--	CRPR 1B.2	No	Grows in brackish, tidally influenced marshes and adjacent mesic areas at elevations of zero to 10 feet amsl.	<b>Habitat Not Present.</b> Brackish, tidally influenced marshes are not present within the study area.
<i>Trifolium hydrophilum</i> Saline clover	--	CRPR 1B.2	No	Grows in marshes, swamps, and vernal pools with alkaline soils.	<b>Habitat Not Present.</b> Mesic alkaline areas are not present within the study area.
<i>Tuctoria mucronate</i> Solano grass	FE	CE, CRPR 1B.1	No	Occurs in the dry bottoms of large/deep vernal pools and other seasonally flooded features.	<b>Habitat Not Present.</b> Depressional wetlands (vernal pools or seasonal wetlands) are not present within the study area.
Invertebrates					
<i>Bombus crotchii</i> Crotch's bumble bee	--	CC	No	Occurs in the State's Mediterranean region, Pacific Coast, Western Desert, and Great Valley and adjacent foothills in open grasslands or scrub habitats. Was common in the Central Valley, now appears absent from its historic range.	<b>Moderate.</b> Much of the study area is disturbed. However, the California Annual Grassland Alliance land cover may provide suitable habitat for the species, and ruderal areas represent marginal potential habitat.

(Continues on next page)



**Table 4.3-3  
Special-Status Species with Potential to Occur Within the Study Area**

Scientific Name (Common Name)	Federal Status	State Status	Yolo HCP/NCCP Covered Species	Habitat Requirements	Potential for Occurrence
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	FE	--	No	Occurs in vernal pools.	<b>Habitat Not Present.</b> Depressional wetlands (vernal pools or seasonal wetlands) are not present within the study area.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT	--	No	Occurs in vernal pools.	<b>Habitat Not Present.</b> Depressional wetlands (vernal pools or seasonal wetlands) are not present within the study area.
<i>Danus plexippus</i> Monarch butterfly	FC	--	No	During the breeding season, the species lays their eggs on their obligate milkweed host plant (primarily <i>Asclepias</i> sp.)	<b>High.</b> Scattered milkweed growth was observed within the study area and represents marginal potential habitat for the species.
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT	--	Yes	Dependent upon elderberry ( <i>Sambucus</i> sp.) shrubs as primary host species.	<b>Moderate.</b> Isolated elderberry shrubs within the northern portion of the study area represent potential habitat for the species.
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	FE	--	No	Occurs in vernal pools.	<b>Habitat Not Present.</b> Depressional wetlands (vernal pools or seasonal wetlands) are not present within the study area.
Fish					
<i>Acipenser medirostris</i> Green sturgeon – Southern Distinct Population Segment (DPS)	FT	--	No	The species spends most of its life in marine waters and migrates into the freshwater reaches of large coastal rivers to spawn. The species spawns in cool, deep, swift-flowing river reaches over gravel and cobble bottoms.	<b>Habitat Not Present.</b> Suitable freshwater or saltwater habitat is not present within the study area.

(Continues on next page)



**Table 4.3-3  
Special-Status Species with Potential to Occur Within the Study Area**

Scientific Name (Common Name)	Federal Status	State Status	Yolo HCP/NCCP Covered Species	Habitat Requirements	Potential for Occurrence
<i>Hypomesus transpacificus</i> Delta smelt	FT	CE	No	Adults are found in the brackish, open surface waters of the Sacramento-San Joaquin River Delta and Suisun Bay. Though never observed, spawning is believed to occur in tidally influenced sloughs and drainages on the freshwater side of the mixing zone.	<b>Habitat Not Present.</b> Tidally influenced sloughs or drainages are not present within the study area.
<b>Amphibians</b>					
<i>Ambystoma californiense</i> California tiger salamander	FT	CT	Yes	Breeds in ponds or other deeply ponded wetlands, and uses gopher holes and ground squirrel burrows in adjacent grasslands for upland refugia/foraging.	<b>Habitat Not Present.</b> Suitable ponds or wetland habitat are not present within the study area.
<b>Reptiles</b>					
<i>Actinemys marmorata</i> Northwestern pond turtle	--	CSC	Yes	Occurs in ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	<b>Low.</b> The intermittent drainage within the study area provides marginal potential habitat for the species.
<i>Thamnophis gigas</i> Giant garter snake	FT	CT	Yes	Found in rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow-moving water and heavy emergent vegetation.	<b>Low.</b> The intermittent drainage within the study area provides marginal potential habitat for the species.
<b>Birds</b>					
<i>Agelaius tricolor</i> Tricolored blackbird	--	CT, CSC	Yes	Colonial nester in cattails, bulrush, or blackberries associated with marsh habitats.	<b>Low.</b> Dense bulrush growth within the intermittent drainage in the study area provides marginal potential nesting habitat for the species.

(Continues on next page)





**Table 4.3-3  
Special-Status Species with Potential to Occur Within the Study Area**

Scientific Name (Common Name)	Federal Status	State Status	Yolo HCP/NCCP Covered Species	Habitat Requirements	Potential for Occurrence
<i>Athene cunicularia</i> Burrowing owl	--	CSC	Yes	Nests in man-made refugia and abandoned mammal burrows associated with open grassland habitats.	<b>High.</b> Large complexes of California ground squirrel burrows occur throughout the study area and represent potential habitat for the species. In addition, the species has been recorded within the CNDDDB as having occurred on-site.
<i>Buteo swainsoni</i> Swainson's hawk	--	CT	Yes	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	<b>Present.</b> The species was observed foraging within the study area. Several large trees within the study area and immediate vicinity represent potential nesting habitat for the species.
<i>Charadrius nivosus nivosus</i> Western snowy plover	FT	CSC	No	Found in barren to sparsely vegetated open areas near water.	<b>Habitat Not Present.</b> The study area lacks appropriate sparsely vegetated open areas adjacent to water.
<i>Circus hudsonius</i> Northern harrier	--	CSC	No	Nests in emergent wetland/marsh, open grasslands, or savannah habitats. Forages in open areas such as marshes, agricultural fields, and grasslands.	<b>Moderate.</b> The annual grasslands and ruderal areas provide marginal potential nesting and foraging habitat for the species.
<i>Elanus leucurus</i> White-tailed kite	--	CFP	Yes	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	<b>High.</b> Trees throughout the study area represent potential nesting habitat for the species.

(Continues on next page)



**Table 4.3-3  
Special-Status Species with Potential to Occur Within the Study Area**

Scientific Name (Common Name)	Federal Status	State Status	Yolo HCP/NCCP Covered Species	Habitat Requirements	Potential for Occurrence
<b>Mammals</b>					
<i>Antrozous pallidus</i> Pallid bat	--	CSC, WBWG H	No	Roosts in crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating bark, deciduous trees in riparian areas, and fruit trees in orchards), bridges, barns, porches, bat boxes, and human-occupied, as well as vacant, buildings.	<b>High.</b> Several derelict sheds, barns, and other structures, as well as trees within the study area provide potential roosting habitat for the species.
<i>Lasionycteris noctivagans</i> Silver-haired bat	--	WBWG M	No	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. The silver-haired bat forages in open, wooded areas near water features.	<b>High.</b> The trees throughout the study area represent potential roosting habitat for the species.
<i>Lasiurus cinereus</i> Hoary bat	--	WBWG M	No	Roosts in dense foliage of medium to large trees within close proximity to water.	<b>Moderate.</b> The large trees associated with the intermittent drainage within the study area provide potential roosting habitat for the species.
<i>Taxidea taxus</i> American badger	--	CSC	No	The species prefers dry open fields, grasslands, and pastures.	<b>Moderate.</b> The ruderal areas and annual grassland within the study area provide potential habitat for the species; however, frequent disturbances and other human activity could dissuade the species.

Status Codes:

CT: California Threatened  
CE: California Endangered  
CFP: CDFW Fully Protected  
CRPR: California Rare Plant Rank  
CSC: CDFW Species of Special Concern

FC: Federal Listing Candidate Species  
FE: Federally Endangered  
FT: Federally Threatened  
WBWG: Western Bat Working Group

**Source: Madrone Ecological Consulting, 2024.**



San Joaquin spearscale was not observed during the protocol-level plant surveys conducted in September 2022, nor during the April 2024 survey. Both surveys occurred during when the plant would have been identifiable. Thus, San Joaquin spearscale has *low* potential for occurrence within the study area.

### Listed and Special-Status Wildlife Species

According to the records search conducted as part of the BRA, 20 special-status wildlife species have the potential to occur on-site or within five miles of the study area (see Figure 4.3-5). Based on field observations and literature review (detailed further in the Method of Analysis section), 13 of the 20 special-status wildlife species were determined to have the potential to occur within the study area. Species that are considered *present* include Swainson's hawk. Species that are considered to have *high* potential to occur include monarch butterfly, burrowing owl, white-tailed kite, pallid bat, and silver-haired bat. Species that are considered to have *moderate* potential to occur include valley elderberry longhorn beetle (VELB), Crotch's bumble bee, northern harrier, hoary bat, and American badger. Species that are considered to have *low* potential to occur include northwestern pond turtle, giant garter snake, and tricolored blackbird.

The following discussions provide further details of the 13 special-status wildlife species with potential to occur within the study area. Table 4.3-3 above lists all 20 special-status wildlife species with potential to occur in the vicinity of the study area. It should be noted that the 2009 EIR did not identify monarch butterfly, northwestern pond turtle, giant garter snake, or silver-haired bat as having potential to occur within the study area.

#### *Monarch Butterfly*

The monarch butterfly (*Danus plexippus*) is currently a candidate species for listing under FESA and is not covered under the Yolo HCP/NCCP. The species can occur in fields, roadside areas, open areas, wet areas, or urban gardens and requires flowering plants as a food source and healthy and abundant milkweed (generally *Asclepius* sp.) for laying eggs on as larval host plants. The monarch butterfly life cycle varies by geographic location. In many regions, monarch butterflies breed year-round.

During the August field survey, several scattered narrowleaf milkweed plants (*Asclepius fascicularis*) were documented within the study area. In addition, other flowering plants within the study area could provide nectar for foraging adults. The study area provides marginal habitat for monarch butterflies. The CNDDDB does not track monarch butterfly breeding, but a query of the Western Monarch Milkweed Database yielded an observation of monarch breeding in 2020 approximately 1.9 miles southwest of the study area. Monarch butterflies, eggs, or caterpillars were not observed during the field survey. Similarly, evidence of monarch use was not observed on the milkweed plants. However, the City's wildlife biologist has observed the species multiple times on and adjacent to the project site. Thus, monarch butterflies have *high* potential for occurrence within the study area.

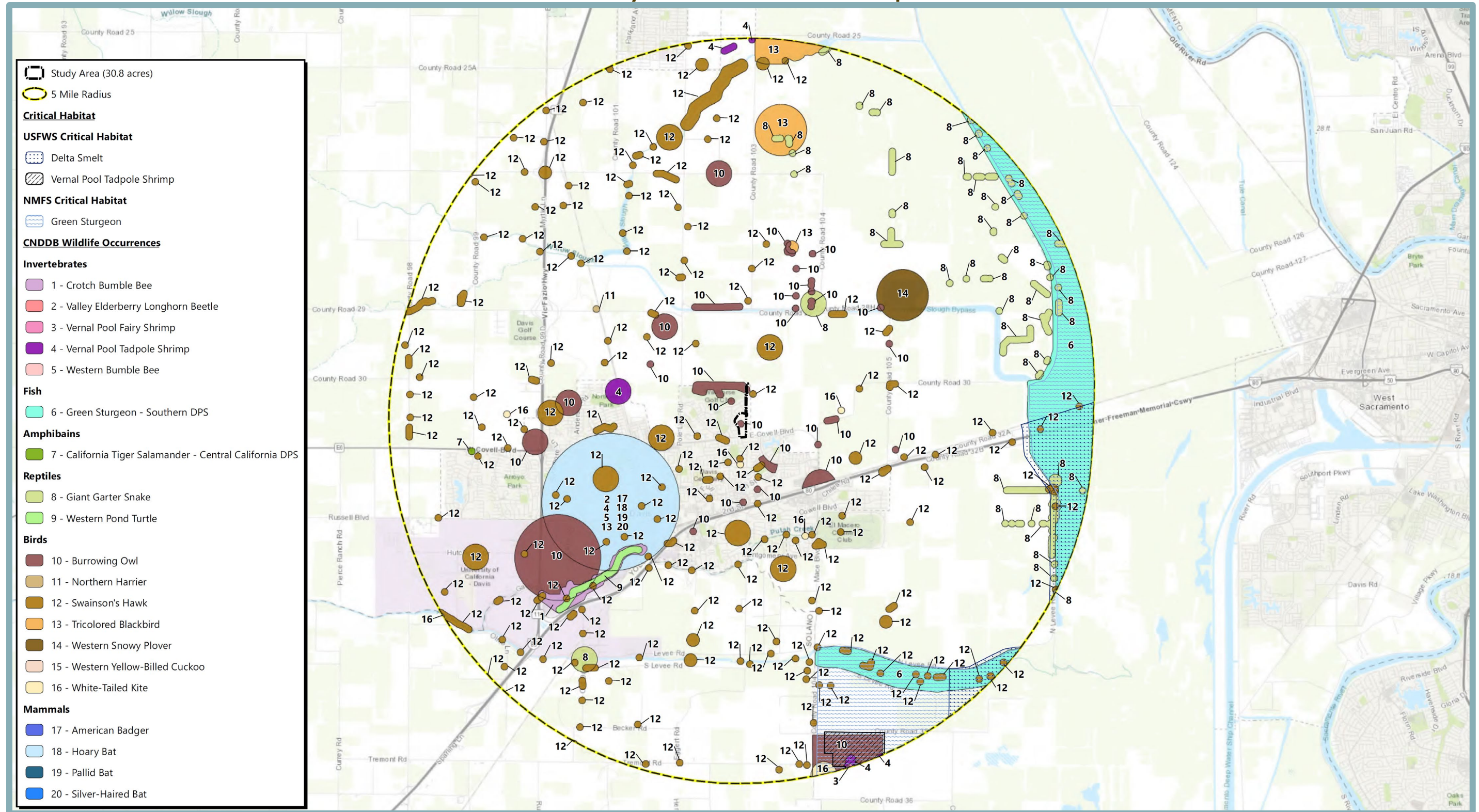
#### *Valley Elderberry Longhorn Beetle*

VELB (*Desmocerus californicus dimorphus*) is listed as threatened, pursuant to FESA, and is a Yolo HCP/NCCP Covered Species. The historic range of VELB is limited to moist Valley oak woodlands, along margins of rivers and streams in the lower Sacramento and lower San Joaquin valleys. At the time of its listing, the beetle was known from less than 10 localities in Merced, Sacramento, and Yolo counties. VELB's current distribution is patchy throughout the Central Valley and associated foothills.





**Figure 4.3-5  
 California Natural Diversity Database Occurrences of Special-Status Wildlife**





VELB is completely dependent on its host plant, the elderberry (*Sambucus* sp.), which occurs in riparian and other woodland communities in the Central Valley and associated foothills. Female beetles lay their eggs in crevices on the stems or on the leaves of living elderberry plants. When the eggs hatch, larvae bore into the stems. The larval stages last for one to two years. The fifth instar larvae create emergence holes in the stems and then plug the holes and remain in the stems through pupation. Adults emerge through the emergence holes from late March through June. The short-lived adult beetles forage on leaves and flowers of elderberry shrubs.

One isolated elderberry shrub with stems one inch diameter or greater is located within the northern portion of the study area, and an additional two shrubs are located within 100 feet of the study area (see Figure 4.3-6). The three elderberry shrubs represent suitable habitat for VELB. In addition, one documented CNDDDB record of VELB occurs within five miles of the study area, located approximately 1.1 miles to the southwest of the project site (CNDDDB Occurrence #270). VELB were not observed during the field surveys. Thus, VELB has *moderate* potential for occurrence within the study area.

### *Crotch's Bumble Bee*

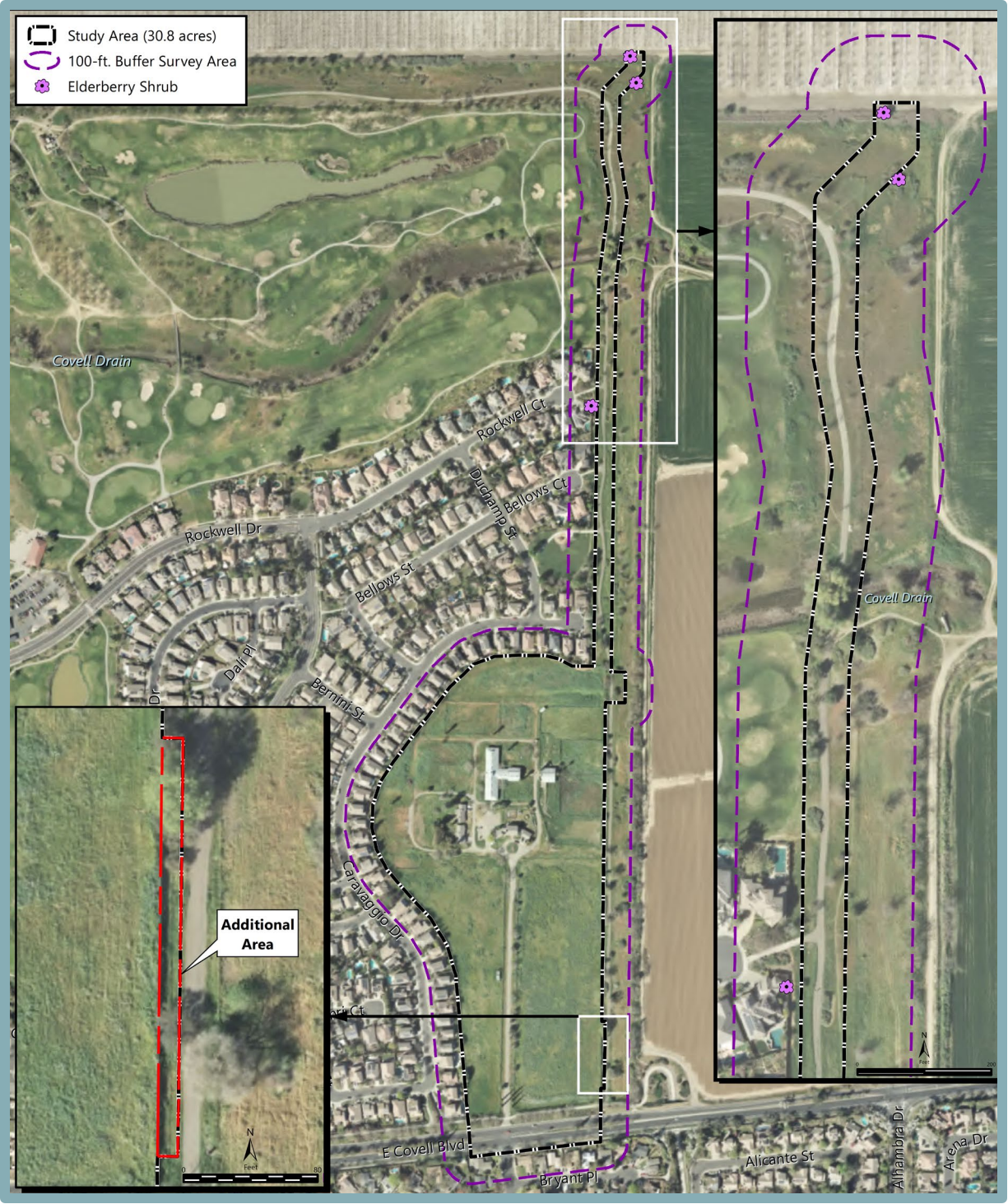
Crotch's bumble bee (*Bombus crotchii*) is a candidate for listing under the CESA, and is not covered by the Yolo HCP/NCCP. The species has a limited distribution in southwestern North America, including Mexico, Baja California, Baja California Sur, and has been documented in southwest Nevada near the California border. Crotch's bumble bee was historically common in the Central Valley of California, but now appears to be absent from most of the valley, especially in the center of its historic range. In California, Crotch's bumble bee inhabits open grasslands and scrub habitats.

All bumble bees have three basic requirements: suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the entirety of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens. Nests are often located underground in abandoned holes made by ground squirrels, mice, and rats or occasionally abandoned bird nests. Some species nest on the surface of the ground (in tufts of grass) or in empty cavities. Bumble bees that nest aboveground may require undisturbed areas with nesting resources such as grass and hay to protect nests. Furthermore, areas with woody cover, or other sheltered areas provide bumble bees sites to build their nests (e.g., downed wood, rock walls, brush piles, etc.).

Bumble bees depend on the availability of habitats with a rich supply of floral resources that bloom continuously during the entirety of the colony's life. The queen collects nectar and pollen from flowers to support the production of her eggs, which are fertilized by sperm she has stored from mating the previous fall. As generalist foragers, bumble bees do not depend on any one flower type. They generally prefer flowers that are purple, blue or yellow and are essentially blind to the color red. The plant families most commonly associated with Crotch's bumble bee observations in California include Apocynaceae, Asteraceae, Boraginaceae, Fabaceae, and Lamiaceae. Very little is known about hibernacula, or overwintering sites used by most bumble bees. Generally, bumble bees overwinter in soft, disturbed soil, under leaf litter or other debris, in abandoned holes made by fossorial mammals or occasionally in abandoned bird nests. Some species nest on the surface of the ground (in grassy tussocks) or in empty cavities (hollow logs, dead trees, under rocks, etc.). Queens most likely overwinter in small cavities just below or on the ground surface.



**Figure 4.3-6  
Elderberry Shrub Locations**





The California Annual Grassland Alliance land cover within the study area represents suitable habitat for Crotch's bumble bee, and the on-site ruderal areas represent marginal potential habitat. One documented occurrence of the species has been recorded in the CNDDDB (CNDDDB Occurrence #11), located approximately 2.1 miles from the study area. Based on the above, Crotch's bumble bee has *moderate* potential for occurrence in the study area.

It should be noted that as a candidate for listing, Crotch's bumble bee is temporarily afforded the same protections as a State-listed endangered or threatened species. After CDFW's status report on Crotch's bumble bee is complete, the California Fish and Game Commission must decide at a public meeting whether the petitioned action (listing of the Crotch's bumble bee) is warranted. If the California Fish and Game Commission finds that the petitioned action is not warranted, the process would end and the Crotch's bumble bee would be removed from the list of candidate species. If the California Fish and Game Commission finds that the petitioned action is warranted, the species would be added to the list of threatened or endangered species under CESA.

### *Northwestern Pond Turtle*

The northwestern pond turtle (*Emys marmorata*) is not listed under FESA or CESA. The species is a CDFW Species of Special Concern and a Yolo HCP/NCCP Covered Species. Northwestern pond turtle's favored habitats include streams, large rivers, and canals with slow-moving water, aquatic vegetation, and open basking sites. Although the turtles must live near water, they can tolerate drought by burrowing into the muddy beds of dried drainages. The species feeds mainly on invertebrates, such as insects and worms, but will also consume small fish, frogs, mammals, and some plants. Northwestern pond turtle predators include raccoons, coyotes, raptors, weasels, large fish, and bullfrogs. The species breeds from mid to late spring in adjacent open grasslands or sandy banks. It should be noted that the northwestern pond turtle was previously known as the western pond turtle (*Emys marmorata*). This SEIR reflects the species' current taxonomy.

Channel A, which is located within the off-site sewer improvement area, provides marginal potential habitat for northwestern pond turtles, which could use Channel A as a dispersal corridor if the drainage is inundated during the species' active season. Channel A was dry during the field surveys.

The annual grasslands within the Wildhorse Agricultural Buffer portion of the study area provide marginal potential upland habitat. One occurrence of northwestern pond turtle has been recorded within five miles of the study area (CNDDDB Occurrence #362), which is approximately 2.1 miles to the southwest of the project site along Putah Creek. Northwestern pond turtles were not observed during the field surveys conducted as part of the BRA. Based on the above, northwestern pond turtle has *low* potential for occurrence within the study area.

### *Giant Garter Snake*

The giant garter snake (*Thamnophis gigas*) is listed as threatened pursuant to FESA and is a Yolo HCP/NCCP Covered Species. The historic range of giant garter snake extended from the vicinity of Sacramento and Contra Costa counties southward to Buena Vista Lake, near the City of Bakersfield in Kern County; however, by the 1950s, agricultural conversion appeared to have resulted in the extirpation of the species from the southern third of its range. Currently, the range of the species is restricted to rice-production zones of Sacramento, Sutter, Butte, Colusa, and Glenn counties, portions of Yolo County, and along the eastern fringes of the Sacramento-San Joaquin River Delta.



Giant garter snakes inhabit marshes, sloughs, ponds, small lakes, low-gradient streams, other waterways, and agricultural wetlands, including irrigation canals, drainage canals, and rice fields. Habitat requirements for giant garter snake include adequate water during the snake's active period (from early spring to mid-fall), emergent herbaceous wetland vegetation for cover and foraging, grassy banks and openings for basking, and higher elevation uplands for cover and refuge from flood waters in the winter. The species is typically absent from larger rivers and other water bodies that have been highly channelized and support predatory fish.

The off-site Channel A provides marginal potential habitat for the giant garter snake, which may use the drainage during the species' active season (May 1 through October 1), if the drainage is inundated. Channel A was dry during field surveys. The annual grasslands within the Wildhorse Agricultural Buffer provide marginal potential upland habitat. Several documented CNDDDB occurrences of giant garter snake occur within five miles of the study area; the nearest occurrence is located approximately 1.3 miles to the northeast of the study area, along the Willow Slough Bypass (CNDDDB Occurrence #80). Giant garter snakes were not observed during the field surveys. Based on the above, giant garter snake has *low* potential for occurrence within the study area.

### *Tricolored Blackbird*

Tricolored blackbird (*Agelaius tricolor*) is not federally listed. The species is State listed as threatened and a Yolo HCP/NCCP Covered Species. Tricolored blackbird has been in decline throughout the State. Tricolored blackbirds are colonial nesters, and historically, established colonies in freshwater marshes dominated by cattails (*Typha* sp.) and bulrushes (*Scirpus* or *Schoenoplectus* sp.). More recently, the species has utilized non-native mustards (*Brassica* sp.), blackberries (*Rubus* sp.), thistles (*Cirsium* sp.), and mallows (*Malva* sp.) as nesting substrate. Since the 1980s, the largest colonies have been observed in the San Joaquin Valley in cultivated fields of triticale, which is a hybrid of wheat and rye often grown as livestock fodder. Nesting in active agricultural fields has further imperiled the species, given that nestlings typically are not fledged by the time the triticale is harvested.

Small stands of bulrush within the off-site portion of the study area containing the Channel A represent marginal potential nesting habitat for tricolored blackbird. Four documented CNDDDB occurrences of tricolored blackbird have been recorded within five miles of the study area. The nearest occurrence is located approximately 1.1 miles to the southwest of the project site (CNDDDB Occurrence #488). Tricolored blackbirds were not observed during the field surveys. Based on the above, tricolored blackbird has *low* potential for occurrence within the study area.

### *Burrowing Owl*

Burrowing owl (*Athene cunicularia*) is not listed under FESA or CESA. The species is designated as a CDFW Species of Special Concern and is a Yolo HCP/NCCP Covered Species. Burrowing owls typically inhabit dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. The species typically uses burrows created by fossorial mammals, most notably the California ground squirrel (*Otospermophilus beecheyi*), but may also use man-made structures, such as culverts, cement, asphalt, or wood debris piles or openings beneath cement or asphalt pavement. The species' breeding season extends from February 1 through August 31.

Extensive complexes of California ground squirrel burrows occur throughout the study area, as well as several debris piles associated with the on-site development, which could provide suitable potential habitat for burrowing owl. The annual grassland and ruderal areas within the study area



also provide suitable foraging habitat for the species. Numerous CNDDDB occurrences of burrowing owl have been documented within five miles of the study area, including two occurrences which are completely or partially located on-site. In 2006, CNDDDB Occurrence #1027 was recorded within the central portion of the site, and CNDDDB Occurrence #613 was recorded in 2009 within the northernmost portion of the study area and to the west within the Wildhorse Golf Club course. Madrone is currently conducting protocol-level breeding season and non-breeding season surveys for burrowing owl within the study, which commenced at the start of 2024. The species has not been documented as part of the surveys. Based on the above, burrowing owl has *high* potential for occurrence within the study area.

### *Swainson's Hawk*

Swainson's hawk (*Buteo swainsoni*) is a raptor species that is not federally listed, but is State listed as threatened. The species is also a Yolo HCP/NCCP Covered Species. Breeding pairs typically nest in tall trees associated with riparian corridors, and forage in grassland, irrigated pasture, and cropland with a high density of rodents. The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter.

Swainson's hawk was observed foraging within the study area during the August and September 2022 field surveys. In addition, several large trees within the study area and immediate vicinity represent suitable potential nesting habitat, and the annual grassland and ruderal areas on-site represent suitable foraging habitat. Out of the many documented CNDDDB occurrences of Swainson's hawk within five miles of the study area, the nearest was recorded in 2004 (CNDDDB Occurrence #1417), with the species documented nesting within a tree along the off-site Channel A. Based on the above, Swainson's hawk is *present* within the study area.

### *Northern Harrier*

The northern harrier (*Circus hudsonius*) is not listed pursuant to either FESA or CESA and is not covered by the Yolo HCP/NCCP. The species is a CDFW Species of Special Concern. Northern harrier, a ground-nesting species, is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California, typically in emergent wetland/marsh, open grasslands, or savannah habitats. Foraging occurs within a variety of open habitats, such as marshes, agricultural fields, and grasslands.

The annual grasslands and ruderal areas within the study area provide marginal potential nesting and foraging habitat for the northern harrier. One documented CNDDDB occurrence of northern harrier is recorded within five miles of the study area (CNDDDB Occurrence #51), which is located approximately 2.5 miles to the northwest of the project site, near the intersection of County Road (CR) 29 and CR 101A. Northern harriers were not observed within the study area during the 2022 field surveys. Based on the above, northern harrier has *moderate* potential for occurrence within the study area.

### *White-Tailed Kite*

White-tailed kite (*Elanus leucurus*) is not listed pursuant to either FESA or CESA. The raptor is a CDFW Fully Protected species and a Yolo HCP/NCCP Covered Species. White-tailed kite is a yearlong resident of the Central Valley and is primarily found in or near foraging areas, such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands. White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range.



Trees throughout the study area represent suitable potential nesting habitat, and the annual grasslands off-site and ruderal areas on-site represent suitable foraging habitat for white-tailed kite. Seven CNDDDB occurrences of white-tailed kite have been documented within five miles of the study area, the nearest of which is located approximately 0.3-mile south of the project site within a residential neighborhood (CNDDDB Occurrence #64). White-tailed kites were not observed within the study area during the field survey. Based on the above, white-tailed kite has *high* potential for occurrence within the study area.

### *Pallid Bat*

Pallid bat (*Antrozous pallidus*) is not listed pursuant to either FESA or CESA and is not covered by the Yolo HCP/NCCP. The species is a CDFW Species of Special Concern and classified by the WBWG as a High priority species. Pallid bat favors roosting sites in crevices in rock outcrops, caves, abandoned mines, hollow trees, and man-made structures, such as barns, attics, and sheds. Though pallid bats are gregarious, they tend to group in smaller colonies of 10 to 100 individuals. The bat is a nocturnal hunter and captures prey in flight, but unlike most American bats, the species has been observed foraging for flightless insects, which the bat seizes after landing.

Several derelict sheds, barns, and other structures, as well as trees, located throughout the study area represent suitable roosting habitat for pallid bat. One CNDDDB occurrence of pallid bat has been documented within five miles of the study area (CNDDDB Occurrence #312), which is located approximately 1.1 miles to the southwest of the project site. Pallid bats were not observed within the study area during the field surveys. Based on the above, pallid bat has *high* potential for occurrence within the study area.

### *Silver-Haired Bat*

Silver-haired bat (*Lasionycteris noctivagans*) is not listed under FESA or CESA and is not covered by the Yolo HCP/NCCP. The species is classified by the WBWG as a Medium priority species. Primarily considered a coastal and montane forest species, the silver-haired bat occurs in drier environments during winter and seasonal migrations. The bat roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. The insectivore's favored foraging sites include open wooded areas near water features.

The trees throughout the study area represent suitable roosting habitat for the silver-haired bat. One documented CNDDDB occurrence of silver-haired bat has been recorded within five miles of the study area (CNDDDB Occurrence #88), which is located approximately 1.1 miles to the southwest of the site. Silver-haired bats were not observed within the study area during the field surveys. Based on the above, silver-haired bat has *high* potential for occurrence within the study area.

### *Hoary Bat*

The hoary bat (*Lasiurus cinereus*) is not listed under FESA or CESA and is not covered by the Yolo HCP/NCCP. The species is classified by the WBWG as a Medium priority species. Hoary bats, considered to be one of the most widespread North American bats, are solitary and can be found in any region of California. The species roosts primarily in the dense foliage of medium to large trees. Preferred roosting sites are hidden from above, with few branches below and a ground cover of low reflectivity. The species prefers open habitats or habitat mosaics with access to trees for cover and open areas or habitat edges for feeding.



Larger trees within the study area represent potential roosting habitat for hoary bat. One documented CNDDDB occurrence has been recorded within five miles of the study area (CNDDDB Occurrence #136), which is located approximately 1.1 miles to the southwest of the project site. Additionally, a dead hoary bat was documented on iNaturalist along the Wildhorse Agricultural Buffer, just east of the study area, in April 2022. Based on the above, hoary bat has *moderate* potential for occurrence within the study area.

### *American Badger*

American badger (*Taxidea taxus*) is not listed pursuant to either FESA or CESA and is not covered by the Yolo HCP/NCCP. The species is designated as a CDFW Species of Special Concern. American badger historically ranged throughout much of the State, except in humid coastal forests, and were once numerous in the Central Valley. However, populations now occur in low numbers in the surrounding peripheral parts of the valley and in the adjacent lowlands of eastern Monterey, San Benito, and San Luis Obispo counties. American badgers occupy a variety of habitats, including grasslands and savannahs, and primarily require food supply, friable soils, and relatively open uncultivated ground.

The annual grasslands and ruderal areas within the study area provide potential habitat for the species; however, frequent disturbances and other human activity throughout the project site could dissuade their presence. One CNDDDB occurrence of American badger has been documented within five miles of the study area (CNDDDB Occurrence #329), which is located approximately 1.1 miles to the southwest of the project site. American badgers were not observed within the study area during the field surveys. Based on the above, American badger has *moderate* potential for occurrence within the study area.

### **Trees**

As discussed further in the Regulatory Context section of this chapter, the City of Davis Tree Ordinance protects various categories of trees. According to the BRA, which included an inventory of the trees throughout the study area as part of the September 2022 and April 2024 field surveys, a total of 128 trees with a diameter at breast height (DBH) of five inches or greater were inventoried within the study area. The foregoing trees are protected by the City of Davis Tree Ordinance and could require removal during project construction (see Figure 4.3-7). The following protected trees occur in the study area:

- **Street Trees:** Street trees are any tree planted and/or maintained by the City, or recorded as a street tree, adjacent to a street or within a City easement or right-of-way on private property, within the street tree easement. The Street Tree Easement is the 10-foot zone behind the sidewalk or between curb and sidewalk. Street trees occur along either side of East Covell Boulevard, and in the median.
- **City Trees:** City trees are trees in parks, greenbelts, open spaces, on City property or easements, etc. City trees occur in the northern portion of the study area.
- **Trees of Significance/Private Trees:** Trees of significance/private trees are all trees greater than five inches DBH. Such trees that occur on unimproved property zoned for single-family or duplex development are considered “trees of significance,” and trees that occur on properties with single-family or duplex dwellings already present are considered “private trees.” Both categories are subject to the same requirements if a grading permit or other discretionary permit application is submitted. Trees of significance/private trees occur in the remainder of the study area.





**Figure 4.3-7  
 Tree Inventory**

Trees to be Impacted				
Number	Common Name	DBH (in)	Dripline Radius (ft)	Condition
0	TOYON	29.1	0	POOR TO DEAD
401	EUROPEAN OLIVE	19.0	15	FAIR OR BETTER
402	CALIFORNIA BLACK WALNUT	7.8	16	FAIR OR BETTER
403	HOLM OAK	10.0	7	POOR TO DEAD
404	CALIFORNIA BLACK WALNUT	11.2	14	FAIR OR BETTER
405	CALIFORNIA BLACK WALNUT	28.0	15	FAIR OR BETTER
406	ENGLISH WALNUT	16.0	0	POOR TO DEAD
407	ENGLISH WALNUT	16.5	18	POOR TO DEAD
408	ENGLISH WALNUT	20.3	20	POOR TO DEAD
409	ENGLISH WALNUT	16.6	20	POOR TO DEAD
410	EUROPEAN OLIVE	28.5	15	POOR TO DEAD
411	ENGLISH WALNUT	16.9	23	POOR TO DEAD
412	EUROPEAN OLIVE	9.5	10	FAIR OR BETTER
413	HOLM OAK	6.2	8	FAIR OR BETTER
414	CALIFORNIA BLACK WALNUT	55.6	35	FAIR OR BETTER
415	ENGLISH WALNUT	14.7	22	FAIR OR BETTER
416	ENGLISH WALNUT	15.0	25	POOR TO DEAD
417	MEXICAN FAN PALM	22.0	7	FAIR OR BETTER
418	FIG	22.3	22	POOR TO DEAD
419	ENGLISH WALNUT	11.7	20	FAIR OR BETTER
420	CANARY ISLAND PINE	24.7	26	POOR TO DEAD
421	MEXICAN FAN PALM	100.0	12	FAIR OR BETTER
422	MEXICAN FAN PALM	19.8	8	FAIR OR BETTER
423	MEXICAN FAN PALM	21.7	7	FAIR OR BETTER
424	MEXICAN FAN PALM	23.0	7	FAIR OR BETTER
425	MEXICAN FAN PALM	18.5	6	FAIR OR BETTER
426	MEXICAN FAN PALM	20.5	7	FAIR OR BETTER
427	EUROPEAN OLIVE	23.3	18	FAIR OR BETTER
428	MEXICAN FAN PALM	22.0	7	FAIR OR BETTER
429	ENGLISH WALNUT	17.1	25	FAIR OR BETTER
430	ENGLISH WALNUT	18.4	20	FAIR OR BETTER
431	ENGLISH WALNUT	9.7	16	FAIR OR BETTER
433	COMMON HACKBERRY	46.8	20	FAIR OR BETTER
434	MYOPORUM	35.4	25	POOR TO DEAD
435	FIG	20.9	18	FAIR OR BETTER
437	CALIFORNIA BLACK WALNUT	16.6	20	FAIR OR BETTER
438	CALIFORNIA BLACK WALNUT	26.6	18	FAIR OR BETTER
439	ENGLISH WALNUT	15.1	20	POOR TO DEAD
440	CALIFORNIA BLACK WALNUT	30.8	18	FAIR OR BETTER
441	ENGLISH WALNUT	14.1	20	POOR TO DEAD
442	MYOPORUM	23.2	8	FAIR OR BETTER
443	MYOPORUM	46.3	20	POOR TO DEAD
444	ENGLISH WALNUT	17.1	25	POOR TO DEAD
445	MEXICAN FAN PALM	17.2	6	FAIR OR BETTER
446	MEXICAN FAN PALM	20.6	6	FAIR OR BETTER
447	MEXICAN FAN PALM	20.0	6	FAIR OR BETTER
448	BLACK WILLOW	20.7	15	FAIR OR BETTER
449	ENGLISH WALNUT	9.1	13	POOR TO DEAD
450	WESTERN SYCAMORE	18.1	25	FAIR OR BETTER
453	MEXICAN FAN PALM	15.0	8	FAIR OR BETTER
454	CHINABERRY	53.0	12	FAIR OR BETTER
455	MEXICAN FAN PALM	15.0	6	FAIR OR BETTER
456	ENGLISH WALNUT	11.9	18	FAIR OR BETTER
457	CALIFORNIA BLACK WALNUT	55.3	35	FAIR OR BETTER
460	VALLEY OAK	8.4	15	FAIR OR BETTER
461	VALLEY OAK	21.6	22	FAIR OR BETTER
462	VALLEY OAK	8.0	10	FAIR OR BETTER
463	VALLEY OAK	8.3	16	FAIR OR BETTER
464	VALLEY OAK	17.5	22	POOR TO DEAD
475	WESTERN SYCAMORE	8.4	18	FAIR OR BETTER
479	VALLEY OAK	5.3	7	FAIR OR BETTER
481	VALLEY OAK	24.2	15	FAIR OR BETTER
482	VALLEY OAK	9.0	12	FAIR OR BETTER
483	VALLEY OAK	9.4	15	FAIR OR BETTER
484	MYOPORUM	9.4	14	FAIR OR BETTER
559	APRICOT	10.6	18	FAIR OR BETTER
560	ENGLISH WALNUT	44.0	30	POOR TO DEAD
581	CHINESE PISTACHE	9.2	15	FAIR OR BETTER
582	VALLEY OAK	6.0	8	FAIR OR BETTER
697	INTERIOR LIVE OAK	9.8	20	FAIR OR BETTER
698	VALLEY OAK	28.1	30	FAIR OR BETTER
N1	CHINABERRY	16.5	12	FAIR OR BETTER
N2	CALIFORNIA BLACK WALNUT	13.0	20	FAIR OR BETTER
N3	CHINESE PISTACHE	11.0	16	FAIR OR BETTER
N4	MEXICAN FAN PALM	15.0	6	FAIR OR BETTER
N5	MEXICAN FAN PALM	15.0	6	FAIR OR BETTER
N6	MEXICAN FAN PALM	18.0	7	FAIR OR BETTER
N7	ITALIAN CYPRESS	14.6	5	FAIR OR BETTER
N8	ITALIAN CYPRESS	11.0	5	FAIR OR BETTER
N9	ITALIAN CYPRESS	11.0	5	FAIR OR BETTER
N10	ITALIAN CYPRESS	11.0	5	FAIR OR BETTER
N11	ITALIAN CYPRESS	11.0	5	FAIR OR BETTER

Trees to Be Preserved				
Number	Common Name	DBH (in)	Dripline Radius (ft)	Condition
432	COMMON HACKBERRY	13.6	22	FAIR OR BETTER
451	PRIVET	9.4	12	FAIR OR BETTER
452	PRIVET	5.1	8	FAIR OR BETTER
458	VALLEY OAK	18.2	28	FAIR OR BETTER
459	CALIFORNIA BUCKEYE	30.4	18	FAIR OR BETTER
465	WESTERN SYCAMORE	6.5	12	FAIR OR BETTER
466	WESTERN SYCAMORE	11.3	16	FAIR OR BETTER
467	TOYON	15.4	14	FAIR OR BETTER
468	WESTERN SYCAMORE	14.9	15	FAIR OR BETTER
469	WESTERN SYCAMORE	6.0	10	FAIR OR BETTER
470	BLACK WILLOW	44.2	45	FAIR OR BETTER
471	BLACK WILLOW	19.2	18	FAIR OR BETTER
472	WESTERN SYCAMORE	9.3	15	FAIR OR BETTER
473	BLACK WILLOW	53.9	30	FAIR OR BETTER
474	BLACK WILLOW	19.2	18	FAIR OR BETTER
476	WESTERN SYCAMORE	9.6	15	FAIR OR BETTER
477	VALLEY OAK	10.8	20	POOR TO DEAD
478	VALLEY OAK	21.5	16	FAIR OR BETTER
480	VALLEY OAK	8.0	14	FAIR OR BETTER
561	ENGLISH WALNUT	39.4	28	POOR TO DEAD
562	CALIFORNIA BLACK WALNUT	41.1	35	POOR TO DEAD
563	CHINESE PISTACHE	12.2	20	FAIR OR BETTER
564	CHINESE PISTACHE	8.8	18	POOR TO DEAD
565	CHINESE PISTACHE	11.1	18	FAIR OR BETTER
566	CHINESE PISTACHE	11.2	16	FAIR OR BETTER
567	CHINESE PISTACHE	11.6	18	FAIR OR BETTER
568	CHINESE PISTACHE	10.2	18	FAIR OR BETTER
569	GOLDEN RAIN TREE	9.4	16	FAIR OR BETTER
570	GOLDEN RAIN TREE	12.8	22	FAIR OR BETTER
571	GOLDEN RAIN TREE	12.6	18	FAIR OR BETTER
572	CHINESE PISTACHE	9.6	20	FAIR OR BETTER
573	CHINESE PISTACHE	8.9	20	FAIR OR BETTER
574	CHINESE PISTACHE	11.6	18	FAIR OR BETTER
575	CANARY ISLAND PINE	15.9	12	FAIR OR BETTER
576	VALLEY OAK	18.2	20	FAIR OR BETTER
577	VALLEY OAK	12.0	14	FAIR OR BETTER
578	CALIFORNIA BLACK WALNUT	36.0	25	POOR TO DEAD
579	CHINESE PISTACHE	11.1	18	FAIR OR BETTER
580	CHINESE PISTACHE	8.3	15	POOR TO DEAD
583	ENGLISH WALNUT	26.8	25	POOR TO DEAD
584	ENGLISH WALNUT	31.8	30	POOR TO DEAD
585	ENGLISH WALNUT	16.3	30	POOR TO DEAD
586	ENGLISH WALNUT	42.2	28	FAIR OR BETTER
587	ENGLISH WALNUT	15.0	25	FAIR OR BETTER
588	ENGLISH WALNUT	18.8	20	POOR TO DEAD





As summarized in Table 4.3-4, the trees within the study area are comprised of the following: 30 street trees along either side of East Covell Boulevard and in the median, 29 City trees along the walkable trail within the Wildhorse Agricultural Buffer, 66 private trees within private parcels, and three trees within the area proposed for the obstacle course east of the project site. It should be noted that the 2009 EIR identified 51 trees with a DBH of five inches or greater within the 25.8-acre project site under Impact 4.6-7. Thirty-one of the trees received a fair to good health rating, and 20 were found to be in fair or poor health.

### **4.3.3 REGULATORY CONTEXT**

A number of federal, State, and local policies provide the regulatory framework that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological resources in the vicinity of the project site.

#### **Federal Regulations**

The following are the federal environmental laws and policies relevant to biological resources.

#### **Federal Endangered Species Act**

The U.S. Congress passed the FESA in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [3], [19]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 Code of Federal Regulations [CFR] Section 17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR Section 17.3). Actions that result in take can result in civil or criminal penalties.

Section 10 requires the issuance of an “incidental take” permit before any public or private action may be taken that could take an endangered or threatened species. The permit requires preparation and implementation of an HCP that would offset the take of individuals that may occur, incidental to implementation of a proposed project, by providing for the protection of the affected species.

Pursuant to the requirements of FESA, a federal agency reviewing a project within the jurisdiction of the agency must determine whether any federally listed threatened or endangered species may be present on-site and whether the proposed project will have a potentially significant impact on such species.

In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 U.S. Code [USC], Section 1536[3], [4]).



**Table 4.3-4  
Trees Within the Study Area**

Tree Species	Number of City Trees (DBH)		Number of Private Trees (DBH)		Number of Street Trees (DBH)		Total (DBH)
	Fair or Better	Poor to Dead	Fair or Better	Poor to Dead	Fair or Better	Poor to Dead	
Apricot			1 (10.6)				1 (10.6)
Black Willow	4 (207.2)		1 (20.7)				5 (227.9)
California Black Walnut	1 (13)		8 (231.9)			2 (77.1)	11 (322)
California Buckeye	1 (30.4)						1 (30.4)
Canary Island Pine				1 (24.7)	1 (15.9)		2 (40.6)
Chinaberry	1 (16.5)		1 (53)				2 (69.5)
Chinese Pistache	1 (11)				10 (106.7)	2 (17.1)	13 (134.8)
Common Hackberry			2 (60.4)				2 (60.4)
English Walnut			6 (83.5)	10 (156.7)	3 (75.7)	6 (177.1)	25 (493)
European Olive			3 (52.1)	1 (28.5)			4 (80.6)
Fig			1 (20.9)	1 (22.3)			2 (43.2)
Golden Rain Tree					3 (34.8)		3 (34.8)
Holm Oak			1 (6.2)	1 (10)			2 (16.2)
Interior Live Oak	1 (9.8)						1 (9.8)
Italian Cypress			5 (58.6)				5 (58.6)
Mexican Fan Palm			16 (383.3)				16 (383.3)
Myoporum			2 (32.6)	2 (81.7)			4 (114.3)
Privet			2 (14.5)				2 (14.5)
Toyon	1 (15.4)	1 (29.1)					2 (44.5)
Valley Oak	12 (170.0)	2 (28.3)			3 (36.2)		17 (234.5)
Western Sycamore	7 (66)		1 (18.1)				8 (84.1)
<b>Total</b>	<b>29 (539.3)</b>	<b>3 (57.4)</b>	<b>50 (1,046.4)</b>	<b>16 (323.9)</b>	<b>20 (269.3)</b>	<b>10 (271.3)</b>	<b>128 (2,507.6)</b>

Source: Madrone Ecological Consulting, 2022.



For federally listed species covered under the Yolo HCP/NCCP, the Biological Opinion issued by the USFWS for the Yolo HCP/NCCP provides take coverage for covered projects under the Yolo HCP/NCCP that may impact federally listed species that are Covered Species under the Yolo HCP/NCCP. Further consultation is not required as long as the covered project complies with Yolo HCP/NCCP requirements. For federally listed species that are not Yolo HCP/NCCP Covered Species, take coverage is required as outlined below.

In the context of the proposed project, FESA consultation with USFWS or the NMFS would be initiated if development would result in take of a threatened or endangered species not covered under the Yolo HCP/NCCP or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species not covered under the Yolo HCP/NCCP or adversely modify critical habitat of such a species.

### **Migratory Bird Treaty Act**

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

### **Clean Water Act**

The U.S. Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into waters of the U.S. under Section 404 of the Clean Water Act (CWA). “Discharge of fill material” is defined as the addition of fill material into waters of the U.S., including but not limited to, the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for the construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 CFR Section 328.2[f]). In addition, Section 401 of the CWA (Title 33 of USC, Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments, such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR Section 328.3[b]).

Furthermore, jurisdictional waters of the U.S. can be defined by exhibiting a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the USACE as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (33 CFR Section 328.3[e]).

### **State Regulations**

The following are the State environmental laws and policies relevant to biological resources.



## **California Department of Fish and Wildlife**

CDFW administers a number of laws and programs designed to protect fish and wildlife resources under the California Fish and Game Code (CFGF), such as CESA (CFGF Section 2050, et seq.), Fully Protected Species (CFGF Section 3511) and the Lake or Streambed Alteration Agreement (LSAA) Program (CFGF Sections 1600 to 1616). Such regulations are summarized in the following sections.

### California Endangered Species Act

The State of California enacted CESA in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that “overriding considerations” exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

As with FESA, for covered projects that may impact State-listed species under CESA that are also Covered Species under the Yolo HCP/NCCP, direct consultation with CDFW for State-listed take authorization is not required as long as the covered project complies with Yolo HCP/NCCP requirements. For projects that may result in take of State-listed species that are not Yolo HCP/NCCP Covered Species, CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (CFGF Section 2081).

### California Fish and Game Codes

A number of species have been designated “Fully Protected” species under Sections 5515, 5050, 3511, and 4700 of the CFGF, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The CFGF defines take as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

Birds of prey are protected in California under provisions of the CFGF Section 3503.5 (1992), which states, “it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by CDFW.

### Lake or Streambed Alteration Program

The CDFW is responsible for conserving, protecting, and managing California’s fish, wildlife, and native plant resources. To meet this responsibility, CFGF Section 1602 requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification



is required by any person, business, State or local government agency, or public utility that proposes an activity 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 or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, the CDFW will require that the parties enter into an LSAA.

### CDFW Species of Special Concern

In addition to formal listings under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of “Species of Special Concern” developed by CDFW. Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California.

### **Native Plant Protection Act**

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. Currently, 64 species, subspecies, and varieties of plants are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations, emergencies, and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

### **Regional Water Quality Control Board**

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the federal CWA. Although the CWA is a federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Quality Control Boards (RWQCBs) are the authorities that certify that issuance of a federal license or permit does not violate California’s water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE’s permits for fill and dredge discharges within waters of the U.S., and also implements the State’s wetland protection and hydromodification regulation program under the Porter-Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Plan. The Procedures consist of four major elements: (1) a wetland definition; (2) a framework for determining if a feature that meets the wetland definition is a water of the State; (3) wetland delineation procedures; and (4) procedures for the submittal, review, and approval of applications for WQCs and Waste Discharge Requirements (WDR) for dredge or fill activities. The State Office



of Administrative Law (OAL) approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code Section 13050[e]), “waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.” Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to waters of the State, which includes waters of the U.S. and non-federal waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California’s statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

### **Local Regulations**

The following are the local environmental laws and policies relevant to biological resources.

### **Yolo County Habitat Conservation Plan and Natural Community Conservation Plan**

The Yolo HCP/NCCP, which was adopted in January 2019, is a 50-year regional plan that provides for the conservation of 12 Covered Species and the natural communities and agricultural land on which they depend, while allowing for orderly development in Yolo County consistent with local general plans. The following six local agencies prepared the Yolo HCP/NCCP: the Yolo Habitat Conservancy, County of Yolo, City of Davis, City of West Sacramento, City of Winters, and City of Woodland. The Yolo HCP/NCCP only applies to eligible projects, also known as Covered Activities, undertaken within the Yolo HCP/NCCP plan area, which includes all areas within Yolo County, including the incorporated cities of Davis, West Sacramento, Winters, and Woodland.

The Yolo HCP/NCCP provides the basis for issuance of long-term permits under FESA and the California Natural Community Conservation Planning Act (NCCPA) that cover an array of public and private activities, including activities that are essential to the ongoing viability of Yolo County’s agricultural and urban economies. Specifically, the Yolo HCP/NCCP provides permittees (i.e., Yolo County, the four incorporated cities, and the Yolo Habitat Conservancy) with incidental take permits from both USFWS and CDFW for the 12 Covered Species, pursuant to Section 10(a)(1)(B) of the FESA and Section 2835 of the NCCPA chapter of the CFGC. The Yolo HCP/NCCP ensures compliance with the FESA, NCCPA, and CESA for Covered Activities that may affect Covered Species.

In addition to the permittees, the Yolo HCP/NCCP permits may cover the activities of other entities through certificates of inclusion obtained by completing the Yolo HCP/NCCP application process. The Yolo Habitat Conservancy charges various types of fees to cover implementation costs, including administration, land acquisition, restoration, and land management costs. Yolo





HCP/NCCP applicants can either pay mitigation fees for land cover conversion, or conduct wetland restoration, and/or dedicate land in-lieu of the fees. Wetland restoration and land-in-lieu proposals must be reviewed and approved by the Yolo Habitat Conservancy. If an applicant opts to pay the mitigation fees, the Yolo Habitat Conservancy applies an adopted land cover fee schedule, with additional fees for wetlands. Fees are automatically increased annually, adjusted for inflation. Additionally, every five years, the Yolo Habitat Conservancy completes a fee assessment to review costs, underlying assumptions, and actual costs. After the review, fee schedule adjustments are made, and automatic annual increases resume based off the five-year fee assessment.

It should be noted that the 2009 EIR was certified prior to the adoption of the Yolo HCP/NCCP. As such, potential impacts to special-status plant and wildlife species that would have resulted from the Wildhorse Ranch Project required direct consultation with USFWS and/or CDFW.

### City of Davis General Plan

The City of Davis General Plan biological resource policies that are applicable to the proposed project are presented below.

#### Habitat and Natural Areas Chapter

Goal HAB 1 Identify, protect, restore, enhance, and create natural habitats. Protect and improve biodiversity consistent with the natural biodiversity of the region.

Policy HAB 1.1 Protect existing natural habitat areas, including designated Natural Habitat Areas.

Policy HAB 1.2 Enhance and restore natural areas and create new wildlife habitat areas.

### City of Davis Tree Ordinance

The City of Davis regulates tree planting and removal within the community in Davis Municipal Code Chapter 37, Tree Planting, Preservation, and Protection. Article 37.01 of the Municipal Code contains the administrative provisions, the pertinent sections of which are as follows:

#### **Section 37.01.020 Definitions**

**City tree** means any tree, other than a street tree, planted or maintained by the city within a city easement, right-of-way, park, greenbelt, public place or property owned or leased by the city.

**Landmark tree** means a tree that has determined by resolution of the city council to be of high value because of its species, size, age, form, historical significance, or some other professional criterion. The landmark tree list, available from the community services department, lists these identified trees.

**Private tree** means any tree privately owned and growing on private property, which may include landmark trees and/or trees of significance.

**Street tree** means any tree planted and/or maintained by the city, or recorded as a street tree, adjacent to a street or within a city easement or right-of-way on private property, within the street tree easement.



**Tree** means any woody perennial plant having one or several main stems commonly achieving ten or more feet in height and capable of being pruned and shaped to develop a branch-free trunk at least nine feet in height. Reference to any tree indicates the entire plant, including both visible (canopy, trunk) and below grade (roots).

**Tree of significance** means any tree included but not limited to those listed as per Section 37.03.050 as small and large trees which measure five inches or more in diameter (DBH).

In addition, Davis Municipal Code Article 37.03 contains the criteria for landmark trees and trees of significance, the pertinent sections of which are as follows:

**37.03.020 Landmark tree designation criteria**

(a) Any person may and is encouraged to submit a proposal to designate a tree as a landmark tree. Property owners of trees under consideration shall be notified that a proposal has been submitted and shall have the opportunity to be fully involved in the designation process. Proposals shall be reviewed by the director and sent to the tree commission for its review. Upon recommendation of the tree commission and approval of the City Council, a tree may be designated as a landmark tree if it meets any of the following criteria:

- (1) The tree is an outstanding specimen of a desirable species;
- (2) The tree is one of the largest or oldest trees in Davis;
- (3) The tree is of historical interest;
- (4) The tree is of distinctive form; or,
- (5) The tree is an unusual species, significant grove or is otherwise unique.

The director shall notify, in writing, the person who submitted the proposal and the tree owner (if different from the applicant) of the City Council's decision.

(b) When considering designating, removing designation (per Section 37.03.040) or removing (per Sections 37.03.060 and 37.03.070) landmark trees of historic value, the historical resources management commission shall be given the opportunity to comment on the proposal prior to tree commission review. (Ord. 2099 § 1, 2002)

**37.03.050 Trees of significance – Identification and classification**

All trees of significance are considered significant at five inches or greater in diameter (DBH). The following list of potential trees of significance divides tree species into two separate categories based upon their potential size at maturity; however, this list is not exhaustive. Should a property owner not know how a specific tree(s) five inches or greater may be affected by this section, (such as identification of species or species not on the list), the property owner may contact the city arborist. Not all trees on the following lists are appropriate for street trees or parking lot trees. For recommended street trees and parking lot trees, the City of Davis master tree list should be consulted.

**37.03.070 Landmark trees and trees of significance – Removal or modification associated with building permits or discretionary projects**

(d) Standards and provisions to be observed considering a permit under this section are as follows:

- (1) The design and placement of development should attempt to incorporate existing healthy trees into the site design.
- (2) All trees to be removed shall be mitigated as required in the permit, with options as follows:



- (A) Replanting a Tree(s) On-Site. Trees shall be planted in number and size so that there is no net loss in tree diameter at breast height (DBH). For example, if one tree is removed with a twelve-inch DBH size, mitigation may consist of a replacement of equal size, two trees each six-inch DBH, or four trees each three-inch DBH. The replanted tree(s) shall be minimum five-gallon size and of a species that will eventually equal or exceed the removed tree in size.
  - (B) Replanting a Tree(s) Off-Site. If there is insufficient space on the property for the replacement tree(s), required planting shall occur on the other property in the applicant's ownership or in city-owned open space or park, subject to the approval of the city arborist and authorized property owners.
  - (C) Payment to the Tree Preservation Fund in Lieu of Replacement. If in the city arborist's determination no feasible alternative exists to plant the required mitigation, or there are other considerations for alternative mitigation, the applicant shall pay into the tree preservation fund an amount determined by the director based upon the ISA appraisal guidelines or other approved method. If the director approves another method of appraisal guidelines the director shall publish notice of that approval and notify the permit applicant at the time the permit application is issued.
- (3) Removal or modification shall not be approved unless one of the following shall apply:
- (A) The tree(s), due to its location in respect to topography and required setbacks and easements, prevents reasonable development of permitted uses. Existing development on similar sites in the same zone and having similar characteristics shall be considered when determining reasonable development of permitted uses.
  - (B) The condition of the tree(s), with respect to general health; disease; maturity; structural integrity; proximity to existing structures; parking; high pedestrian traffic areas; activity areas or interference with utility services, cannot be controlled or remedied through reasonable preservation procedures and practices.
  - (C) Good forestry practice suggests a reduction in the number of trees due to incapacity of the property to sustain the present number in healthy condition.
- (4) The visual prominence and function of each tree on the site shall be considered prior to a decision on the application.
- (5) If the application is approved, such conditions shall be imposed as are deemed necessary to fulfill the standards of this chapter.

Davis Municipal Code Section 37.03.050 protects 25 small tree species and 43 large tree species. However, as noted above, the listed tree species is not exhaustive. In addition, Davis Municipal Code Section 37.03.060 requires approval of a valid tree removal request and/or tree modification permit prior to cutting down, pruning substantially, encroaching into the protection zone of, or topping or relocating any landmark tree or tree of significance. Furthermore, Article 37.05 contains protection procedures to be implemented during grading, construction, or other site-related work. Such procedures, include, but are not limited to, inclusion of tree protection measures on approved development plans and specifications, and inclusion of tree care practices, such as the cutting of roots, pruning, etc., in approved tree modification permits, tree preservation plans, or project conditions.



#### **4.3.4 IMPACTS AND MITIGATION MEASURES**

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to biological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

##### **Standards of Significance**

Consistent with Appendix G of the CEQA Guidelines, the City's General Plan, and professional judgment, a significant impact would occur if the proposed project would result in the following:

- 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 CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- 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;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan.

##### **Method of Analysis**

The analysis of this SEIR is focused generally on the changes in circumstances following the City's certification of the 2009 EIR, pursuant to CEQA Guidelines Section 15162. The analysis of this chapter is based on the 2009 EIR and the BRA prepared for the currently proposed project by Madrone.

As discussed throughout this SEIR, the environmental baseline for this SEIR is appropriately considered to be the approved Wildhorse Ranch Project, which included a 191-unit residential development comprised of 73 detached single-family residences and 78 two- and three-story single-family townhomes on 11.95 acres, as well as 40 attached affordable housing units on 1.92 acres. In addition, the Wildhorse Ranch Project included the dedication of 2.26 acres of additional agricultural buffer, 1.61 acres of interior greenbelt, and 4.4 acres of interior open space. As such, construction activities associated with the Wildhorse Ranch Project would have potentially impacted biological resources located on-site.

Below are descriptions of the methodologies used in the BRA (see Appendix D of this SEIR) to evaluate potential impacts to biological resources associated with the currently proposed project. Further details are provided in Appendix D of this SEIR. The results of the impact analyses were compared to the standards of significance discussed above in order to determine the associated level of impact.



## Biological Resources Assessment

The analyses within the BRA are based on a literature review, field surveys of the study area, an ARD, and an arborist survey, which are detailed further below.

### Literature Review

A list of special-status plant and wildlife species with potential to occur within the study area was developed as part of the BRA through queries of the following databases:

- CNDDDB query of the study area and all areas within five miles of the study area (see Figure 4.3-4 and Figure 4.3-5);
- USFWS Information for Planning and Conservation (IPaC) query of federally listed species within the vicinity of the study area (included as Attachment B of the BRA);
- CNPS Rare and Endangered Plant Inventory query of the “Davis, California” U.S. Geological Survey (USGS) topographic quadrangle and the eight surrounding quadrangles (included as Attachment C of the BRA);
- The Cornell Laboratory’s eBird Database;
- The Western Monarch Milkweed Mapper Database;
- WBWG Species Matrix; and
- iNaturalist.

In addition, any special-status species that are known to occur in the project region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the study area.

### Field Surveys

Madrone conducted field surveys of the study area on August 24, September 12, and September 21, 2022, as well as in April 2024. The August 2022 field survey mapped Yolo HCP/NCCP land cover types, assessed the suitability of on-site habitats to support special-status species, and included an ARD. The April 2024 survey was conducted within the portion of the study area that would contain the proposed obstacle course to map Yolo HCP/NCCP land cover types, assess the suitability of habitats to support special-status species, and conduct a follow-up ARD.

The September 2022 field surveys were conducted to inventory the trees throughout the study area, as required by the City’s Tree Ordinance. The September 2022 field survey also included a protocol-level special-status plant survey, which was conducted in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants; the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities; and the CNPS Botanical Survey Guidelines. Meandering pedestrian surveys were performed throughout the study area, and a list of all wildlife species observed during the surveys is included as Attachment D to the BRA. Vegetation communities were classified in accordance with The Manual of California Vegetation, Second Edition, and plant taxonomy was based on the nomenclature in the Jepson eFlora.

### Aquatic Resources Delineation Report

Madrone conducted an ARD within the study area on August 24, 2022, and a follow-up ARD of the proposed obstacle course area in April 2024. Water features and data points were mapped in the field with a global positioning system (GPS) unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) was collected at each data point, documenting wetland/waters or upland status as appropriate. The delineation map was prepared



in accordance with the USACE Updated Map and Drawing Standards for the South Pacific Division Regulatory Program. The GPS data was overlaid on an ortho-rectified aerial photograph.

The delineation was performed in accordance with the USACE Wetlands Delineation Manual, the USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States, and the USACE Sacramento District's Minimum Standards for Acceptance of Preliminary Wetlands Delineations. In addition, USACE regulations (33 CFR 328) were used to determine the presence of waters of the U.S. other than wetlands. The most recent USACE National Wetland Plant List from 2018 was used to determine the wetland indicator status of plants observed in the study area. The Jepson eFlora was used for plant nomenclature, except where nomenclature conflicted with the National Wetland Plant List, which was given priority on the data sheets.

### Arborist Survey Report

Madrone conducted an arborist survey on September 12 and 21, 2022 and a follow-up survey in April 2024. The survey was conducted in accordance with the City of Davis Tree Ordinance. All trees with a DBH of five inches or more were inventoried.

In accordance with the City's Tree Ordinance, the arborist survey report defined a "tree" as any woody perennial plant having one or several main stems commonly achieving 10 or more feet in height and capable of being pruned to develop a branch free trunk at least nine feet in height. A number of woody plant species that are typically considered shrubs, but have been pruned into a tree shape, were observed within the study area; however, in many cases, the branches and/or trunks were numerous and slender. As such, only plants with at least one trunk five inches DBH or greater were inventoried.

For each tree inventoried, aluminum tags with a unique identification number were nailed into the trunk, and Madrone recorded the tree identification number, tree species, DBH, approximate dripline radius, and general health and structure of the tree. The location of each tree was recorded with a GPS unit capable of sub-meter accuracy (Arrow 100). It should be noted that the health and structure ratings recorded during the course of the survey should not be considered to be a hazard assessment for public safety purposes.

### Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to biological resources is based on implementation of the proposed project in comparison with the baseline and the standards of significance presented above.

- 4.3-1 Have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**





The 2009 EIR evaluated the potential for special-status plant species to occur on-site on pages 4.6-8 and 4.6-9 of the EIR and concluded that although field surveys were not performed as part of preparation of the EIR, special-status plant species with potential to occur within 10 miles of the project site (see Table 4.6-1 of the 2009 EIR) were not expected to occur on-site. As detailed therein, the majority of special-status plant species with potential to occur within the greater project region required alkaline soils, vernal pools, seasonal wetlands, and other habitats, none of which were detected within the project site. As such, the 2009 EIR determined that a potential impact would not occur to special-status plant species.

With respect to the currently proposed project, as detailed in Table 4.3-3, the special-status plant species with potential to occur within the study area include bristly sedge and San Joaquin spearscale. Channel A within the off-site portion of the study area represents potential habitat for bristly sedge, and ruderal areas containing Tyndall soils in the southeastern portion of the project site represent potential habitat for San Joaquin spearscale. However, the protocol-level special-status plant surveys conducted as part of the BRA were negative for both plant species. Additionally, the study area does not include the necessary habitat to support the 21 other special-status plant species identified by the BRA as having potential to occur within five miles of the study area.

Nonetheless, the protocol-level plant surveys were conducted in 2022. Given enough time, plants may become established in areas where suitable habitat exists, such as the off-site Channel A and on-site ruderal areas featuring Tyndall soils. Therefore, special-status plants could become established within the foregoing portions of the study area in the interim between surveys/analysis and construction activities, which could result in potential impacts during project construction.

Based on the above, should construction commence during or following the spring of 2025, without additional field surveys, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on a special-status plant species, beyond what were previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

*SEIR 4.3-1 If construction has not commenced prior to the first day of spring 2025 (March 20, 2025), a new round of special-status plant surveys shall be conducted by a qualified biologist in areas proposed for disturbance, prior to the commencement of construction.*



*The surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants, the California Native Plant Society (CNPS) Botanical Survey Guidelines of the California Native Plant Society, and the California Department of Fish and Wildlife (CDFW) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. The surveys shall be conducted at the appropriate time of year when plants are in bloom. A report summarizing the results of the protocol-level special-status plant surveys shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department.*

*If special-status plant species are not found, further mitigation shall not be required. If special-status plants are found within the proposed impact area and they are perennials, such as bristly sedge, then mitigation shall consist of digging up the plants and transplanting them into a suitable mitigation area prior to construction. If special-status plants will be impacted, a mitigation plan shall be developed and approved by the City of Davis Community Development and Sustainability Department. Mitigation for the transplantation/establishment of rare plants shall result in no net loss of individual plants after a five-year monitoring period.*

**4.3-2 Have a substantial adverse effect, either directly or through substantial habitat modifications, on monarch butterfly. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR did not evaluate potential impacts to monarch butterfly, as the species was not identified as a special-status species with potential to occur on-site.

With respect to the currently proposed project, several scattered narrowleaf milkweed plants occur within the ruderal areas and annual grasslands throughout the study area, which represent potential habitat for monarch butterfly, a special-status species that is not covered under the Yolo HCP/NCCP. If milkweed plants are removed during project construction and monarch butterfly larva or chrysalises are present, incidental mortality could occur. In addition, the City's wildlife biologist has observed monarch butterfly multiple times on and adjacent to the project site.

Based on the above, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on monarch butterfly, beyond what was previously identified in the 2009 EIR.



Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

**SEIR 4.3-2**

*If project-related vegetation removal occurs during the time when milkweed plants may host monarch eggs or caterpillars (March 15 through September 30, or otherwise identified in any future USFWS survey protocol), a preconstruction survey shall be conducted by a qualified biologist to survey for monarch eggs, larvae, and chrysalises, at most, 14 days prior to the commencement of construction. All milkweed plants within the study area shall be surveyed, as well as surrounding vegetation which may support chrysalises. A report summarizing the results of the preconstruction survey shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department.*

*If any monarch eggs, larvae, or chrysalises are found within the study area, they shall be avoided and work shall not occur within 50 feet of the monarchs until adults emerge and voluntarily leave the project site. If the eggs, larvae, or chrysalises are located in the work area and cannot be avoided, as determined by a qualified biologist in coordination with the project engineer and the City, eggs shall be allowed to hatch, and all larvae and chrysalises shall be translocated to an alternative location (e.g., containing a suitable population of larval host plants) outside of the work area. Should the species be listed under the federal Endangered Species Act (FESA) in the future, additional coordination with USFWS shall be completed, as necessary, prior to translocation.*

**4.3-3 Have a substantial adverse effect, either directly or through habitat modifications, on VELB. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR noted the presence of one small blue elderberry shrub, which was located approximately 100 feet east of the project site within the Wildhorse Agricultural Buffer, on page 4.6-18 of the EIR. As discussed therein, the blue elderberry shrub had several stems with a diameter over one inch, but exit holes were not observed. In addition, other occurrences of elderberry shrub included shrubs within 100 feet of the study area. Because elderberry shrubs were not present within the project site and



because VELB depend on the presence of the elderberry shrubs for all stages of their life cycle, the 2009 EIR concluded that a potential impact to VELB would not occur.

One elderberry shrub with stems greater than one inch occurs within the current study area, and an additional two shrubs are present within 100 feet of the study area (see Figure 4.3-6). The foregoing shrubs represent potential habitat for VELB. If VELB larva are present within the on-site elderberry shrub and the shrub is removed during project construction, the larva could be killed. Additionally, construction activities that occur within 100 feet of the elderberry shrubs outside the study area could indirectly affect VELB if they are present. Potential indirect effects could include application of pesticides that could kill individual beetles, or disturbance associated with dust, herbicides, or adjacent compaction that could reduce the health of the shrubs hosting the beetles and cause larva inside the shrubs to die.

VELB is a Yolo HCP/NCCP Covered Species. Davis Municipal Code Section 42.01.040 requires project applicants for Covered Activities within the Yolo HCP/NCCP plan area to comply with the applicable Yolo HCP/NCCP Avoidance and Minimization Measures (AMMs) to avoid, minimize, and mitigate the take of Covered Species resulting from Covered Activities. Thus, as the proposed project is a Covered Activity under the Yolo HCP/NCCP, the proposed project would be required to comply with the applicable Yolo HCP/NCCP AMMs, including the species-specific Yolo HCP/NCCP AMM12, which necessitates the mapping of all elderberry shrubs in and within 100 feet of the project footprint, as well as requiring the establishment of buffers and transplanting of elderberry shrubs to minimize take and adverse effects on habitat of VELB. However, as the final application to the Yolo Habitat Conservancy has not yet been prepared, proper compliance with the aforementioned Yolo HCP/NCCP AMMs cannot be ensured at this time, and the proposed project could have a substantial adverse effect on VELB, either directly or through habitat modifications.

Based on the above, without compliance with the Yolo HCP/NCCP, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on VELB, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

VELB is a Yolo HCP/NCCP Covered Species. Thus, the proposed project would be subject to the following species-specific Yolo HCP/NCCP AMM to address potential impacts to the species. Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

SEIR 4.3-3      Yolo HCP/NCCP AMM12: The project proponent will retain a qualified biologist who is familiar with valley elderberry longhorn



beetle and evidence of its presence (i.e., exit holes in elderberry shrubs) to map all elderberry shrubs in and within 100 feet of the project footprint with stems that are greater than one inch in diameter at ground level. To avoid take of valley elderberry longhorn beetle fully, the project proponent will maintain a buffer of at least 100 feet from any elderberry shrubs with stems greater than one inch in diameter at ground level. AMM1, Establish Buffers, above [in the Yolo HCP/NCCP], describes circumstances in which a lesser buffer may be applied. For elderberry shrubs that cannot be avoided with a designated buffer distance as described above, the qualified biologist will quantify the number of stems one inch or greater in diameter to be affected, and the presence or absence of exit holes. The Yolo Habitat Conservancy will use this information to determine the number of plants or cuttings to plant on a riparian restoration site to help offset the loss, consistent with Section 6.4.2.4.1, Valley Elderberry Longhorn Beetle. Additionally, prior to construction, the project proponent will transplant elderberry shrubs identified within the project footprint that cannot be avoided.

Transplantation will only occur if a shrub cannot be avoided and, if indirectly affected, the indirect effects would otherwise result in the death of stems or the entire shrub. If the project proponent chooses, in coordination with a qualified biologist, not to transplant the shrub because the activity would not likely result in death of stems of the shrub, then the qualified biologist will monitor the shrub annually for a five-year monitoring period. The monitoring period may be reduced with concurrence from the wildlife agencies if the latest research and best available information at the time indicates that a shorter monitoring period is warranted. If death of stems at least one inch in diameter occurs within the monitoring period, and the qualified biologist determines that the shrub is sufficiently healthy to transplant, the project proponent will transplant the shrub as described in the following paragraph, in coordination with the qualified biologist. If the shrub dies during the monitoring period, or the qualified biologist determines that the shrub is no longer healthy enough to survive transplanting, then the Yolo Habitat Conservancy will offset the shrub loss consistent with the preceding paragraph.

The project proponent will transplant the shrubs into a location in the HCP/NCCP reserve system that has been approved by the Conservancy. Elderberry shrubs outside the project footprint but within the 100-foot buffer will not be transplanted.

Transplanting will follow the following measures:

1. *Monitor:* A qualified biologist will be on-site for the duration of the transplanting of the elderberry shrubs to ensure the effects on elderberry shrubs are minimized.
2. *Timing:* The project proponent will transplant elderberry plants when the plants are dormant, approximately





November through the first two weeks of February, after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the plant and increase transplantation success.

3. Transplantation procedure:
  - a. Cut the plant back three to six feet from the ground or to 50 percent of its height (whichever is taller) by removing branches and stems above this height. Replant the trunk and stems measuring one inch or greater in diameter. Remove leaves that remain on the plants.
  - b. Relocate plant to approved location in the reserve system, and replant as described in Section 6.4.2.4.1, Valley Elderberry Longhorn Beetle.

**4.3-4 Have a substantial adverse effect, either directly or through habitat modifications, on Crotch's bumble bee. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR did not evaluate potential impacts to Crotch's bumble bee, as the species was not identified as a special-status species with potential to occur on-site. The approximately three acres of California Annual Grassland Alliance land cover that occurs off-site within the Wildhorse Agricultural Buffer of the current study area represents suitable habitat for Crotch's bumble bee. In addition, the on-site ruderal areas represent marginally suitable habitat for the species. Thus, if Crotch's bumble bees are nesting within the foregoing areas during project construction, the species could be injured or killed.

Based on the above, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on Crotch's bumble bee, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level. It should be noted that the following mitigation measures only apply if Crotch's bumble bee is a candidate species or is listed under the CESA at the time of project construction. If the California Fish and Game





Commission finds that the petitioned action is not warranted, mitigation for the species shall not be required.

*SEIR 4.3-4 If feasible, initial ground-disturbing activities associated with the proposed project (e.g., grading, vegetation removal, staging) shall take place between September 1 and March 31 (i.e., outside the colony active period) to avoid potential impacts on special-status bumble bees. If completing all initial ground-disturbing activities between September 1 and March 31 is not feasible, then at a maximum of 14 days prior to the commencement of construction activities, a qualified biologist with 10 or more years of experience conducting biological resource surveys within California shall conduct a preconstruction survey for Crotch's bumble bees in the area(s) proposed for impact.*

*The survey shall occur during the period from one hour after sunrise to two hours before sunset, with temperatures between 65 degrees Fahrenheit and 90 degrees Fahrenheit, with low wind and zero rain. If the timing of the start of construction makes the survey infeasible due to the temperature requirements, the surveying biologist shall select the most appropriate days based on the National Weather Service seven-day forecast and shall survey at a time of day that is closest to the temperature range stated above. The survey duration shall be commensurate with the extent of suitable floral resources (which represent foraging habitat) present within the area proposed for impact, and the level of effort shall be based on the metric of a minimum of one person-hour of searching per three acres of suitable floral resources/foraging habitat. A meandering pedestrian survey shall be conducted throughout the area proposed for impact in order to identify patches of suitable floral resources. Suitable floral resources for Crotch's bumble bee include species in the following families: Apocynaceae, Asteraceae, Boraginaceae, Fabaceae, and Lamiaceae.*

*At a minimum, preconstruction survey methods shall include the following:*

- Search areas with floral resources for foraging Crotch's bumble bees. Observed foraging activity may indicate a nest is nearby, and therefore, the survey duration shall be increased when foraging bumble bees are present;*
- If Crotch's bumble bees are observed, watch any Crotch's bumble bees present and observe their flight patterns. Attempt to track their movements between foraging areas and the nest;*
- Visually look for nest entrances. Observe burrows, any other underground cavities, logs, or other possible nesting habitat;*



- *If floral resources or other vegetation preclude observance of the nest, small areas of vegetation may be removed via hand removal, line trimming, or mowing to a height of a minimum of four inches to assist with locating the nest;*
- *Look for concentrated Crotch's bumble bee activity;*
- *Listen for the humming of a nest colony; and*
- *If bumble bees are observed, attempt to photograph the individual and identify it to species.*

*The biologist conducting the survey shall record when the survey was conducted, a general description of any suitable foraging habitat/floral resources present, a description of observed bumble bee activity, a list of bumble bee species observed, a description of any vegetation removed to facilitate the survey, and their determination of if survey observations suggest a Crotch's bumble bee nest(s) may be present or if construction activities could result in take of Crotch's bumble bees. The report shall be submitted to the City of Davis Community Development and Sustainability Department prior to the commencement of construction activities.*

*If bumble bees are not located during the preconstruction survey or the bumble bees located are definitively identified as a common species (i.e., not special-status species), then further mitigation or coordination with the CDFW is not required.*

*If any sign(s) of a bumble bee nest is observed, and if the species present cannot be established as a common bumble bee, then construction shall not commence until either (1) the bumble bees present are positively identified as common (i.e., not a special-status species), or (2) the completion of coordination with CDFW to identify appropriate mitigation measures, which may include, but not be limited to, waiting until the colony active season ends, establishment of nest buffers, or obtaining an Incidental Take Permit (ITP) from CDFW.*

*If Crotch's bumble bees are located, and after coordination with CDFW take of Crotch's bumble bees cannot be avoided, the project proponent shall obtain an ITP from CDFW, and the project proponent shall implement all conditions identified in the ITP. Mitigation required by the ITP may include, but not be limited to, the project proponent translocating nesting substrate in accordance with the latest scientific research to another suitable location (i.e., a location that supports similar or better floral resources as the impact area), enhancing floral resources on areas of the project site that will remain appropriate habitat, worker awareness training, and/or other measures specified by CDFW.*



**4.3-5 Have a substantial adverse effect, either directly or through habitat modifications, on northwestern pond turtle. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR concluded on pages 4.6-22 to 4.6-23 of the EIR that, based on a lack of suitable aquatic habitat and isolation from known populations, western pond turtles were not expected to occur within the study area. Although soils within the project site could have been suitable for western pond turtle nest building, the 2009 EIR found that known breeding populations in the region would not have nested on-site due to the lack of aquatic features and the disconnection from local waterways. Channel A, located approximately 0.3-mile north of the project site, contained suitable aquatic habitat for western pond turtles; however, the Wildhorse Ranch Project did not require installation of an off-site sewer line. Thus, Channel A would not have been impacted by the Wildhorse Ranch Project. In addition, western pond turtles had not been documented within the waterway in the project vicinity and the project site was separated from the waterway by dense urban development and actively farmed agricultural fields. Thus, the 2009 EIR concluded a potential impact to western pond turtle would not occur.

The western pond turtle is now known as the northwestern pond turtle, and this SEIR reflects the species' current taxonomy. The off-site Channel A within the current study area could represent potential habitat for the northwestern pond turtle if the drainage is inundated during the species' active season. As discussed further in the Project Description chapter of this SEIR, as part of establishing sewer service to the project site, 2,270 lineal feet of new 12-inch sewer line would be extended from an existing 42-inch sewer trunk main along the northern boundary of the Wildhorse Golf Course to the project site's northeastern corner, through the edge of the existing Wildhorse Agricultural Buffer, requiring a crossing of Channel A. While potential aquatic habitat would not be impacted, as the project would use a jack-and-bore process to install the crossing, northwestern pond turtles present and/or nesting during project construction in the upland areas within 100 feet of Channel A, as well as their eggs, could be injured or killed.

The northwestern pond turtle is a Yolo HCP/NCCP Covered Species. In accordance with Davis Municipal Code Section 42.01.040, the proposed project would be required to comply with species-specific Yolo HCP/NCCP AMM14, which necessitates permanent buffer zones to protect habitat of northwestern pond turtle and preconstruction assessment of the potential for northwestern pond turtle to occur within on- and off-site habitat. If the potential is determined to be moderate to high, AMM14 requires a qualified biologist to monitor ground-disturbing activity. However, as the final application to the Yolo Habitat Conservancy has not yet been prepared, proper compliance with the aforementioned Yolo HCP/NCCP AMMs cannot be ensured at this time, and the proposed project could have a substantial adverse effect on northwestern pond turtle, either directly or through habitat modifications.



Based on the above, without compliance with the Yolo HCP/NCCP, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on northwestern pond turtle, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

Northwestern pond turtle is a Yolo HCP/NCCP Covered Species. Thus, the proposed project would be subject to the following general and species-specific Yolo HCP/NCCP AMMs to address potential impacts to the species. It should be noted that AMM9, which is referenced below within the text of AMM14, is related to establishing buffers around valley foothill riparian communities, and thus, is not applicable to the currently proposed project due to the lack of such habitat within areas that would be disturbed by the currently proposed project. AMM10 is related to the avoidance and minimization of effects on wetlands and waters but is not required due to the currently proposed project's design avoiding impacts to Channel A waters. As such, AMMs 9 and 10 are not included as mitigation measures.

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

*SEIR 4.3-5      Yolo HCP/NCCP AMM14: There are no specific design requirements for western pond turtle habitat, however, project proponents must follow design requirements for the valley foothill riparian and lacustrine and riverine natural communities described in AMMs 9 and 10, which require a 100-foot (minimum) permanent buffer zone from the canopy drip-line (the farthest edge on the ground where water will drip from the tree canopy, based on the outer boundary of the tree canopy). If modeled upland habitat will be impacted, a qualified biologist must be present and will assess the likelihood of western pond turtle nests occurring in the disturbance area (based on sun exposure, soil conditions, and other species habitat requirements). If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground disturbing activity for nests that may be unearthed during the disturbance, and will move out of harm's way any turtles or hatchlings found.*



**4.3-6 Have a substantial adverse effect, either directly or through habitat modifications, on giant garter snake. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR concluded on pages 4.6-23 to 4.6-24 of the EIR that giant garter snakes are not expected to occur within the project site during project construction. As discussed therein, aquatic features capable of supporting giant garter snakes were not located on-site. The closest potential habitat was Channel A, located 0.3-mile north of the project site. Giant garter snakes had been recorded within Willow Slough Bypass, two miles northeast of the project site, and in the Fork of Putah Creek, as well as approximately 4.5 miles east of the project site in the Willow Slough Bypass. However, the Wildhorse Ranch Project did not include installation of an off-site sewer line and, thus, would not have impacted Channel A. Furthermore, the 2009 EIR concluded that the area between the slough and the project site was developed with a dense residential neighborhood, which would limit the potential for giant garter snakes to travel to the project site. The 2009 EIR also concluded that the likelihood for giant garter snakes to use the rodent burrows within the project site as upland refugia was similarly low, due to the distance from suitable aquatic habitat. Thus, the 2009 EIR concluded a potential impact to giant garter snake would not occur.

The current BRA found that when inundated, the off-site Channel A represents potential habitat for giant garter snake. As previously discussed, as part of establishing sewer service to the project site, 2,270 lineal feet of new 12-inch sewer line would be extended from an existing 42-inch sewer trunk main along the northern boundary of the Wildhorse Golf Course to the project site's northeastern corner, through the edge of the existing Wildhorse Agricultural Buffer, requiring a crossing of Channel A. While potential aquatic habitat would not be impacted, due to the project using a jack-and-bore process to install the crossing, giant garter snakes present and/or nesting during project construction in the upland areas within 200 feet of Channel A could be injured or killed.

The giant garter snake is a Yolo HCP/NCCP Covered Species, and thus, the proposed project would be required to comply with the applicable Yolo HCP/NCCP AMMs. Applicable Yolo HCP/NCCP AMMs would include species-specific Yolo HCP/NCCP AMM15, which necessitates avoidance of potential habitat and minimization procedures if avoidance is infeasible, including, but not limited to, dewatering irrigation ditches, canals, or other aquatic habitat, providing environmental awareness training, and stopping construction if the species is encountered. However, as the final application to the Yolo Habitat Conservancy has not yet been prepared, proper compliance with the aforementioned Yolo HCP/NCCP AMMs cannot be ensured at this time, and the proposed project could have a substantial adverse effect on giant garter snake, either directly or through habitat modifications.

Based on the above, without compliance with the Yolo HCP/NCCP, the currently proposed project could result in a new significant impact or substantially more severe





significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on giant garter snake, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

Giant garter snake is a Yolo HCP/NCCP Covered Species. Thus, the proposed project would be subject to the following general and species-specific Yolo HCP/NCCP AMMs to address potential impacts to the species. Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

SEIR 4.3-6

*Yolo HCP/NCCP AMM15: The project proponent will avoid effects on areas where planning-level surveys indicate the presence of suitable habitat for giant garter snake. To avoid effects on giant garter snake aquatic habitat, the project proponent will conduct no in-water/in-channel activity and maintain a permanent 200-foot non-disturbance buffer from the outer edge of potentially occupied aquatic habitat. If the project proponent cannot avoid effects of construction activities, the project proponent will implement the measures below to minimize effects of construction projects (measures for maintenance activities are described after the following bulleted list).*

- Conduct preconstruction clearance surveys using USFWS-approved methods within 24 hours prior to construction activities within identified giant garter snake aquatic and adjacent upland habitat. If construction activities stop for a period of two weeks or more, conduct another preconstruction clearance survey within 24 hours prior to resuming construction activity.*
- Restrict all construction activity involving disturbance of giant garter snake habitat to the snake's active season, May 1 through October 1. During this period, the potential for direct mortality is reduced because snakes are expected to move and avoid danger.*
- In areas where construction is to take place, encourage giant garter snakes to leave the site on their own by dewatering all irrigation ditches, canals, or other aquatic habitat (i.e., removing giant garter snake aquatic habitat) between April 15 and September 30. Dewatered habitat must remain dry, with no water puddles remaining, for at least 15 consecutive days prior to excavating or filling of the habitat. If a site cannot be completely dewatered, netting*





and salvage of giant garter snake prey items may be necessary to discourage use by snakes.

- Provide environmental awareness training for construction personnel, as approved by the Conservancy. Training may consist of showing a video prepared by a qualified biologist, or an in-person presentation by a qualified biologist. In addition to the video or in-person presentation, training may be supplemented with the distribution of approved brochures and other materials that describe resources protected under the Yolo HCP/NCCP and methods for avoiding effects.
- A qualified biologist will prepare a giant garter snake relocation plan which must be approved by the Conservancy prior to work in giant garter snake habitat. The qualified biologist will base the relocation plan on criteria provided by CDFW or USFWS, through the Conservancy.
- If a live giant garter snake is encountered during construction activities, immediately notify the project's biological monitor and USFWS and CDFW. The monitor will stop construction in the vicinity of the snake, monitor the snake, and allow the snake to leave on its own. The monitor will remain in the area for the remainder of the work day to ensure the snake is not harmed or, if it leaves the site, does not return. If the giant garter snake does not leave on its own, the qualified biologist will relocate the snake consistent with the relocation plan described above.
- Employ the following management practices to minimize disturbances to habitat:
  - Install temporary fencing to identify and protect adjacent marshes, wetlands, and ditches from encroachment from construction equipment and personnel.
  - Maintain water quality and limit construction runoff into wetland areas through the use of hay bales, filter fences, vegetative buffer strips, or other accepted practices. No plastic, monofilament, jute, or similar erosion-control matting that could entangle snakes or other wildlife will be permitted.

Ongoing maintenance covered activities by local water and flood control agencies typically involve removal of vegetation, debris, and sediment from water conveyance canals as well as resloping, rocking, and stabilizing the canals that serve agricultural water users. Maintenance of these conveyance facilities can typically occur only from mid-January through April when conveyance canals and ditches are not in service by the agency, although some drainages are used for storm conveyance during the winter and are wet all year. This timing is during the giant garter snake's inactive



period. This is when snakes may be using underground burrows and are most vulnerable to take because they are unable to move out of harm's way. Maintenance activities, therefore, will be limited to the giant garter snake's active season (May 1 to October 1) when possible. All personnel involved in maintenance activities within giant garter snake habitat will first participate in environmental awareness training for giant garter snake, as described above for construction-related activities. To minimize the take of giant garter snake, the local water or flood control agency will limit maintenance of conveyance structures located within modeled giant garter snake habitat (Appendix A, Covered Species Accounts) to clearing one side along at least 80 percent of the linear distance of canals and ditches during each maintenance year (e.g., the left bank of a canal is maintained in the first year and the right bank in the second year). To avoid collapses when resloping canal and ditch banks composed of heavy clay soils, clearing will be limited to one side of the channel during each maintenance year.

For channel maintenance activities conducted within modeled habitat for giant garter snake, the project proponent will place removed material in existing dredged sites along channels where prior maintenance dredge disposal has occurred. For portions of channels that do not have previously used spoil disposal sites and where surveys have been conducted to confirm that giant garter snakes are not present, removed materials may be placed along channels in areas that are not occupied by giant garter snake and where materials will not re-enter the canal because of stormwater runoff.

Modifications to this AMM may be made with the approval of the Conservancy, USFWS, and CDFW.

**4.3-7 Have a substantial adverse effect, either directly or through habitat modifications, on tricolored blackbird. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR concluded on page 4.6-28 that tricolored blackbird was among the special-status bird species with a low potential to occur on-site, due to suitable nesting and foraging habitat being located on-site, such as ruderal grasslands and agricultural fields. Thus, the 2009 EIR determined under Impact 4.6-3 that tricolored blackbird and other special-status passerine species could be disturbed by construction activities occurring in the vicinity of active nests, and a significant impact could occur. To address the potential impact, the 2009 EIR set forth Mitigation Measures 4.6-3(a) through 4.6-3(c). Mitigation Measure 4.6-3(a) required removal of buildings, trees, or shrubs outside of the annual nesting season. If such activities were to begin during the



nesting season, Mitigation Measure 4.6-3(a) required a preconstruction nesting bird survey. If active nests were identified as part of the preconstruction survey, Mitigation Measure 4.6-3(b) required establishment of non-disturbance buffer zones, and Mitigation Measure 4.6-3(c) required continued monitoring of active nests by a qualified biologist. Such mitigation measures would apply to any on-site nests associated with tricolored blackbird. With implementation of Mitigation Measures 4.6-3(a) through 4.6-3(c), the 2009 EIR concluded a less-than-significant impact would occur.

The current BRA identified small stands of bulrush within the off-site Channel A that represent potential nesting habitat for tricolored blackbird. As previously discussed, the portion of Channel A that runs through the northern portion of the study area could be impacted by the proposed project during installation of the off-site sewer line necessary to establish sewer service for the proposed project. If Channel A is impacted and tricolored blackbirds are nesting during project construction, the species could be injured or killed.

The tricolored blackbird is a Yolo HCP/NCCP Covered Species. Therefore, the proposed project would be required to comply with species-specific Yolo HCP/NCCP AMM21, which necessitates identifying potential tricolored blackbird nests, maintaining non-disturbance buffers, and checking records for tricolored blackbird nesting colonies. However, as the final application to the Yolo Habitat Conservancy has not yet been prepared, proper compliance with the Yolo HCP/NCCP cannot be ensured at this time, and the proposed project could have a substantial adverse effect on tricolored blackbird, either directly or through habitat modifications.

Based on the above, without compliance with the Yolo HCP/NCCP, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on tricolored blackbird, beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

As previously discussed, the 2009 EIR was certified prior to the adoption of the Yolo HCP/NCCP. Because tricolored blackbird is a Yolo HCP/NCCP Covered Species, potential impacts to the species that would occur as a result of the currently proposed project are addressed through compliance with the applicable Yolo HCP/NCCP AMMs, including the species-specific AMM21. Thus, Mitigation Measures 4.6-3(a) through 4.6-3(c) from the 2009 EIR are not applicable to address potential impacts specific to tricolored blackbird. However, it should be noted that the foregoing mitigation measures are included under Impact 4.3-10 to address potential impact to other migratory birds and nesting raptors.

#### Modified Mitigation Measure(s)

*None required.*

#### New Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.



SEIR 4.3-7 *Yolo HCP/NCCP AMM21: The project proponent will retain a qualified biologist to identify and quantify (in acres) tricolored blackbird nesting and foraging habitat (as defined in Appendix A, Covered Species Accounts) within 1,300 feet of the footprint of the covered activity. If a 1,300-foot buffer from nesting habitat cannot be maintained, the qualified biologist will check records maintained by the Conservancy (which will include CNDDDB data, and data from the tricolored blackbird portal) to determine if tricolored blackbird nesting colonies have been active in or within 1,300 feet of the project footprint during the previous five years. If there are no records of nesting tricolored blackbirds on the site, the qualified biologist will conduct visual surveys to determine if an active colony is present, during the period from March 1 to July 30, consistent with protocol described by Kelsey (2008).*

*Operations and maintenance activities or other temporary activities that do not remove nesting habitat and occur outside the nesting season (March 1 to July 30) do not need to conduct planning or construction surveys or implement any additional avoidance measures.*

*If an active tricolored blackbird colony is present or has been present within the last five years within the planning-level survey area, the project proponent will design the project to avoid adverse effects within 1,300 feet of the colony site(s), unless a shorter distance is approved by the Conservancy, USFWS, and CDFW. If a shorter distance is approved, the project proponent will still maintain a 1,300-foot buffer around active nesting colonies during the nesting season but may apply the approved lesser distance outside the nesting season. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.*

**4.3-8 Have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts to burrowing owl under Impact 4.6-2 and concluded that with implementation of mitigation, a less-than-significant impact would occur. As discussed therein, the habitat assessment and focused winter and breeding surveys conducted as part of the Wildhorse Ranch Project either identified burrowing owls on-site, detected burrows with burrowing owl sign, or both. Therefore, the 2009 EIR determined that a potential impact could occur. As a result, Mitigation Measures 4.6-2(a) through 4.6-2(f) were required, which necessitated preconstruction surveys of all potential burrowing owl habitat. If active nests were identified during the



preconstruction survey, Mitigation Measure 4.6-2(b) necessitated a non-disturbance buffer around burrows during the nesting season. If burrowing owls were identified outside of the nesting season, Mitigation Measure 4.6-2(c) included passive relocation and monitoring procedures. Regardless of the time of detection, if burrowing owls were actively detected on-site, Mitigation Measures 4.6-2(d) and 4.6-2(e) required habitat preservation and educational material on recognizing burrowing owl, respectively. Mitigation Measure 4.6-2(f) necessitated submittal of a monitoring report of all activities related to burrowing owl to the City and CDFW. With incorporation of the foregoing requirements, the 2009 EIR concluded that a substantial adverse effect to the species would not occur.

With respect to the currently proposed project, extensive complexes of ground squirrel burrows and several piles of debris located throughout the study area represent suitable habitat for the burrowing owl. The proposed project would potentially impact the majority of the foregoing areas (approximately 25.5 total acres of ruderal areas and California Annual Grassland Alliance land cover). If ground disturbance occurs while burrowing owls are occupying the on-site burrows, the species could be injured or killed.

The burrowing owl is a Yolo HCP/NCCP Covered Species. Therefore, the proposed project would be required to comply with species-specific Yolo HCP/NCCP AMM18, which necessitates a planning-level survey for suitable burrowing owl habitat and the species, non-disturbance buffers on occupied habitat, and potentially, a preconstruction survey prior to ground-disturbing activities and nest monitoring to ensure buffers are enforced and any on-site burrowing owls remain undisturbed. However, as the final application to the Yolo Habitat Conservancy has not yet been prepared, proper compliance with the aforementioned Yolo HCP/NCCP AMMs cannot be ensured at this time, and the proposed project could have a substantial adverse effect on burrowing owl, either directly or through habitat modifications.

Based on the above, without compliance with the Yolo HCP/NCCP, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on burrowing owl, beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

As previously discussed, the 2009 EIR was certified prior to the adoption of the Yolo HCP/NCCP. Because burrowing owl is a Yolo HCP/NCCP Covered Species, pursuant to Davis Municipal Code Section 42.01.040, potential impacts to the species that would occur as a result of the currently proposed project are addressed through compliance with the applicable Yolo HCP/NCCP AMMs set forth below under the Modified Mitigation Measure(s) subheading.

#### Modified Mitigation Measure(s)

Modifications to Mitigation Measures 4.6-2(a) through 4.6-2(f) from the 2009 EIR are shown in ~~strikethrough~~ and double-underline below. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.





4.6-2(a)

~~Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities and within 15 days of initiation of any grading or other construction activities, pre-construction surveys of all potential burrowing owl habitat shall be conducted by a qualified biologist within the project area and within 250 feet of the project boundary. Presence or sign of burrowing owl and all potentially occupied burrows shall be recorded and monitored according to the CDFG and California Burrowing Owl Consortium guidelines. If burrowing owls are not detected by sign or direct observation, construction may proceed.~~

Yolo HCP/NCCP AMM18: The project proponent will retain a qualified biologist to conduct planning-level surveys and identify western burrowing owl habitat (as defined in Appendix A, Covered Species Accounts) within or adjacent to (i.e., within 500 feet of) a covered activity. If habitat for this species is present, additional surveys for the species by a qualified biologist are required, consistent with CDFW guidelines (Appendix L).

If burrowing owls are identified during the planning-level survey, the project proponent will minimize activities that will affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint does not impinge on a nondisturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this nondisturbance buffer could range from 150 to 1,500 feet (Table 4-2, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls [incorporated as Table 4.3-5 of this chapter]), depending on the time of year and the level of disturbance, based on current guidelines (California Department of Fish and Game 2012). The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

- Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high-tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.
- Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large





gasoline-powered tools. Construction activities would normally fall under this category.

- High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression (“jake”) brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.

**Table 4.3-5  
 Recommended Restricted Activity Dates and  
 Setback Distances by Level of Disturbance for  
 Burrowing Owls**

<u>Time of Year</u>	<u>Level of Disturbance (feet) from Occupied Burrows</u>		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>April 1-August 15</u>	<u>600</u>	<u>1,500</u>	<u>1,500</u>
<u>August 16-October 15</u>	<u>600</u>	<u>600</u>	<u>1,500</u>
<u>October 16-March 31</u>	<u>150</u>	<u>300</u>	<u>1,500</u>

Source: Yolo Habitat Conservancy, Yolo County Habitat Conservation Plan/Natural Community Conservation Plan [Table 4-2], April 2018.

The project proponent may qualify for a reduced buffer size, based on existing vegetation, human development, and land use, if agreed upon by CDFW and USFWS (California Department of Fish and Game 2012).

If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), the project proponent will retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines (Appendix L, Take Avoidance Surveys). The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses



between ground disturbing activities will trigger subsequent surveys prior to ground disturbance.

If the biologist finds the site to be occupied by western burrowing owls during the breeding season (February 1 to August 31), the project proponent will avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and the project proponent develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:

- The Conservancy, CDFW, and USFWS approves the AMM plan provided by the project proponent.
- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
- If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all construction related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree.
- If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the project proponent may remove the nondisturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies.

If evidence of western burrowing owl is detected outside the breeding season (December 1 to January 31), the project proponent will establish a non-disturbance buffer around occupied burrows, consistent with Table 4-2 (incorporated as Table 4.3-5 of



this chapter), as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:

- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
- If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer.
- If the owls are gone for at least one week, the project proponent may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed and construction may continue.

Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active.

A qualified biologist will monitor the site, consistent with the requirements described above, to ensure that buffers are enforced and owls are not disturbed. Passive relocation (i.e., exclusion) of owls has been used in the past in the Plan Area to remove and exclude owls from active burrows during the nonbreeding season (Trulio 1995). Exclusion and burrow closure will not be conducted during the breeding season for any occupied burrow. If the Conservancy determines that passive relocation is necessary, the project proponent will develop a burrowing owl exclusion plan in consultation with CDFW biologists. The methods will be designed as described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors will be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist will collapse the burrow to prevent reoccupation. Burrows will be excavated using hand tools. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that



no owls are trapped inside the burrow. The Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows will be constructed prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.

~~4.6-2(b) — If potentially nesting burrowing owl are present during pre-construction surveys conducted between February 1 and August 31, grading or other construction related disturbance shall not be allowed within 250 feet of any active nest burrows during the nesting season (February 1 — August 31) unless approved by CDFG.~~

~~4.6-2(c) — If burrowing owl are detected during pre-construction surveys outside the nesting season (September 1 — January 31), passive relocation and monitoring may be undertaken by a qualified biologist following the CDFG and California Burrowing Owl Consortium guidelines, which involve the placement of one-way exclusion doors on occupied and potentially occupied burrowing owl burrows. Owls shall be excluded from all suitable burrows within the project area and within a 250-foot buffer zone of the impact area. A minimum of one week shall be allowed to accomplish this task and allow for owls to acclimate to alternate burrows. These mitigation actions shall be carried out prior to the burrowing owl breeding season (February 1 — August 31) and the site shall be monitored weekly by a qualified biologist until construction begins to ensure that burrowing owls do not re-inhabit the site.~~

~~4.6-2(d) — If burrowing owl or sign of burrowing owl are detected at any time on the project site, a minimum of 6.5 acres of foraging habitat per pair or individual resident bird, shall be acquired and permanently protected to compensate for the loss of burrowing owl habitat. The acreage shall be based on the maximum number of owls observed inhabiting the property for any given observation period, pre-construction survey, or other field visit. The protected lands shall be occupied burrowing owl habitat and at a location acceptable to CDFG. A report shall be submitted to the City describing the agreed upon location. First priority for habitat preservation shall be accomplished on-site. If the required acreage cannot be preserved on-site, second priority shall be given to habitat preservation at an off-site location within the Davis city limits that shall be acquired and preserved in perpetuity. Third priority shall be given to another offsite location outside of the Davis city limits. Habitat in the amount specified above shall be acquired, permanently protected, and enhanced through management for the benefit of the species, to compensate for the loss of burrowing owl habitat on the project site. Alternatively, the applicant can provide the required mitigation either through an in-lieu fee program, purchase of the required~~



~~acreage in an approved mitigation bank, or an approved Habitat Conservation Plan (HCP).~~

~~4.6-2(e) If burrowing owl are determined to be actively using the site, a qualified biologist shall conduct an education session for project contractors and construction crews responsible for site demolition and/or grading operations before any ground disturbance work within the project area. The education session, shall include includes photos of burrowing owl for identification purposes, habitat description, limits of construction activities in the project area, and guidance regarding general measures being implemented to conserve burrowing owl as they relate to the project. A qualified biologist shall provide materials and instructions to train new workers whose jobs involve initial ground disturbance, grading, or paving. Training for personnel finalizing exteriors and interiors would not be required.~~

~~4.6-2(f) A monitoring report of all activities associated with pre-construction surveys, avoidance measures, and passive relocation of burrowing owls shall be submitted to the City and CDFG no later than three days before initiation of grading.~~

New Mitigation Measure(s)

None required.

**4.3-9 Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk and white-tailed kite. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts to nesting Swainson's hawk under Impact 4.6-5 and concluded that, if Swainson's hawks were found nesting on or near the site, development of the Wildhorse Ranch Project could have a significant impact. In addition, the 2009 EIR evaluated potential impacts to Swainson's hawk foraging habitat under Impact 4.6-6 and concluded that development of the project site would result in the loss of approximately 15.5 acres of Swainson's hawk foraging habitat, which would be a significant impact. To address the potential impacts, the 2009 EIR included Mitigation Measures 4.6-5(a) through 4.6-5(c), as well as Mitigation Measures 4.6-6(a) and 4.6-6(b). Mitigation Measure 4.6-5(a) necessitated preconstruction surveys for nesting Swainson's hawk, and Mitigation Measure 4.6-5(b) required non-disturbance buffers around any active nests. In addition, Mitigation Measure 4.6-5(c) required the planting of replacement trees for any Swainson's hawk nest trees removed as part of project construction and/or payment of an in-lieu fee to the City. Mitigation Measure 4.6-6(a) and 4.6-6(b) necessitated compensation and mitigation for the loss of Swainson's hawk foraging habitat, as determined by the City and CDFW





through habitat management lands, in-lieu fees for the 15.5 acres of impacted foraging habitat, and/or conservation easements. The 2009 EIR concluded that with implementation of the foregoing requirements, the potential impacts would be reduced to a less-than-significant level.

With respect to potential impacts to white-tailed kite, the 2009 EIR concluded on page 4.6-25 of the EIR that the on-site trees lining the driveway and within the Wildhorse Agricultural Buffer would provide suitable nesting and foraging habitat for the species, and the on-site ruderal grasslands in the pastures and corrals would provide suitable foraging habitat. To address the potential impact, the 2009 EIR set forth Mitigation Measures 4.6-3(a) through 4.6-3(c), which are discussed further under Impact 4.3-6 in the analysis of potential impacts to tricolored blackbird. The 2009 EIR determined that a less-than-significant impact would occur with implementation of the foregoing requirements.

The ruderal areas and annual grassland within the study area of the currently proposed project would represent suitable foraging habitat for Swainson's hawk and white-tailed kite. In addition, the proposed project could result in the removal of potential nesting trees and impacts to 25.5 total acres of ruderal areas and California Annual Grassland Alliance land cover that represent foraging habitat for Swainson's hawk and white-tailed kite. It should be noted that the 2009 EIR identified potential impacts to 15.5 acres of Swainson's hawk foraging habitat; however, as previously discussed, the 2009 EIR did not include the acreage associated with the Wildhorse Agricultural Buffer within the analysis, as the Wildhorse Ranch Project did not include installation of an off-site sewer line in the foregoing location.

Swainson's hawk and white-tailed kite are Yolo HCP/NCCP Covered Species. Thus, the proposed project would be required to comply with species-specific Yolo HCP/NCCP AMM16, which necessitates planning-level surveys and avoidance of potential Swainson's hawk and white-tailed kite nest trees. If avoidance is infeasible, AMM16 requires preconstruction surveys, non-disturbance buffers around any identified nests, and on-site monitoring to watch for agitated behavior. However, as the final application to the Yolo Habitat Conservancy has not yet been prepared, proper compliance with the aforementioned Yolo HCP/NCCP AMMs cannot be ensured at this time, and the proposed project could have a substantial adverse effect on Swainson's hawk or white-tailed kite, either directly or through habitat modifications.

Based on the above, without compliance with the Yolo HCP/NCCP, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having an adverse effect, either directly or through habitat modifications, on Swainson's hawk and white-tailed kite, beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

As previously discussed, the 2009 EIR was certified prior to the adoption of the Yolo HCP/NCCP. Because Swainson's hawk and white-tailed kite are Yolo HCP/NCCP Covered Species, potential impacts to the species that would occur as a result of the currently proposed project are addressed through compliance with the applicable Yolo





HCP/NCCP AMMs set forth below under the Modified Mitigation Measure(s) subheading.

#### Modified Mitigation Measure(s)

Modifications to Mitigation Measures 4.6-5(a) through 4.6-5(c) and Mitigation Measures 4.6-6(a) and 4.6-6(b) from the 2009 EIR are shown in ~~strike through~~ and double-underline below. It should be noted that the acreage mitigation and compensation required by Mitigation Measures 4.6-6(a) and 4.6-6(b) of the Wildhorse Ranch EIR would be accomplished by the currently proposed project through payment of applicable Yolo HCP/NCCP fees. Thus, Mitigation Measures 4.6-6(a) and (b) have been deleted as they are superseded by Yolo HCP/NCCP compliance. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

~~4.6-5(a) ————— In order to ensure that nesting Swainson's hawks will not be affected by construction on the project site, a qualified biologist shall conduct preconstruction surveys according to the CDFG and Swainson's hawk Technical Advisory Committee guidelines (2000). Survey Period I occurs from January 1 — March 20, Period II from March 20 — April 5, Period III from April 5 — April 20, Period IV from April 21 — June 10, and Period V from June 10 — July 30. Three surveys shall be completed in at least each of the two survey periods immediately prior to a project's initiation and shall encompass the area within one half mile of the project site.~~

Yolo HCP/NCCP AMM16: The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey shall be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not



exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks.

For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

- ~~4.6-5(b) — Because of the potential for Swainson's hawk to nest on-site, potential adverse affects to this species shall be avoided by establishment of CDFG approved buffers around any active nests. No construction activities shall take place within 0.25 mile of the nest until the young have fledged, or authorization has been obtained from CDFG. Weekly monitoring reports summarizing nest activities shall be submitted to the City and CDFG until the young have fledged and the nest is determined to be inactive. Trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (late September to March) and in accordance with the CDFG "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California," November 8, 1994.~~
- ~~4.6-5(c) — Replacement trees for any potential Swainson's hawk nest trees removed as part of project construction must be planted either on-site or at a nearby site, and/or an in-lieu fee must be paid to the City of Davis Tree Preservation Fund as detailed in Mitigation Measure 4.6-7.~~
- ~~4.6-6(a) — The applicant shall be responsible for mitigating the loss of any Swainson's hawk foraging habitat. The extent of any necessary mitigation shall be determined by the City in consultation with CDFG; past recommended mitigation for loss of foraging habitat has been at a ratio of one acre of suitable foraging habitat for every one acre utilized by the proposed project. An "Agreement Regarding Mitigation for Impacts to Swainson's Hawk Foraging Habitat in Yolo County" was executed in August, 2002, between the Cities of Davis, West Sacramento, Winters, Woodland, the County of Yolo, and CDFG. The agreement currently requires 1.0 acre of~~



~~habitat management lands as mitigation for each 1.0 acre of Swainson's hawk foraging habitat lost.~~

~~4.6-6(b) The project proponent will compensate for the loss of Swainson's hawk foraging habitat by providing Habitat Management lands (HM lands) to CDFG as defined in the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (published by California Department of Fish and Game in 1994). If the proposed project is located within 1 mile of an active nest (to be determined with preconstruction surveys) the loss of habitat will be compensated at a ratio of 1:1 (HM lands:urban development). The project proponent will provide HM lands through an in-lieu fee process prior to groundbreaking per the Agreement to Yolo County HCP/NCCP Joint Powers Agency. Credits will be purchased through the in-lieu fee program due to the lack of mitigation credits currently available at a bank. As of January 2007, the cost per acre for the in-lieu fee is \$8,660 payable to the Joint Powers Agency. Should the in-lieu fee be increased prior to clearance to grade the project site, the project proponent shall pay the in-lieu fee in effect at that time. The project proponent will issue a check to the Joint Powers Agency if mitigation is required. It is estimated that a total of 15.5 acres of Swainson's hawk foraging habitat would be removed as a result of the project. The applicant shall pay the in-lieu fee for the 15.5 acres based on the removal of this Swainson's hawk foraging habitat.~~

~~-Or-~~

~~Prior to commencement of construction related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, the project proponent shall place and record one or more Conservation Easements that meet the acreage requirements of CDFG's Swainson's Hawk foraging habitat mitigation guidelines. The conservation easement(s) shall be executed by the project proponent and a Conservation operator. The City may, at its discretion, also be a party to the conservation easement(s). The conservation easement(s) shall be reviewed and approved in writing by CDFG prior to recordation for the purpose of confirming consistency. The purpose of the conservation easement(s) shall be to preserve the value of the land as foraging habitat for the Swainson's hawk.~~

New Mitigation Measure(s)

None required.



**4.3-10 Have a substantial adverse effect, either directly or through habitat modifications, on other nesting birds and raptors protected under the MBTA and CFGC. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts to nesting birds under Impact 4.6-3 and concluded that a significant impact could occur. As discussed therein, special-status bird species had the potential to nest in on-site vegetation, trees, shrubs, ruderal habitats, and/or grassland, as well as within existing structures. Therefore, the 2009 EIR found that any removal of buildings, trees, or shrubs, as well as any grading, discing, or other construction activities in the vicinity of active nests could have resulted in nest abandonment, nest failure, or premature fledging. In order to address the potential impact, the 2009 EIR required Mitigation Measures 4.6-3(a) through 4.6-3(c), which are discussed further under Impact 4.3-6 in the analysis of potential impacts to tricolored blackbird. The 2009 EIR determined that a less-than-significant impact would occur with implementation of the foregoing requirements.

Other nesting bird and raptor species protected under the MBTA and CFGC have the potential to be present and nest within the current study area. Removal of trees, shrubs, or ground cover being used by actively nesting bird and raptor species could result in the incidental mortality of individuals. In addition, construction activities adjacent to birds nesting in nearby areas could result in nest abandonment.

With respect to northern harrier, which is protected under the MBTA and a CDFW Species of Special Concern, Table 4.6-2 of the 2009 EIR notes that the species was observed on-site, and the 2009 EIR concludes on page 4.6-25 that northern harriers could nest either on-site or in the project vicinity. The current study area includes approximately 25.5 total acres of ruderal areas and California Annual Grassland Alliance land cover that represents potential nesting and foraging habitat for northern harrier could be impacted by the proposed project. Therefore, construction of the proposed project could have a substantial adverse effect on nesting northern harrier individuals.

With respect to loggerhead shrike, which is protected under the MBTA and a CDFW Species of Special Concern, the 2009 EIR notes under Impact 4.6-3 that the species is considered to have a moderate potential to occur on-site. In addition, the City's wildlife biologist has identified the species nesting in shrubs located within the Wildhorse Agricultural Buffer. As such, construction of the proposed sewer line and/or obstacle course could have a substantial adverse effect on nesting loggerhead shrike individuals.

Based on the above, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on nesting songbirds and raptor species protected under the MBTA and CFGC, beyond what was previously identified in the 2009 EIR.



### Applicable Mitigation Measure(s) from the 2009 EIR

The 2009 EIR required Mitigation Measures 4.6-3(a) through 4.6-3(c) to reduce potential impacts to nesting birds. The proposed project would be subject to the most up-to-date provisions to protect nesting bird and raptor species, as established in the BRA prepared for the currently proposed project. Thus, Mitigation Measures 4.6-3(a) through 4.6-3(c) from the 2009 EIR are modified, as applicable, and included under the Modified Mitigation Measure(s) subheading below.

### Modified Mitigation Measure(s)

Modifications to Mitigation Measures 4.6-3(a) through 4.6-3(c) from the 2009 EIR are shown in ~~strike-through~~ and double-underline below. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

#### 4.6-3(a)

*The removal of any buildings, trees, or shrubs shall occur from September 1 through December 15, outside of the avian nesting season. If removal of buildings, trees, or shrubs occurs, or construction begins between February 1 and August 31 (nesting season for passerine or non-passerine land birds) or between December 15 and August 31 (nesting season for raptors), a nesting bird survey shall be performed by a qualified ornithologist throughout the project site and all accessible areas within a 500-foot radius of proposed construction areas, at most, 14 ~~within 15~~ days prior to the removal or disturbance of a potential nesting structure, tree, or shrub, or the initiation of other construction activities. During this survey, a qualified ~~biologist~~ ornithologist shall inspect all potential nesting habitat (trees, shrubs, structures, grasslands, etc.) for nests in and immediately adjacent to the impact areas. If a break in construction activity of more than 14 days occurs, then subsequent surveys shall be conducted. A report of the survey findings shall be provided to the City of Davis Community Development and Sustainability Department and CDFG within 30 days of the completed survey and is valid for one construction season. If nests are not found, further mitigation is not required.*

*If active raptor nests are found, construction activities shall not take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot non-disturbance buffer shall be established. The non-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is approved by the City after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether visual or acoustic barriers occur between the proposed activity and the nest). A qualified ornithologist may visit the nest, as needed, to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.*





If the nest buffer is reduced but construction activities cause a nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest in a way that would be considered a result of construction activities, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the agitated behavior. The revised non-disturbance buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified ornithologist in consultation with the City.

Construction activities may only resume within the non-disturbance buffer after a follow-up survey by the ornithologist has been conducted and a report has been prepared indicating that the nest (or nests) are not active any longer, and that new nests have not been identified.

~~4.6-3(b) All vegetation and structures with active nests shall be flagged and an appropriate non-disturbance buffer zone shall be established around the nest site. The size of the buffer zone shall be determined by the project biologist in consultation with CDFG and shall depend on the species involved, site conditions, and type of work to be conducted in the area.~~

~~4.6-3(c) A qualified biologist shall monitor active nests to determine when the young have fledged and are feeding on their own. The project biologist and CDFG shall be consulted for clearance before construction activities resume in the vicinity.~~

New Mitigation Measure(s)

None required.

**4.3-11 Have a substantial adverse effect, either directly or through habitat modifications, on roosting bats. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts to special-status bat species, including pallid bat, Townsend's western big-eared bat, western red bat, hoary bat, and Yuma myotis bat, under Impact 4.6-4 and concluded that a significant impact could occur. The 2009 EIR noted that special-status bat species had the potential to roost in existing on-site structures and trees and found that any removal of buildings or trees hosting special-status bat species could result in injury or mortality. In order to address the potential impact, the 2009 EIR required Mitigation Measures 4.6-4(a) through 4.6-4(d), which necessitated a preconstruction survey within 30 days of tree or structure removal, as well as project redesign, roost avoidance, non-disturbance buffers, species eviction, and replacement roost procedures. With implementation of the





foregoing requirements, the 2009 EIR found that a less-than-significant impact would occur.

The currently proposed project includes the removal of buildings, structures, and trees within the project site and similarly has the potential to impact several roosting bat species, including western red bat, hoary bat, and pallid bat. Should such species be roosting in trees or structures proposed for removal as part of the proposed project, the foregoing species could be injured or killed. In addition, protected bat species roosting in trees adjacent to the proposed off-site sewer line extension, which was not included as part of the Wildhorse Ranch Project, could be subject to indirect disturbance associated with the proposed off-site improvements.

Based on the above, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on roosting bats, beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

The 2009 EIR required Mitigation Measures 4.6-4(a) through 4.6-4(d) to reduce potential impacts to special-status bat species. The proposed project would be subject to the most up-to-date provisions to protect roosting bat species, as established in the BRA prepared for the currently proposed project. Thus, Mitigation Measures 4.6-4(a) through 4.6-4(d) from the 2009 EIR are modified, as applicable, and included under the Modified Mitigation Measure(s) subheading below.

#### Modified Mitigation Measure(s)

Modifications to Mitigation Measures 4.6-4(a) through 4.6-4(d) from the 2009 EIR are shown in ~~strike through~~ and double underline below. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4.6-4(a) *A pre-construction survey for roosting bats shall be performed by a qualified biologist within 30 14 days prior to any removal of trees or structures on the site that would occur during the breeding season (April through August). A report summarizing the results of the preconstruction roosting bat survey shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department. Surveys shall be repeated if project-related disturbance is delayed more than 14 days past previous survey date. If no active roosts are found, then no further action would be warranted. ~~If either a maternity roost or hibernacula (structures used by bats for hibernation) is present, the following mitigation measures shall be implemented:~~*

*If roosting bats are found, exclusion shall be conducted by the qualified biologist in coordination with CDFW. Exclusion and bat habitat removal shall not occur during the breeding season in order to minimize disturbance to, or abandonment of, young bats. Methods may include acoustic monitoring, evening emergence*



surveys, and the utilization of two-step tree removal supervised by the qualified biologist. Two-step tree removal involves removal of all branches that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree. Building exclusion methods may include such techniques as installation of passive one-way doors, or the installation of netting when the bats are not present to prevent their reoccupation. Once the bats have been excluded, tree or building removal may occur.

- ~~4.6-4(b) — If active maternity roosts or hibernacula are found in trees or structures which will be removed as part of project construction, the project shall be redesigned to avoid the loss of the tree or structure occupied by the roost to the extent feasible as determined by the City. If an active maternity roost is located and the project cannot be redesigned to avoid removal of the occupied tree or structure, demolition shall commence before maternity colonies form (i.e., prior to March 1) or after young are volant (flying) (i.e., after July 31). Disturbance-free buffer zones, as determined by a qualified biologist in coordination with CDFG, shall be observed during the maternity roost season (March 1 – July 31).~~
- ~~4.6-4(c) — If a non-breeding bat hibernacula is found in a tree or structure scheduled for removal, the individuals shall be safely evicted, under the direction of a qualified biologist (as determined by a Memorandum of Understanding with CDFG), by opening the roosting area to allow airflow through the cavity. Demolition shall then follow at least one night after initial disturbance for airflow. This action should allow bats to leave during darkness, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. Trees or structures with roosts that need to be removed shall first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours.~~
- ~~4.6-4(d) — If special status bats are found roosting within trees or structures on-site that require removal, appropriate replacement roosts shall be created at a suitable location on site or off site in coordination with a qualified biologist, CDFG, and the City.~~

New Mitigation Measure(s)

None required.



**4.3-12 Have a substantial adverse effect, either directly or through habitat modifications, on American badger. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts to American badger under Impact 4.6-1 and concluded that a significant impact could occur. As discussed therein, suitable foraging habitat was located on-site, and the ground squirrel colonies located on-site and adjacent to the project site formed a large prey base. The 2009 EIR found that if individual American badgers were located on-site during construction activities, the species could be injured or killed. In order to address the potential impact, the 2009 EIR required Mitigation Measures 4.6-1(a) through 4.6-1(d), which necessitated preconstruction surveys and also included den excavation, blocking, and animal-relocation procedures, as well as requiring a worker-awareness program if the species was actively using the project site. The 2009 EIR determined that a less-than-significant impact would occur with implementation of the foregoing requirements.

The currently proposed project could result in the loss of 25.5 total acres of on-site ruderal areas and off-site California Annual Grassland Alliance land cover, both of which represent potential habitat for American badger. It should be noted that because the Wildhorse Ranch Project did not include installation of an off-site sewer line through the Wildhorse Agricultural Buffer, the currently proposed project includes a greater amount of potential habitat. Similar to the 2009 EIR, if the species is present during project construction, individuals could be directly impacted.

Based on the above, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on American badger, beyond what were previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

The 2009 EIR required Mitigation Measures 4.6-1(a) through 4.6-1(d) to reduce potential impacts to American badger. The proposed project would be subject to the most up-to-date provisions to protect American badgers, as established in the BRA prepared for the currently proposed project. Thus, Mitigation Measures 4.6-1(a) through 4.6-1(d) from the 2009 EIR are modified, as applicable, and included under the Modified Mitigation Measure(s) subheading below.

Modified Mitigation Measure(s)

Modifications to Mitigation Measures 4.6-1(a) through 4.6-1(d) from the 2009 EIR are shown in ~~strike-through~~ and double-underline below. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.



- 4.6-1(a) *A Within 48 hours prior to the commencement of construction activities, a qualified biologist shall conduct pre-construction surveys for American badger in all construction areas identified as potential habitat located within the project area two weeks prior to initiation of construction activities. If American badger is not found, further mitigation shall not be required. If an American badger or active burrow, indicated by the presence of badger sign (i.e. suitable shape and burrow-size, scat) is found within the construction area during pre-construction surveys, the CDFG shall be consulted to obtain permission for animal relocation. A report summarizing the results of the preconstruction survey shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department.*
- ~~4.6-1(b) *If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction.*~~
- 4.6-1(eb) *If the qualified biologist determines that potential dens may be active, the entrances of the dens shall be blocked with soil, sticks, and debris for three to five days to discourage use of these dens prior to project disturbance. The den entrances shall be blocked to an incrementally greater degree over the three to five day period. After the qualified biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.*
- 4.6-1(dc) *If badger are determined to be actively using the site, a qualified biologist shall provide project contractors and construction crews responsible for site demolition and/or grading operations with a worker-awareness program before any ground disturbance work within the project area. This program shall be used to describe the species, its habits and habitats, its legal status and required protection, and all applicable mitigation measures.*

New Mitigation Measure(s)

*None required.*

**4.3-13 Have a substantial adverse effect on any riparian habitat or other Sensitive Natural Community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**



The 2009 EIR determined on pages 4.6-7 and 4.6-8 that Sensitive Natural Communities are not present within or adjacent to the project site. The project site was subject to mass disturbance that precluded any native vegetation communities, and site conditions did not include water ponding or seasonal flooding that could result in wetlands or watercourses to support a Sensitive Natural Community. Therefore, the 2009 EIR concluded that adverse effects on riparian habitat or other Sensitive Natural Communities would not occur.

Riparian habitat does not occur within the current project site boundaries, similar to the conclusions of the 2009 EIR. The current study area contains a portion of the Wildhorse Agricultural Buffer, where the off-site sewer line extension would be located (which was not included as part of the Wildhorse Ranch Project). This portion of the agricultural buffer includes a wooden plank bridge that crosses the off-site Channel A as part of the walking trail within the Wildhorse Agricultural Buffer. Riparian vegetation occurs at the bridge crossing within the 0.04-acre of Mixed Willow Alliance land cover and is dominated by Goodding's black willow, along with Fremont cottonwood and California wild grape (see Figure 4.3-2). In addition, the Mixed Willow Alliance land cover is included by the Yolo HCP/NCCP as part of the Valley Foothill Riparian Natural Community. However, according to the BRA, the proposed project would not result in disturbances to the riparian vegetation within the study area, as the proposed project would use jack-and-bore construction methods as part of installation of the off-site sewer line crossing underneath Channel A and the adjacent riparian zone. It should be noted that the jack and bore process is sometimes associated with an accidental release of drilling mud through a process known as a frac-out. Frac-out occurs during drilling operations and involves the inadvertent release of drilling fluids or slurry into materials other than the intended entry and exit points. According to the BRA, the injection of drilling mud would not be necessary during the jack-and-bore activities due to the alluvial soil types present. Therefore, the proposed project would not include risk of frac-out associated with boring activities.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect on riparian habitat identified in local or regional plans, policies, regulations or by the CDFW or USFWS, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*



**4.3-14 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. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions.

The 2009 EIR concluded on pages 4.6-7 and 4.6-8 that the project site did not include aquatic habitats, and thus, potential impacts to State- or federally protected wetlands were not identified. As discussed therein, the project site included three soil units: Sycamore silt loam, drained; Sycamore silty clay loam, drained; and Tyndall very fine sandy loam, drained. The foregoing soils consist of somewhat poorly drained silty clay loams and fine sandy loams formed on alluvial fans. Where relatively undisturbed, but even where cultivated, such soils can support seasonal wetlands where poor drainage allows water to pond on the surface. However, such conditions did not appear present on-site.

The currently proposed project includes a total of 0.052-acre of aquatic resources mapped within the study area associated with the off-site Channel A, which is an increase in aquatic resources within the study area, as the proposed off-site sewer line extension was not included as part of the Wildhorse Ranch Project. Channel A ultimately flows into the Yolo Bypass and Sacramento River. As previously discussed, the portion of Channel A that runs through the northern portion study area outside of the project site boundaries would not be impacted by the proposed project during installation of the off-site sewer line necessary to establish sewer service for the proposed project, as the sewer line crossing of Channel A would be completed through a jack-and-bore process.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect on State- or federally protected wetlands through direct removal, filling, hydrological interruption, or other means, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*





New Mitigation Measure(s)

*None required.*

**4.3-15 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. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. Fragmentation also occurs when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance, such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thereby reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The 2009 EIR did not identify potential impacts related to wildlife migratory corridors or use of the project site as a wildlife nursery site. As detailed on page 4.6-31 of the EIR, although the project site is adjacent to a section of the Wildhorse Agricultural Buffer, which provides relatively high-quality wildlife habitat that could use the open nature of the project site for foraging opportunities, the 2009 EIR ultimately determined that because the site is located adjacent to dense urban development, the site was unlikely to offer a corridor of movement between areas of suitable habitat for terrestrial species. In addition, because aquatic features were not present on-site, the 2009 EIR found that a potential impact to movement corridors for aquatic species would not occur.

The project site continues to be located adjacent to existing residential development to the north and west, and East Covell Boulevard to the south, which precludes use of the site as a migratory corridor for terrestrial species. In addition, due to the regularly disturbed nature of the project site’s ruderal areas, which encompass the majority of the site, the site does not serve as a wildlife nursery site.

The Wildhorse Agricultural Buffer is used as a movement corridor by wildlife species for north-south movement through the area. The currently proposed project would include installation of an obstacle course within a narrow portion of the 135-foot-wide Wildhorse Agricultural Buffer adjacent to the project site’s eastern boundary in the southernmost portion of the buffer, near the proposed USA Pentathlon Training Facility



and pool complex, as well as near East Covell Boulevard. The obstacle course would encroach into the movement corridor within the Wildhorse Agricultural Buffer; however, the obstacle course would be located between the western fence line associated with the proposed project and the existing gravel path. Although the obstacle course would be constructed within the Wildhorse Agricultural Buffer, adequate space would still exist for wildlife species to move through the corridor. Furthermore, the Wildhorse Agricultural Buffer is wider near the location of the proposed obstacle course due to existing configuration of the East Covell Boulevard undercrossing.

In addition, the proposed project would require a crossing of Channel A as part of installation of the off-site sewer line; however, the channel does not include flowing water year-round. Thus, use of Channel A as a migratory corridor for aquatic species is limited. In addition, the off-site sewer line would be installed below the existing gravel path, thereby ensuring any interference would not be substantial and removal of existing vegetation within the buffer would not be necessary for sewer line construction. As such, while the proposed sewer line and obstacle course improvements could interfere with wildlife movement through the Wildhorse Agricultural Buffer, it is reasonable to conclude that the interference would not be considered substantial, which is the significance threshold for this impact, pursuant to Appendix G of the CEQA Guidelines.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**4.3-16 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts related to tree removal under Impact 4.6-7 and concluded that a significant could occur. As discussed therein, the tree appraisal



of the site identified 51 trees of significance, 31 of which received a fair to good health rating; all others were rated in fair or poor health. In addition, 17 trees were considered unsuitable for preservation. Depending on the final site plan and extent of grading activities associated with the Wildhorse Ranch Project, tree removal could result in a significant impact. Therefore, the 2009 EIR required Mitigation Measures 4.6-7(a) through 4.6-7(c). Mitigation Measure 4.6-7(a) required preparation of a tree preservation plan to ensure compliance with various measures required by the City of Davis Tree Ordinance. Mitigation Measure 4.6-7(b) required preparation of a tree report, including descriptions of trees, protection procedures for preserved trees, and an explanation of tree care practices. Mitigation Measure 4.6-7(c) required tree replacement and replanting procedures, including payment to the City's Tree Preservation Fund. With implementation of the foregoing requirements, the 2009 EIR determined a less-than-significant impact would occur.

The currently proposed project, as detailed in the Arborist Survey Report conducted as part of the BRA (see Attachment G to the BRA), includes a total of 128 protected trees of significance in the study area. It should be noted that the current study area includes the off-site portion of the Wildhorse Agricultural Buffer to accommodate the sewer line extension included as part of the currently proposed project, which contains a large number of trees. The protected trees are comprised of three trees within the obstacle course area, 29 City trees along the public trail in the Wildhorse Agricultural Buffer, 30 street trees along either side of East Covell Boulevard, and 66 additional trees, which are shown in Figure 4.3-7 and summarized in Table 4.3-4. It should be noted that the walnut trees along East Covell Boulevard are in poor health.

Of the total number of trees within the study area, 18 are in "poor to dead" condition and recommended for removal. The remaining 110 trees are in "fair or better" condition and could be protected under the City's Tree Ordinance, thus, requiring a tree removal permit. Project construction is anticipated to require removal of 62 of the 110 potentially protected trees. Additionally, indirect effects from construction could occur to any trees that are avoided. The indirect effects could include compaction from adjacent construction, altered hydrology, or exposure to fungi or other pathogens. Therefore, the currently proposed project would be subject to Mitigation Measures 4.6-7(a) through 4.6-7(c) of the 2009 EIR to ensure the project complies with the provisions of Davis Municipal Code Chapter 37.

Based on the above, because the mitigation measures from the 2009 EIR would still apply to address tree removal within the current study area, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

#### Modified Mitigation Measure(s)

The following mitigation measures from the 2009 EIR have been modified to reflect the current City departments and/or officials that would be responsible for ensuring



satisfactory completion of the various requirements established therein. Modifications are shown in ~~striketrough~~ and double-underline. Implementation of the following modified mitigation measures from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

4.6-7(a) *Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, a tree preservation plan, in compliance with Ordinance 37.03.010 in the City of Davis Municipal Code, shall be submitted to the Community Development Department and ~~City Arborist~~ Public Works Department for review and approval, which shall ensure the following measures:*

- *Trees shall be cordoned off with chain link fence prior to construction as specified;*
- *Soil compaction under trees is to be avoided;*
- *The fence shall prevent equipment traffic and storage under the trees and should extend beyond the drip-line;*
- *Excavation within this zone shall be accomplished by hand, and roots ½" and larger shall be preserved;*
- *Proper fertilization and irrigation prior to and during the construction period shall be provided as specified;*
- *New landscaping under existing trees shall be carefully planned to avoid any grade changes and any excess moisture in trunk area. Existing plants which have compatible irrigation requirements and which complement the trees' color, texture and form are to be saved;*
- *Trenching within the drip-line shall be performed only with prior approval of the Park and General Services Department. Boring is preferred when feasible;*
- *All paving plans and specifications shall clearly prohibit the use of soil sterilants adjacent to preserved trees; and*
- *Grade changes greater than one foot within the drip-line shall be avoided, and nothing other than a saw shall be used for root cutting.*

4.6-7(b) *Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, a ~~sheet~~ page shall be included with the project plans, which indicates all of the trees identified. The tree report with corresponding descriptions of each tree by species, health, etc. should also be included. In addition, notes shall be included on the plans which clearly state protection procedures for trees that are to be preserved. Any tree care practices, such as cutting of roots, pruning the top, etc., shall be adequately described and shall have the approval of a representative of the ~~Parks and General Services~~ Public Works Utilities and Operations Department prior to execution. In the event of damage to existing trees, a penalty clause shall be replacement tree(s) of equal size in D.B.H.*



unless specified otherwise by the Parks and General Services Department.

4.6-7(c)

Trees identified on the site as Trees of Significance, that are proposed for removal, shall be replaced either on site or at a nearby site deemed acceptable by the Public Works Director of the City of Davis Parks and General Services Department. The Director may require an in-lieu fee to be paid to the City of Davis Tree Preservation Fund instead of or in addition to tree replacement. The recommendations for avoidance of trees contained in Chapter 37 of the City of Davis Municipal Code (Tree Planting, Preservation, and Protection) should be adopted if feasible. If infeasible, the applicant should identify trees slated for removal on the site plan, including those with encroachments within 30-feet of the drip line of trees and develop a tree replacement plan that shall be reviewed and approved by the City prior to issuance of the grading permit. Tree replacement shall be implemented according to options outlined in Section 37.03.070 of the City's Municipal Code as follows:

- (i) *Replanting a tree(s) on site: Trees shall be planted in number and size so that there is no net loss in tree diameter at breast height (DBH). For example, if one tree is removed with a 12-inch DBH size, mitigation may consist of a replacement of equal size, two trees each 6-inch DBH, or four trees each 3-inch DBH. The replanted tree(s) shall be minimum 5 gallon size and of a species that will eventually equal or exceed the removed tree in size.*
- (ii) *Replanting a tree(s) off site: If there is insufficient space on the property for the replacement tree(s), required planting shall occur on other property in the applicant's ownership or in City-owned open space or park, subject to the approval of the City Arborist and authorized property owners.*
- (iii) *Payment to the Tree Preservation Fund in lieu of replacement: If in the City Arborist's determination no feasible alternative exists to plant the required mitigation, or there are other considerations for alternative mitigation, the applicant shall pay into the Tree Preservation Fund an amount determined by the Director based upon the ISA appraisal guidelines or other approved method. If the Director approves another method of appraisal guideline, the Director shall publish notice of that approval and notify the permit applicant at the time the permit application is issued.*

New Mitigation Measure(s)

None required.





**4.3-17 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The Yolo HCP/NCCP was adopted after the 2009 EIR was certified, and thus, was not included as part of the 2009 evaluation.

Applicants of development projects within the Yolo HCP/NCCP permit area are required to complete a Yolo HCP/NCCP application package, which includes an application form, a project description, land cover mapping and planning-level surveys, verification of land cover impacts, an AMM plan, and fees or equivalent mitigation. Land cover conversion fees, in effect at time of payment, would be applied for the proposed project's land cover impacts, in accordance with Yolo HCP/NCCP guidelines.

In addition, pursuant to Yolo HCP/NCCP Chapter 4, the Yolo HCP/NCCP AMMs are intended to ensure that adverse effects on Covered Species and natural communities are avoided and minimized. As previously discussed in this chapter in the species-specific analyses of potential impacts that could occur to Yolo HCP/NCCP Covered Species, the proposed project would be subject to the applicable Yolo HCP/NCCP AMMs. However, without compliance with the aforementioned provisions of the Yolo HCP/NCCP, the project would result in a significant impact.

Based on the above, without compliance with all applicable AMMs set forth by the Yolo HCP/NCCP, the currently proposed project could result in a new significant impact or substantially more severe significant impact related to conflicts with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

*SEIR 4.3-17(a) Yolo HCP/NCCP AMM3: Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the*





project site to established roadways and driveways to minimize natural community and covered species habitat disturbance. The project proponent will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction vehicles, other equipment, and personnel will avoid these designated areas.

- SEIR 4.3-17(b) Yolo HCP/NCCP AMM4: To prevent injury and mortality of giant garter snake, western pond turtle, and California tiger salamander, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.
- SEIR 4.3-17(c) Yolo HCP/NCCP AMM5: Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.
- SEIR 4.3-17(d) Yolo HCP/NCCP AMM6: All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.
- SEIR 4.3-17(e) Yolo HCP/NCCP AMM7: Workers will direct all lights for nighttime lighting of project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the project construction area.
- SEIR 4.3-17(f) Yolo HCP/NCCP AMM8: Project proponents should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support habitat for covered species or are easily restored to prior or improved ecological functions (e.g., grassland and agricultural land). Construction staging and other temporary work areas located outside of project footprints will be sited in areas that avoid adverse effects on the following:



- *Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types.*
- *Occupied western burrowing owl burrows.*
- *Nest sites for covered bird species and all raptors, including noncovered raptors, during the breeding season.*

*Project proponents will follow specific AMMs for sensitive natural communities (Section 4.3.3, Sensitive Natural Communities) and covered species (Section 4.3.4, Covered Species) in temporary staging and work areas. For establishment of temporary work areas outside of the project footprint, project proponents will conduct surveys to determine if any of the biological resources listed above are present. Within one year following removal of land cover, project proponents will restore temporary work and staging areas to a condition equal to or greater than the covered species habitat function of the affected habitat. Restoration of vegetation in temporary work and staging areas will use clean, native seed mixes approved by the Conservancy that are free of noxious plant species seeds.*

*SEIR 4.3-17(g) To ensure avoidance and minimization of impacts to the species covered by the Yolo HCP/NCCP, which could be impacted by the project, the project applicant shall obtain coverage under the Yolo HCP/NCCP for on-site, and as may be determined necessary by Yolo Habitat Conservancy, for off-site infrastructure work, for each phase of development. In addition to payment of any applicable HCP/NCCP fees, the applicant shall implement Yolo HCP/NCCP Avoidance and Minimization Measures identified in Mitigation Measures SEIR 4.3-3, SEIR 4.3-5, SEIR 4.3-6, SEIR 4.3-7, 4.6-2, 4.6-5, and SEIR 4.3-17(a) through SEIR 4.3-17(f).*

### **Cumulative Impacts and Mitigation Measures**

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The geographic scope for the cumulative biological resources analysis generally includes buildout of the proposed project in conjunction with the development of the Davis General Plan planning area, as well as a list of present and probable future projects. For more details regarding the cumulative setting, refer to Chapter 5, Statutorily Required Sections, of this SEIR.



**4.3-18 Cumulative loss of habitat for special-status species. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR concluded that, while additional impacts may result from the development of individual projects within the City and surrounding areas, impacts to biological resources related to future growth and the ongoing urbanization of the area would be mitigated to a less-than-significant level by mitigation measures required of the future developments, such as the mitigation measures included in the 2009 EIR. In addition, the 2009 EIR concluded that the policies and guidelines established by the City of Davis and the, at the time, impending Yolo HCP/NCCP (once adopted) would further reduce cumulative impacts.

The cumulative analysis in this EIR is based upon development of the proposed project in conjunction with buildout of the Davis General Plan planning area, as well as a list of present and probable future projects. In addition to the proposed project, Shriner's Property, a 234-acre residential subdivision project located east of the proposed project, across the Wildhorse Agricultural Buffer and outside of the City limits, is currently under review by the City. The Village Farms Davis Project, a mixed-use neighborhood development including single- and multi-family residential villages on 497.6-acre project site north of East Covell Boulevard and west of Pole Line Road, is also under review by the City.

Other development projects undergoing planning review are located in the southern portion of the City, including two new multi-family residential apartment buildings, a new commercial hotel building, and a 700-unit residential neighborhood located on the 46.9-acre site formerly known as the Nishi Housing Site. The Bretton Woods University Retirement Community project, located northwest of the West Covell Boulevard/Risling Place intersection, is currently under construction. Finally, though rejected by the voters, the City of Davis previously approved the Davis Innovation and Sustainability Campus (DiSC) 2022 Project, which was proposed for a 102-acre site (plus the 16.5-acre Mace Triangle property) located immediately to the east of Mace Boulevard and to the north of CR 32A, northeast of the City limits. Buildout of the proposed project, in combination with the foregoing development projects and other development within the City of Davis, would result in a significant cumulative impact related to the loss of special-status species habitat.

The study area is comprised of a variety of Yolo HCP/NCCP land covers, including Bulrush-Cattail Freshwater Marsh Alliance, Mixed Willow Alliance, Urban, Urban Ruderal with Covered Species Habitat, Vegetated Corridor, and California Annual Grassland Alliance land covers. In addition, the study area includes an intermittent drainage known as Channel A. As discussed throughout this chapter, the foregoing areas represent potential habitat for various special-status species listed in Table 4.3-3.

This chapter provides a wide range of mitigation to minimize potential adverse effects associated with the proposed project to habitat for special-status species. For



example, mitigation measures have been set forth in this chapter to ensure that the proposed project complies with all applicable Yolo HCP/NCCP AMMs, including, but not limited to, AMMs to address potential impacts to Yolo HCP/NCCP Covered Species, such as VELB, northwestern pond turtle, giant garter snake, tricolored blackbird, burrowing owl, Swainson's hawk, and white-tailed kite, as well as general construction, operations, and maintenance AMMs. In addition, the proposed project would be required to pay land cover conversion fees to with the Yolo Habitat Conservancy, which are anticipated to total an estimated \$414,771.20 and would further reduce any potential impacts to biological resources.

With respect to special-status species that are not covered under the Yolo HCP/NCCP, such as bristly sedge, San Joaquin spearscale, monarch butterfly, northern harrier, western red bat, hoary bat, pallid bat, and American badger, this chapter sets forth mitigation to ensure that potential impacts are reduced to a less-than-significant level. For example, preconstruction plant and wildlife surveys would be conducted, non-disturbance buffers maintained, and all applicable permits, such as a tree removal permit, would be acquired. In addition, it should be noted that while the proposed project would result in the loss of a portion of the existing on-site habitat, the project would include a total of 2.76 acres of open space preserved on-site and 0.46-acre of trails.

Overall, with incorporation of the mitigation measures set forth herein, the proposed project would be required to comply with all applicable Yolo HCP/NCCP AMMs and pay all applicable land cover conversion fees to address Covered Activities within the study area. The mitigation measures set forth herein additionally address potential impacts to biological resources that are not covered under the Yolo HCP/NCCP. As such, the proposed project would not result in a substantial adverse effect to biological resources protected by CEQA.

Additionally, the Yolo HCP/NCCP requires the Yolo Habitat Conservancy to protect approximately 33,300 acres over 50 years, primarily through the acquisition of habitat conservation easements on agricultural land funded with development fees paid by project proponents. The Yolo HCP/NCCP coordinates conservation efforts to ensure that the lands are selected consistent with a conservation strategy based on biological criteria, including the selection of lands that provide habitat to multiple species and are located near existing protected lands and riparian areas. The Yolo Habitat Conservancy regularly consults with the CDFW and the USFWS to ensure that the Yolo HCP/NCCP is successfully and sustainably implemented. As such, the Yolo HCP/NCCP functions as the regional strategy for preserving natural habitat, and compliance with the Yolo HCP/NCCP would prevent cumulative impacts. It should be noted that projects within the City limits, including project associated with buildout of the Davis General Plan planning area, as well as the list of present and probable future projects, would all be required to comply with the Yolo HCP/NCCP.

Based on the above, although cumulative buildout of the City of Davis would result in a significant cumulative impact related to the loss of special-status species habitat, the currently proposed project's contribution to the significant impact, through incorporation of the mitigation measures set forth herein, would not result in a new significant impact or substantially more severe significant impact related to the



cumulative loss of special-status species habitat beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*



---

---

## **4.4 NOISE**

---

---



## 4.4 NOISE

### 4.4.1 INTRODUCTION

Pursuant to CEQA Guidelines Section 15162, the Noise chapter of the Subsequent Environmental Impact Report (SEIR) assesses whether the proposed project would result in a new significant impact not previously identified in the Wildhorse Ranch Project EIR (2009 EIR) or a substantial increase in the severity of a significant impact previously identified in the 2009 EIR. The City of Davis has prepared the SEIR to analyze new or substantially more severe potential adverse effects that could occur as a result of the changes from the former Wildhorse Ranch Project to the currently proposed project. For further details related to the proposed project, refer to Chapter 3, Project Description, of this SEIR.

This chapter of the SEIR describes the existing noise environment in the project vicinity, and identifies potential impacts and mitigation measures related to noise and vibration associated with construction and operation of the proposed project. The method by which the potential impacts are analyzed is discussed, followed by the identification of potential impacts and the recommended mitigation measures designed to reduce significant noise and vibration impacts to less-than-significant levels, if required. The Noise chapter is primarily based on the Environmental Noise & Vibration Assessment (Noise Assessment) prepared for the proposed project by Bollard Acoustical Consultants, Inc. (BAC) (see Appendix E of this SEIR).<sup>1</sup> Other sources of information used in this chapter include the City of Davis General Plan,<sup>2</sup> the City of Davis General Plan EIR,<sup>3</sup> and the 2009 EIR.

### 4.4.2 EXISTING ENVIRONMENTAL SETTING

The Existing Environmental Setting section provides background information on noise and vibration, a discussion of acoustical terminology and the effects of noise on people, existing sensitive receptors in the project vicinity, existing sources and noise levels in the project vicinity, and groundborne vibration.

#### **Fundamentals of Noise**

Decibels (dB) are logarithmic units that compare the wide range of sound intensities to which the human ear is sensitive. The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the typical range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by filtering the frequency response of a sound level meter by means of the standardized A-weighting network. A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and the use of A-weighted sound level, expressed as dBA, has become the standard tool of environmental noise assessment. Noise levels associated with common noise sources are provided in Figure 4.4-1.

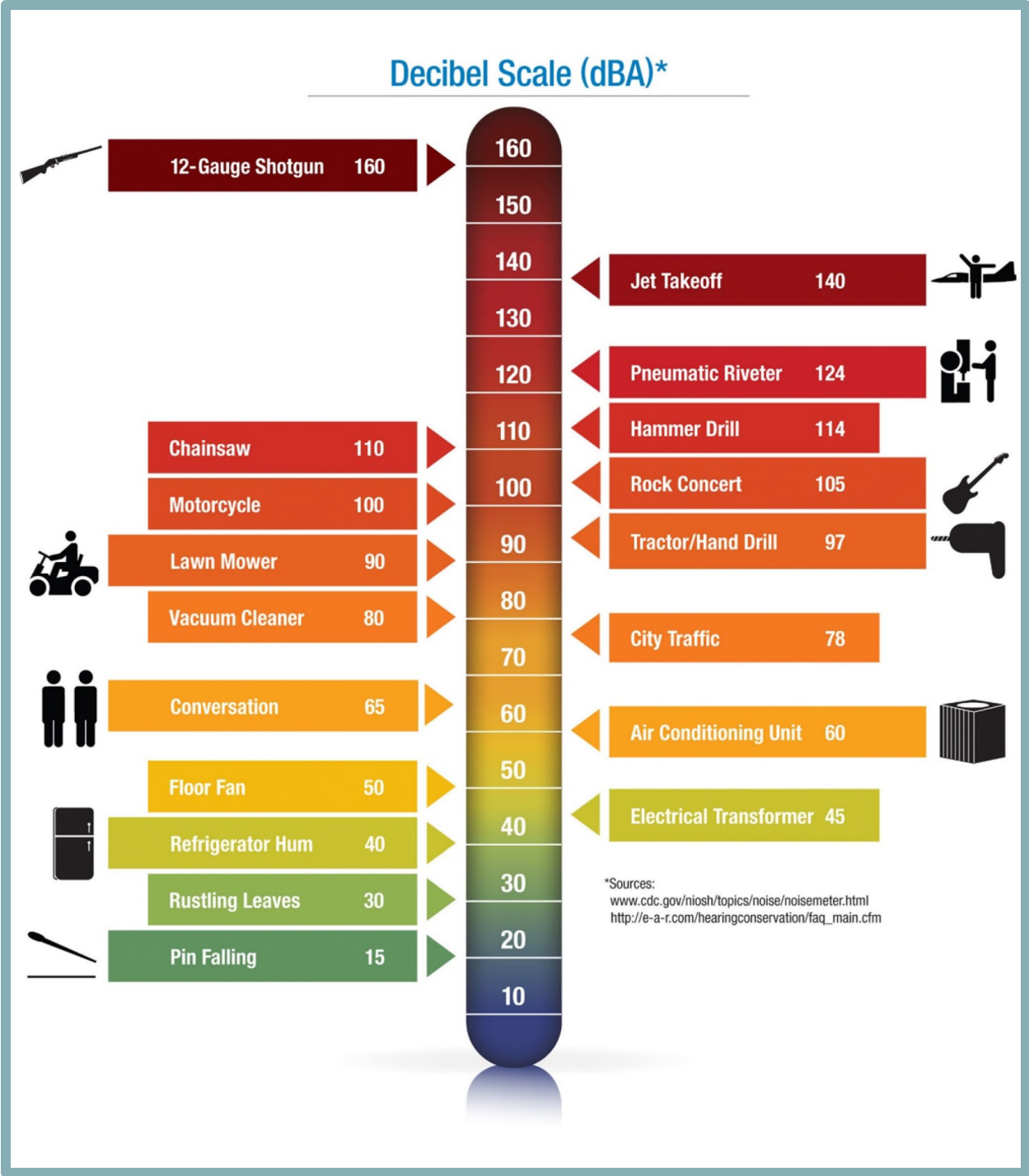
<sup>1</sup> Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment, Palomino Place Project, Davis, California*. July 26, 2024.

<sup>2</sup> City of Davis. *City of Davis General Plan*. Adopted May 2001, Amended January 2007.

<sup>3</sup> City of Davis. *Final Program EIR for the City of Davis General Plan Update and Final Project EIR for Establishment of a New Junior High School*. Certified May 2001.



**Figure 4.4-1  
 Noise Levels Associated with Common Noise Sources**



Source: *Bollard Acoustical Consultants, Inc., 2024.*



Several time-averaged scales represent noise environments and consequences of human activities. Community Noise Equivalent Level (CNEL), which can be used to compare the noise level of neighborhoods, is the weighted average noise level over time, presented in dB. Community noise is also commonly described in terms of the ambient noise level, which is defined as the overall noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level ( $L_{eq}$ ). The  $L_{eq}$  is the foundation of the day-night average noise descriptor ( $L_{dn}$  or DNL), and represents a correlation with community response to noise. DNL is based on the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime hours (10:00 PM to 7:00 AM). The nighttime penalty is based on the assumption that people experience nighttime noise exposures twice as loudly as daytime noise exposures. Because DNL represents a 24-hour average, the DNL tends to disguise short-term variations in the noise environment.  $L_{50}$  is defined as the median sound level.

The City's General Plan relies on DNL for the assessment of noise generated by traffic noise sources. For non-transportation noise sources, the Davis Municipal Code relies on both  $L_{eq}$  and single-event maximum ( $L_{max}$ ) noise standards.

Stationary "point" sources of noise, including stationary mobile sources such as idling vehicles, attenuate at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source, depending upon environmental conditions (i.e., atmospheric conditions and noise barriers, either vegetative or manufactured, etc.). Widely distributed noises, such as a large industrial facility, that spread over many acres or a street with moving vehicles (a "line" or "moving point" source) typically attenuate at a lower rate, approximately 4.0 to 6.0 dBA per doubling distance from the source and are also dependent on environmental conditions. Noise from large construction sites, with heavy equipment moving dirt and trucks entering and exiting the site daily, have characteristics of both "point" and "line" sources, so attenuation generally ranges between 4.5 and 7.5 dBA per doubling of distance. Atmospheric absorption of sound varies depending on temperature and relative humidity, as well as the frequency content of the noise source. In general, "average day" atmospheric conditions result in attenuation at a rate of approximately 1.5 dB per 1,000 feet.

### **Existing Sensitive Receptors**

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise, because intrusive noise can be disruptive to such activities. Sensitivity to ambient noise levels is also related to the amount of noise exposure (in terms of both exposure time and shielding from noise sources). Noise-sensitive land uses typically include residences, schools, child care centers, hospitals, long-term health care facilities, convalescent centers, retirement homes, and recreation areas.

The nearest sensitive receptors to the project site consist primarily of residential uses to the north, west, and south, as shown in Figure 4.4-2. Existing land uses in the vicinity of the project site and sensitive receptors have not changed since the City's certification of the 2009 EIR.





**Figure 4.4-2  
Ambient Noise and Vibration Survey Locations**



### **Existing Ambient Noise Environment**

Similar to the existing ambient noise environment identified in the 2009 EIR, the ambient noise environment in the immediate project vicinity is defined primarily by traffic on East Covell Boulevard. Additionally, to a lesser extent, traffic on neighborhood streets and intermittent agricultural activities on the farmland to the east of the project site contribute to the existing ambient noise environment.

To quantify existing ambient noise levels within the project area, BAC conducted long-term (continuous) ambient noise-level measurements at three locations within the project site from September 7 to 11, 2022. The equipment and approach used to evaluate existing noise levels are discussed in the Method of Analysis section of this chapter. The long-term noise survey locations are shown on Figure 4.4-2. The results of the long-term ambient noise survey are summarized below in Table 4.4-1.

Survey Location <sup>2</sup>	Date	DNL	Average Measured Hourly Noise Levels (dBA) <sup>3</sup>			
			Daytime		Nighttime	
			L <sub>max</sub>	L <sub>50</sub>	L <sub>max</sub>	L <sub>50</sub>
1	9/7/2022	59	72	54	71	43
	9/8/2022	59	73	53	70	43
	9/9/2022	59	75	54	70	44
	9/10/2022	59	74	54	69	43
	9/11/2022	57	75	52	66	38
	<b>Average</b>	<b>58</b>	<b>74</b>	<b>53</b>	<b>69</b>	<b>42</b>
2	9/7/2022	48	55	42	53	39
	9/8/2022	57	58	40	54	40
	9/9/2022	49	59	40	54	40
	9/10/2022	50	63	44	55	41
	9/11/2022	47	56	39	53	37
	<b>Average</b>	<b>50</b>	<b>58</b>	<b>41</b>	<b>54</b>	<b>39</b>
3	9/7/2022	50	56	45	53	41
	9/8/2022	49	55	41	54	41
	9/9/2022	50	59	39	57	41
	9/10/2022	51	60	47	56	43
	9/11/2022	47	58	39	52	39
	<b>Average</b>	<b>49</b>	<b>58</b>	<b>42</b>	<b>54</b>	<b>41</b>

<sup>1</sup> Detailed summaries of the noise monitoring results are provided in Appendices C and D of the Noise Assessment.  
<sup>2</sup> Long-term ambient noise monitoring locations are identified in Figure 4.4-2.  
<sup>3</sup> Daytime hours: 7:00 AM to 10:00 PM | Nighttime hours: 10:00 PM to 7:00 AM.

**Source: Bollard Acoustical Consultants, Inc., 2024.**

As shown above in the table, DNL, L<sub>50</sub>, and L<sub>max</sub> noise levels were generally consistent at each individual survey site throughout the monitoring period, with the values at each site fluctuating over a small range during the five days.

The 2009 EIR conducted a continuous ambient noise survey at one location in the central portion of the project site. As shown in Table 4.5-2 of the 2009 EIR, over a period of five days, the continuous DNL noise levels ranged from 51 to 52 dB. The continuous L<sub>max</sub> noise levels ranged





from 73 dB to 81 dB during daytime hours (7:00 AM to 10:00 PM) and from 62 dB to 70 dB during nighttime hours (10:00 PM to 7:00 AM). As such, the existing ambient noise environment at the project site is generally similar to noise levels measured within the site as part of the 2009 EIR.

### **Existing Traffic Noise Levels**

The Federal Highway Administration (FHWA) Traffic Noise Model (FHWA-RD-77-108) was used to develop existing noise contours, expressed in DNL, for major roadways within the project vicinity. The approach used to evaluate existing traffic noise levels is discussed in the Method of Analysis section of this chapter. The traffic noise level at the nearest sensitive receptor and distances from the centerlines of the selected roadways to the 60 dB DNL, 65 dB DNL, and 70 dB DNL noise contours are summarized below in Table 4.4-2.

#	Roadway	Segment	DNL at Nearest Sensitive Receptor	Distance to Contour (feet)		
				70 dB DNL	65 dB DNL	60 dB DNL
1	West Covell Boulevard	West of F Street	67	42	90	194
2	East Covell Boulevard	F Street to J Street	67	47	101	219
3	East Covell Boulevard	J Street to L Street	63	45	98	211
4	East Covell Boulevard	L Street to Pole Line Road	65	44	95	205
5	East Covell Boulevard	Pole Line Road to Birch Lane	60	18	39	85
6	East Covell Boulevard	East of Birch Lane	64	35	76	163
7	East Covell Boulevard	West of Wright Boulevard	60	16	34	73
8	East Covell Boulevard	Wright Boulevard to Monarch Lane	60	16	35	74
9	East Covell Boulevard	Monarch Lane to Alhambra Drive	62	19	42	89
10	East Covell Boulevard	Alhambra Drive to Harper Junior High School	60	17	37	81
11	Mace Boulevard	Harper Junior High School to Alhambra Drive	61	38	83	179
12	Mace Boulevard	Alhambra Drive to 2 <sup>nd</sup> Street	64	46	99	214
13	Mace Boulevard	2 <sup>nd</sup> Street to Chiles Road	66	51	110	236
14	Mace Boulevard	Chiles Road to Cowell Boulevard	63	33	71	152
15	Mace Boulevard	South of Cowell Boulevard	63	22	47	102
16	F Street	North of East Covell Boulevard	62	18	39	84
17	F Street	South of East Covell Boulevard	59	19	40	86

(Continues on next page)





**Table 4.4-2  
Existing Traffic Noise Modeling Results**

#	Roadway	Segment	DNL at Nearest Sensitive Receptor	Distance to Contour (feet)		
				70 dB DNL	65 dB DNL	60 dB DNL
18	Cannery Avenue	North of East Covell Boulevard	53	8	17	37
19	J Street	South of East Covell Boulevard	59	13	27	59
20	Pole Line Road	North of East Covell Boulevard	64	42	91	195
21	Pole Line Road	South of East Covell Boulevard	61	20	43	92
22	Birch Lane	South of East Covell Boulevard	57	6	12	26
23	Wright Boulevard	North of East Covell Boulevard	54	9	20	43
24	Monarch Lane	South of East Covell Boulevard	53	4	9	20
25	Alhambra Drive	South of East Covell Boulevard	54	5	10	21
26	Alhambra Drive	West of Mace Boulevard	56	6	13	29
27	County Road 32A	East of Mace Boulevard	60	22	48	104
28	2 <sup>nd</sup> Street	West of Mace Boulevard	65	30	65	141
29	Chiles Road	East of Mace Boulevard	62	27	59	127
30	Chiles Road	West of Mace Boulevard	64	38	82	177
31	Cowell Boulevard	East of Mace Boulevard	58	11	23	50
32	Cowell Boulevard	West of Mace Boulevard	60	10	22	48

Source: **Bollard Acoustical Consultants, Inc., 2024.**

As presented above in Table 4.4-2, the currently existing traffic noise levels range from 53 to 67 dB DNL at the nearest sensitive receptor to each evaluated roadway. The 2009 EIR identified existing traffic noise levels at 100 feet from the centerline of segments of the following roadways: East Covell Boulevard, Alhambra Drive, Loyola Drive, Pole Line Road, Mace Boulevard, and Monarch Lane. Pursuant to Table 4.5-4 of the 2009 EIR, the traffic noise levels along the foregoing roadways were as follows:

- East Covell Boulevard: 63 to 65 dB L<sub>dn</sub>;
- Alhambra Drive: 57 to 59 dB L<sub>dn</sub>;
- Loyola Drive: 53 to 57 dB L<sub>dn</sub>;
- Pole Line Road: 61 to 63 dB L<sub>dn</sub>;
- Mace Boulevard: 63 to 66 dB L<sub>dn</sub>; and
- Monarch Lane: 53 dB L<sub>dn</sub>.



Although existing traffic  $L_{dn}$  noise levels in the 2009 EIR were measured at 100 feet from the centerline of selected roadways (whereas the noise levels shown in Table 4.4-2 of this chapter are at the nearest receptor), as shown above, existing traffic noise levels along project vicinity roadways are generally similar to the noise levels identified in the 2009 EIR along East Covell Boulevard, Alhambra Drive, Loyola Drive, Pole Line Road, Mace Boulevard, and Monarch Lane.

### **Fundamentals of Vibration**

Vibration is similar to noise in that both involve a source, a transmission path, and a receiver. However, while noise is generally considered to be pressure waves transmitted through air, vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration depends on their individual sensitivity, as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second (in/sec) peak particle velocity (PPV) or root-mean-square (VdB, RMS). Standards pertaining to perception, as well as damage to structures, have been developed for vibration in terms of PPV and RMS velocities. In terms of RMS velocities, vibration levels below approximately 65 VdB are typically considered to be below the threshold of perception.

As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes decrease with increasing distance.

According to the California Department of Transportation (Caltrans) Transportation and Construction Vibration Guidance Manual, operation of construction equipment and construction techniques generate ground vibration. Roadway traffic can also be a source of such vibration. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage. However, traffic rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. Ground vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities.

### **Existing Ambient Vibration Environment**

During a BAC site visit conducted on September 12, 2022, vibration levels were below the threshold of perception within the project vicinity. Nonetheless, to quantify existing vibration levels in the project area, BAC conducted short-term vibration measurements at the three survey locations identified in Figure 4.4-2. The results are summarized below in Table 4.4-3 and indicate that measured average vibration levels within the project area ranged from 32 to 45 VdB, which are below the 65 VdB threshold of perception. It should be noted that the 2009 EIR did not include an analysis of potential impacts related to groundborne vibration and, therefore, did not quantify existing vibration levels in the project area.



Site <sup>1</sup>	Time	Average Measured Vibration Level, VdB
1	12:07 PM	45
2	12:35 PM	34
3	1:00 PM	32

<sup>1</sup> Vibration measurement sites are the same sites used for the ambient noise surveys are identified on Figure 4.4-2.  
**Source: Bollard Acoustical Consultants, Inc., 2024.**

### **4.4.3 REGULATORY CONTEXT**

In order to limit exposure to physically and/or psychologically damaging noise levels, the State of California, various county governments, and most municipalities in the State have established standards and ordinances to control noise. Applicable federal laws or regulations pertaining to noise or vibration that would directly apply to the proposed project do not exist. The following provides a general overview of the existing State and local regulations that are relevant to the proposed project.

#### **State Regulations**

The following are the State environmental laws and policies relevant to noise and vibration.

#### **California Building Code**

The California Building Code (Title 24, Part 2 of the California Code of Regulations [CCR]) establishes uniform minimum noise-insulation performance standards to protect persons within new buildings that house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings.

Title 24 mandates that interior noise levels attributable to exterior sources cannot exceed 45 dB L<sub>dn</sub> or CNEL in any habitable room. Title 24 also requires that for structures containing noise-sensitive uses that would be located where the L<sub>dn</sub> or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

#### **Local Regulations**

The following are the local environmental goals and policies relevant to noise and vibration.

#### **City of Davis General Plan**

The following goals and policies from the City's General Plan related to noise and vibration are applicable to the proposed project.

#### **Noise Chapter**

Goal NOISE 1 Maintain community noise levels that meet health guidelines and allow for a high quality of life.

Policy NOISE 1.1 Minimize vehicular and stationary noise sources, and noise emanating from temporary activities.



- Standard a The City shall strive to achieve the “normally acceptable” exterior noise levels shown in Table 19 (see Table 4.4-4) and the target interior noise levels in Table 20 (see Table 4.4-5) in future development areas and in currently developed areas.
- Standard b New development shall generally be allowed only in areas where exterior and interior noise levels consistent with Table 19 (see Table 4.4-4) and Table 20 (see Table 4.4-5) can be achieved.
- Standard c New development and changes in use shall generally be allowed only if they will not adversely impact attainment within the community of the exterior and interior noise standards shown in Table 19 (see Table 4.4-4) and Table 20 (see Table 4.4-5). Cumulative and project specific impacts by new development on existing residential land uses shall be mitigated consistent with the standards in Table 19 (see Table 4.4-4) and Table 20 (see Table 4.4-5).
- Standard d Required noise mitigation measures for new and existing housing shall be provided with the first stage and prior to completion of new developments or the completion of capacity-enhancing roadway changes wherever noise levels currently exceed or are projected within 5 years to exceed the normally acceptable exterior noise levels in Table 19 (see Table 4.4-4).

Policy NOISE 1.2 Discourage the use of sound walls whenever alternative mitigation measures are feasible, while also facilitating the construction of sound walls where desired by the neighborhood and there is no other way to reduce noise to acceptable exterior levels shown in Table 19 (see Table 4.4-4).

- Standard c Review sound walls and other noise mitigations through the design review process.



**Table 4.4-4  
Standards for Exterior Noise Exposure**

Use	Community Noise Exposure $L_{dn}$ or CNEL, dBA			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential	Under 60	60-70 <sup>1</sup>	70-75	Above 75
Transient Lodging – Motels, Hotels	Under 60	65-75	75-80	Above 80
Schools, Libraries, Churches, Hospitals, Nursing Homes	Under 60	60-70	70-80	Above 80
Auditoriums, Concert Halls, Amphitheaters	Under 50	50-70	N/A	Above 70
Sports Arenas, Outdoor Spectator Sports	N/A	Under 75	N/A	Above 75
Playgrounds, Neighborhood Parks	Under 70	N/A	70-75	Above 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Under 70	N/A	70-80	Above 80
Office Buildings, Business Commercial and Professional	Under 65	65-75	Above 75	N/A
Industrial, Manufacturing, Utilities, Agriculture	Under 65	70-80	Above 80	N/A

**Normally Acceptable:** Specified land use is satisfactory based upon the assumption that all buildings involved are of conventional construction, without special noise insulation requirements.

**Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is conducted, and needed noise attenuation features are included in the construction or development.

**Normally Unacceptable:** New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be conducted and needed noise attenuation features shall be included in the construction or development.

**Clearly Unacceptable:** New construction or development shall not be undertaken.

**N/A:** Not applicable.

<sup>1</sup> The City Council shall have discretion within the “conditionally acceptable” range for residential use to allow noise levels in outdoor spaces to go up to 65 dBA if cost effective or aesthetically acceptable measures are not available to reduce noise levels in outdoor spaces to the “normally acceptable” levels. Outdoor spaces which are designed for visual use only (for example, streetside landscaping in an apartment project), rather than outdoor use space, may be considered acceptable up to 70 dBA.

**Source: City of Davis General Plan, Table 19, January 2007.**





<b>Table 4.4-5 Standards for Interior Noise Levels</b>	
<b>Use</b>	<b>Noise Level (dBA)</b>
Residences, Schools Through Grade 12, Hospitals and Churches	45
Offices	55
<i>Source: City of Davis General Plan, Table 20, January 2007.</i>	

Goal NOISE 2 Provide for indoor noise environments that are conducive to living and working.

Policy NOISE 2.1 Take all technically feasible steps to ensure that interior noise levels can be maintained at the levels shown in Table 20 (see Table 4.4-5).

Standard a New residential development or construction shall include noise attenuation measures necessary to achieve acceptable interior noise levels shown in Table 20 (see Table 4.4-5).

Standard b Existing areas that will be subjected to noise levels greater than the acceptable noise levels shown in Table 20 (see Table 4.4-5) as a result of increased traffic on existing city streets (including streets remaining in existing configurations and streets being widened) shall be mitigated to the acceptable levels in Table 20 (see Table 4.4-5). If traffic increases are caused by specific projects, then the City shall be the lead agency in implementing cumulative noise mitigation projects. Project applicants shall pay their fair share for any mitigation.

### City of Davis Noise Ordinance

Davis Municipal Code establishes noise level limits that are applicable to on-site project-generated noise sources that would affect existing or proposed sensitive receptors. According to Section 24.02.020 of the Davis Municipal Code, a person shall not produce, suffer, or allow to be produced on any public or private property, sounds at a level in excess of those shown below in Table 4.4-6, when measured at a property's plane or, if on any street or highway, measured at the property plane of the nearest property.

Davis Municipal Code Section 24.02.030 prohibits the production of a noise level of more than 20 dBA above the limit provided in Table 4.4-6, but not greater than 80 dBA measured at the property plane, which constitutes an absolute noise limitation. Therefore, the City's maximum noise limit is 75 dBA  $L_{max}$  for the hours of 7:00 AM to 9:00 PM and 70 dBA  $L_{max}$  during the hours of 9:00 PM to 7:00 AM.



<b>Table 4.4-6 City of Davis Municipal Code Exterior Noise Standards</b>		
<b>Land Use</b>	<b>Time Period</b>	<b>Maximum Noise Level (dBA)</b>
Residential	9:00 PM to 7:00 AM	50
	7:00 AM to 9:00 PM	55
Commercial/Industrial/Core Commercial	10:00 PM to 7:00 AM	55
	7:00 AM to 10:00 PM	60
High Noise Traffic Corridor	Anytime	65

*Source: Davis Municipal Code, 2024.*

Additionally, Davis Municipal Code Section 24.02.040 contains special provisions which apply to noise generated by construction-related activities. The pertinent components of the section are provided below.

- (a) Power tools. The operation of power tools for noncommercial purposes shall be exempt from the provisions of Sections 24.02.020(a), (b), (c) and 24.02.030, between the hours of 8:00 a.m. and 8:00 p.m.; provided, that such operations shall be subject to the provisions of Section 24.05.010. For purposes of this section, a noncommercial use shall be a use for which a business license is not required pursuant to Chapter 19.
- (b) Construction and landscape maintenance equipment. Notwithstanding any other provision of this chapter, between the hours of 7:00 a.m. and 7:00 p.m. on Mondays through Fridays, and between the hours of 8:00 a.m. and 8:00 p.m. on Saturdays and Sundays, construction, alteration, repair or maintenance activities which are authorized by valid city permit or business license, or carried out by employees of contractors of the city shall be allowed if they meet at least one of the following noise limitations:
  - (1) No individual piece of equipment shall produce a noise level exceeding eighty-three dBA at a distance of twenty-five feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to twenty feet from the equipment as possible.
  - (2) The noise level at any point outside of the property plane of the project shall not exceed eighty-six dBA.
  - (3) The provisions of subdivisions (1) and (2) of this subsection shall not be applicable to impact tools and equipment; provided, that such impact tools and equipment shall have intake and exhaust mufflers recommended by manufacturers thereof and approved by the director of public works as best accomplishing maximum noise attenuation, and that pavement breakers and jack-hammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof and approved by the director of public works as best accomplishing maximum noise attenuation. In the absence of manufacturer's recommendations, the director of public works may prescribe such means of accomplishing maximum noise attenuation as he or she may determine to be in the public interest.

Construction projects located more than two hundred feet from existing homes may request a special use permit to begin work at 6:00 a.m. on weekdays from June 15th until September 1st. No percussion type tools (such as ramsets or jackhammers) can be used before 7:00 a.m. The permit shall be revoked if any noise complaint is received by the police department.

#### **4.4.4 IMPACTS AND MITIGATION MEASURES**

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to noise and vibration. In addition,



a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Impacts of the environment on a project (as opposed to impacts of a project on the environment) are beyond the scope of required CEQA review. “[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project.” (*Ballona Wetlands Land Trust v. City of Los Angeles*, [2011] 201 Cal.App.4th 455, 473 [*Ballona*]). The California Supreme Court has held that “CEQA does not generally require an agency to consider the effects of existing environmental conditions on a proposed project’s future users or residents. What CEQA does mandate is an analysis of how a project might exacerbate existing environmental hazards.” (*California Building Industry Assn. v. Bay Area Air Quality Management Dist.* [2015] 62 Cal.4th 369, 392; see also *Mission Bay Alliance v. Office of Community Investment & Infrastructure* [2016] 6 Cal.App.5th 160, 197 [“identifying the effects on the project and its users of locating the project in a particular environmental setting is neither consistent with CEQA’s legislative purpose nor required by the CEQA statutes”]), quoting *Ballona, supra*, 201 Cal.App.4th at p. 474). Therefore, for the purposes of the CEQA analysis, the relevant inquiry is not whether the proposed project’s future residents will be exposed to pre-existing environmental noise-related hazards, but instead whether project-generated noise would exacerbate the pre-existing conditions. However, the discussions of potential noise effects on the proposed residences presented in the project-specific Noise Assessment will be used by the City of Davis to develop conditions of approval, to the extent allowed by state law, consistent with the City’s General Plan goals and policies related to exterior and interior noise levels.

### **Standards of Significance**

Consistent with Appendix G of the CEQA Guidelines, an impact related to noise is considered significant if the proposed project would result in any of the following:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- 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 area to excessive noise levels (see Chapter 4.7, Other Effects).

As noted above, impacts related to exposure of people to airport noise levels are discussed in Chapter 4.7, Other Effects, of this EIR.

### **Summary of Applicable Noise Standards**

Applicable noise and vibration level standards, including standards from the City of Davis General Plan and the Municipal Code are summarized below.

### **Construction Noise Criteria**

Pursuant to Davis Municipal Code Section 24.02.040, sound or noise emanating from construction activities is exempt from the City’s noise regulations, provided that construction occurs between the hours of 7:00 AM to 7:00 PM on Monday through Friday and between the hours of 8:00 AM to 8:00 PM on Saturdays and Sundays, as well as meets at least one of the following noise limitations:



- None of the construction equipment generates noise levels exceeding 83 dBA at a distance of 25 feet;
- The noise level at any point outside of the property plane of the construction site does not exceed 86 dBA;
- The construction tools are impact tools and/or equipment that have manufacturer-recommended intake and exhaust mufflers and are approved by the Director of Public Works as having the best-accomplishing noise attenuation. Pavement breakers and jack hammers must also be equipped with acoustically attenuating shields or shrouds recommended by manufacturers and approved by the Director of Public Works as having the best-accomplishing noise attenuation;
- Individual powered blowers do not produce a noise level exceeding 70 dBA measured at a distance of 50 feet;
  - On a single-family residential property, the 70 dBA at 50 feet restriction does not apply, if operated for less than 10 minutes per occurrence; and
- Powered blowers are not simultaneously operated within a 100-foot radius of another powered blower.

In terms of determining the temporary noise increase due to project-related construction activities, an impact would occur if construction activity would substantially increase ambient noise levels above background levels. The threshold of perception of the human ear is approximately 3.0 to 5.0 dB. A 5.0 dB change is considered to be clearly noticeable. Thus, consistent with the Federal Interagency Committee on Noise (FICON) criteria discussed further below, a substantial increase in ambient noise levels is assumed to occur when noise levels increase by 5.0 dB or more over existing ambient noise levels.

### Transportation Source Noise Criteria

The City of Davis does not have a specific threshold for evaluating noise increases due to transportation sources. Therefore, similar to the 2009 EIR, BAC relied on the FICON substantial increase criteria, discussed further below, to evaluate impacts related to traffic noise.

The following table was developed by FICON as a means of developing thresholds for identifying project-related noise-level increases. The rationale for the graduated scales is that test subjects' reactions to increases in noise levels varied depending on the starting level of noise. Specifically, with lower ambient noise environments, such as those below 60 dB L<sub>dn</sub>, a larger increase in noise levels was required to achieve a negative reaction than was necessary in environments where noise levels were already elevated. Therefore, because the City does not have defined thresholds for what would be considered a substantial increase in traffic noise levels, information from Table 4.4-7 is used.

<b>Table 4.4-7</b>	
<b>Significance of Changes in Cumulative Noise Exposure (dB DNL)</b>	
<b>Ambient Noise Level Without Project</b>	<b>Increase Required for Significant Impact</b>
<60	+5.0 or more
60 to 65	+3.0 or more
>65	+1.5 or more
<i>Source: Federal Interagency Committee on Noise.</i>	

The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State. For example, Caltrans requires a project-related traffic noise-level increase



of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers project-related noise-level increases between 5.0 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a conservative approach to impact assessment for the proposed project.

### Non-Transportation Source Noise Criteria

Section 24.02.020 of the Davis Municipal Code establishes exterior noise standards at residential uses of 50 dBA  $L_{max}$  between the hours of 9:00 PM to 7:00 AM, and 55 dBA  $L_{max}$  between the hours of 7:00 AM to 9:00 PM. Section 24.02.030 establishes that the City’s maximum noise limit is 75 dBA  $L_{max}$  for the hours of 7:00 AM to 9:00 PM and 70 dBA  $L_{max}$  during the hours of 9:00 PM to 7:00 AM. The City of Davis General Plan establishes a day/night average noise-level threshold of 60 dBA  $L_{dn}$  within outdoor activity areas of residential land uses.

### Vibration

The City of Davis does not have specific policies or standards pertaining to groundborne vibration. Therefore, the vibration impact criteria for damage to structures and annoyance to receptors developed by the Federal Transit Administration (FTA) is applied for the purposes of analysis. The criteria for damage to structures are presented in Table 4.4-8. The criteria related to annoyance are focused on sleep disturbance when evaluating residential receptors. Pursuant to Davis Municipal Code Section 24.02.040, construction activities would not occur during nighttime hours. Thus, the vibration analysis will focus only on damage to structures criteria.

<b>Table 4.4-8 Federal Transit Administration Criteria for Assessing Vibration Damage to Structures</b>	
<b>Building Category</b>	<b>Level, VdB<sup>1</sup></b>
I. Reinforced-Concrete, Steel or Timber (No Plaster)	102
II. Engineered Concrete and Masonry (No Plaster)	98
III. Non-Engineered Timber and Masonry Buildings	94
IV. Buildings Extremely Susceptible to Vibration Damage	90
<sup>1</sup> RMS velocity in decibels (VdB) re 1 micro-inch/second.	
<b>Source: Federal Transit Authority Noise and Vibration Manual, Table 12-3.</b>	

The surrounding uses include newer engineered residences, which are not highly susceptible to damage by construction. The applicable building category would be Category II, Engineered Concrete and Masonry (No Plaster), and the applicable threshold for assessing vibration damage would be 98 VdB.

### Method of Analysis

The analysis in this SEIR is focused generally on the changes to the proposed project and changes in circumstances following the City’s certification of the 2009 EIR, pursuant to CEQA Guidelines Section 15162. The analysis of this chapter is based on the 2009 EIR and the Noise Assessment prepared for the currently proposed project by BAC.

As discussed throughout this SEIR, the environmental baseline is appropriately considered to be the Wildhorse Ranch Project, which included up to 191 residential units, comprised of 73 detached single-family residences and 78 two- and three-story single-family townhomes on 11.95



acres, as well as 40 attached affordable housing units to be developed on the project site. As such, noise associated with the Wildhorse Ranch Project would have occurred as a result of construction activities and operations of such uses.

Below are descriptions of the methodologies used in the Noise Assessment (see Appendix E of this SEIR) to estimate construction noise and vibration associated with the currently proposed project, future traffic noise, and noise associated with the proposed pool complex. Further modeling details and calculations are provided in Appendix E of this SEIR. The results of the noise and vibration impact analyses were compared to the standards of significance discussed above in order to determine the associated level of impact.

### **On-Site Existing Ambient Noise Levels**

To quantify existing ambient noise levels within the project site, BAC conducted long-term (continuous) ambient noise-level measurements at three locations (see Figure 4.4-2) from September 7 to September 11, 2022. Larson Davis Laboratories (LDL) precision (Type 1) integrating sound level meters were used to complete the long-term noise-level survey. The meters were calibrated immediately before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all specifications of the American National Standards Institute requirements for Type 1 sound level meters (ANSI S1.4). The results of the long-term ambient noise survey are shown numerically and graphically in Appendices C and B of the Noise Assessment, respectively, and are summarized in Table 4.4-1 above.

### **Project Traffic Noise-Level Increases**

The FHWA-RD-77-108 traffic noise model was used to quantify existing traffic noise levels at the existing sensitive land uses nearest to the project vicinity roadway network. The model was also used to quantify the distances to the 60, 65 and 70 dB DNL traffic noise contours for the roadways. The FHWA Model predicts hourly  $L_{eq}$  values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop DNL values from  $L_{eq}$  values. Existing traffic data in the form of peak hour intersection turning movements were obtained from the transportation consultant for the proposed project. The data was converted to average daily traffic (ADT) segment volumes by multiplying the average of the AM and PM movements by a factor of 10. Other inputs were obtained from BAC observations and noise measurement data.

Using such data and the FHWA Model, existing traffic noise levels at the nearest sensitive receptors were calculated. The traffic noise level at sensitive receptors and distances from the centerlines of selected roadways to the 60 dB DNL, 65 dB DNL, and 70 dB DNL contours are summarized in Table 4.4-2. A complete listing of the FHWA Model inputs for existing conditions are provided in Appendix E of the Noise Assessment. The FHWA Model was used with traffic input data to predict project traffic noise-level increases relative to existing and cumulative conditions, both with and without the proposed project.

### **Project Construction Noise and Vibration Levels**

Construction noise was analyzed using data compiled for various pieces of construction equipment at a representative distance of 50 feet. BAC estimated average noise levels at the nearest residences to the project site using the FHWA Roadway Construction Noise Model (RCNM). Construction noise is discussed relative to the applicable City of Davis policies and standards.





BAC conducted short-term vibration measurements at the three survey locations identified in Figure 4.4-2 on September 12, 2022. An LDL Model LxT precision integrating sound level meter equipped with a vibration transducer was used to complete the measurements. The results are summarized in Table 4.4-3. The Noise Assessment analyzed construction-related vibration using data compiled for various pieces of construction equipment at a representative distance of 25 feet.

### **Pool Complex Noise Levels**

Based on the limited parking proposed at the community-serving facilities (55 spaces), significant crowd sizes at the pool complex are not anticipated. Thus, BAC conservatively assumed a crowd size of 60 persons speaking and cheering at varying vocal levels (casual to loud). Based on the foregoing assumption, BAC concluded that the predicted average and maximum noise levels during swimming events at a distance of 400 to 500 feet from the nearest residences would be less than 40 dB  $L_{eq}$  and less than 50 dB  $L_{max}$  (after consideration of noise attenuation provided by intervening buildings to the west and the existing sound wall located on the south side of East Covell Boulevard).

### **Project-Specific Impacts and Mitigation Measures**

The following discussion of impacts related to noise and vibration is based on implementation of the proposed project in comparison with the baseline and standards of significance presented above.

#### **4.4-1 Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below and even with the implementation of mitigation, the currently proposed project would result in a new significant impact beyond what was previously identified in the 2009 EIR.**

During project construction, heavy equipment would be used for grading excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. Noise exposure would also vary depending on the proximity of equipment activities to any point outside of the project site.

The 2009 EIR evaluated potential impacts related to construction noise under Impact 4.5-3 and found that a significant impact could occur. As noted therein, construction activities would have been temporary and anticipated to occur during typical daytime working hours, with activities associated with construction assumed to generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Although construction noise would have been temporary and would have likely occurred during normal daytime working hours, the 2009 EIR concluded that construction activities would have resulted in periods of elevated noise levels. However, Mitigation Measure 4.5-3 from the 2009 EIR would have required short-term elevated noise levels to be reduced through compliance with standard best management practices (BMPs) that



serve to minimize construction-related noise and requiring that construction be limited to normal daytime hours. With implementation of Mitigation Measure 4.5-3, the 2009 EIR concluded the potential impact would have been reduced to a less-than-significant level.

With respect to the currently proposed project, Table 4.4-9 below includes the range of maximum noise levels for equipment commonly used in general construction projects at full-power operation at a distance of 50 feet, which are generally similar to the noise levels anticipated in the 2009 EIR for the same type of construction equipment being used. It should be noted that not all of the listed construction equipment would be required or used as part of construction activities for the proposed project. Table 4.4-9 also includes predicted maximum equipment noise levels at the boundary of the nearest sensitive use, which is located approximately 25 feet away, and assumes a standard spherical spreading loss of 6.0 dB per doubling of distance from the noise source.

<b>Table 4.4-9 Construction Equipment Reference Noise Levels and Predicted Noise Levels at 25 Feet</b>		
<b>Equipment</b>	<b>Maximum Noise Level at 50 feet (dBA)</b>	<b>Predicted Maximum Noise Level at 25 feet (dBA)</b>
Air Compressor	80	86
Backhoe	80	86
Ballast Equalizer	82	88
Ballast Tamper	83	89
Compacter	82	88
Concrete Mixer	85	91
Concrete Pump	82	88
Concrete Vibrator	76	82
Crane, Mobile	83	89
Dozer	85	91
Generator	82	91
Grader	85	88
Impact Wrench	85	91
Loader	80	91
Paver	85	86
Pneumatic Tool	85	91
Pump	77	91
Saw	76	83
Scarifier	83	82
Scraper	85	89
Shovel	82	91
Spike Driver	77	88
Tie Cutter	84	83
Tie Handler	80	90
Tie Inserter	85	86
Truck	84	91
<i>Source: Bollard Acoustical Consultants, Inc., 2024.</i>		



Based on the equipment noise levels in Table 4.4-9, worst-case on-site project construction equipment maximum noise levels at the nearest existing residential uses located 25 feet away are expected to range from approximately 82 to 91 dB  $L_{max}$ . Based on such levels and using the FHWA Roadway RCNM, average noise levels at the nearest residences to the project site are anticipated to be 85 dBA  $L_{eq}$  or less. Average noise levels would be satisfactory relative to Davis Municipal Code Section 24.02.040(B)(2), as project construction would not exceed 86 dBA beyond the project site boundaries. However, worst-case maximum noise levels generated during project construction could exceed 5.0 dB or more above baseline ambient conditions at the nearest existing residences.

Because short-term noise-level increases associated with project construction could result in substantial noise-level increases above baseline levels, similar to the 2009 EIR, mitigation would be required. While the construction noise levels attributable to the proposed project would be similar to the approved Wildhorse Ranch Project and a new significant impact or substantial increase in the severity of a previously identified significant impact would not be expected to occur, this impact analysis employs a more robust and conservative methodology that, unlike the 2009 EIR, suggests construction noise could be significant and unavoidable at the nearest residences.

For example, unlike this SEIR, the 2009 EIR did not clearly articulate an ambient noise level increase threshold to determine construction noise impact significance. Rather, the 2009 EIR generally concluded that elevated construction noise levels due to the project would be significant.

The 2009 EIR included Mitigation Measure 4.5-3, which included standard construction noise BMPs, and concluded that implementation of said BMPs would reduce the impact to a less-than-significant level. In contrast, based on recent CEQA case law, this SEIR uses an ambient increase construction noise threshold of 5.0 dB, and thus, implementation of mitigation must be shown to be capable of reducing ambient noise level increases attributable to construction below 5.0 dB over ambient levels. As discussed further below, implementation of Mitigation Measure 4.5-3 from the 2009 EIR (as modified below) would ensure compliance with the Davis Municipal Code but cannot conclusively be shown to reduce increases in ambient noise levels due to project construction to at or below 5.0 dB at the nearest sensitive receptors. Therefore, based on the robust construction noise analysis methodology employed in this SEIR, the proposed project would result in a substantial increase in the severity of a significant impact previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

#### Modified Mitigation Measure(s)

Mitigation Measure 4.5-3 from the 2009 EIR has been modified to include additional construction noise performance standards set forth by the Noise Assessment prepared for the currently proposed project. Modifications are shown in ~~strike through~~ and double-underline below.



Although the modified mitigation measure below would decrease the potential for substantial temporary increases in ambient noise levels in the project vicinity to occur, certainty that the mitigation measure would reduce construction-related noise levels to both a state of compliance with Davis Municipal Code requirements and to levels which do not exceed 5.0 dB above baseline ambient conditions cannot be determined. As a result, whereas the 2009 EIR determined that Mitigation Measure 4.5-3 would reduce the potential impact to a less-than-significant level, with respect to the currently proposed project, even with implementation of the measure, the potential impact, while temporary, is conservatively assumed to be *significant and unavoidable*.

4.5-3 Compliance with the following measures shall be incorporated within the ~~Final Planned Development~~ construction documents prior to issuance of building permits with specific criteria and standards to be reviewed and approved by the ~~Planning Commission~~ City of Davis Community Development and Sustainability Department and Public Works Department:

- Construction activities shall be scheduled to occur during normal daytime working hours (i.e., 7:00 AM to 7:00 PM Monday through Friday and 8:00 AM to 8:00 PM Saturday and Sunday). These criteria shall be included in the Improvement Plans prior to initiation of construction. Exceptions to allow expanded construction activity hours shall be reviewed on a case-by-case basis as determined by the Community Development Director;
- Nearby residences shall be notified of construction schedules as part of a Notification Program subject to review and approval by the City of Davis, so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels;
- All mobile or fixed noise-producing equipment used on the project site shall comply with applicable federal, State, or local agency regulations while in the course of project activity;
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible;
- All heavy construction equipment and all stationary noise sources (such as diesel generators) shall be fitted with factory-specified mufflers and be maintained in good working condition;  
and
- Equipment warm up areas, water tanks, material stockpiles, mobile equipment staging, parking, maintenance areas, and equipment storage areas shall be located in an area as far away from existing residences as feasible.

New Mitigation Measure(s)

*None required.*



**4.4-2 Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

Noise sources associated with operation of the proposed project would consist of traffic noise and noise associated with the pool complex. The noise generated by the aforementioned components could result in impacts to existing noise-sensitive receptors in the project vicinity. Each of the foregoing noise sources is discussed in further detail below.

This chapter does not consider exposure of future residents of the currently proposed project to potential noise or vibration effects associated with the existing and post-construction noise environment, given that such an analysis is not required pursuant to CEQA. CEQA is focused on the proposed project's effects on the surrounding physical environment. Thus, although the 2009 EIR evaluated potential noise impacts related to existing agricultural activity, occurring to the east of the project site, upon the proposed residents of the Wildhorse Ranch Project, such analysis is not included herein. The potential noise effects upon future residents of the proposed project, which could result from future traffic noise levels and the proposed non-residential uses, will be addressed separately by the City during their planning review of the proposed project to ensure that the noise levels experienced at the future residences are in compliance with the City's General Plan noise-level standards.

Traffic Noise at Existing Noise-Sensitive Receptors

The 2009 EIR evaluated the increase in traffic noise levels that could occur as a result of the Wildhorse Ranch Project on surrounding roadways under Impact 4.5-1 and determined that noise levels would have exceeded the Davis General Plan's 60 dB  $L_{dn}$  exterior threshold at 100 feet from the centerline of several of the evaluated roadway segments. However, as shown in Table 4.5-4 of the 2009 EIR, existing noise levels at such roadway segments already exceeded the 60 dB  $L_{dn}$  threshold, and the project would have resulted in noise-level increases of 0.0 to 3.0 dB  $L_{dn}$ , which would have been below the 5.0 dB noise-level-increase threshold. As such, the 2009 EIR concluded that a less-than-significant impact would occur.

With respect to the currently proposed project, using the methodology described above in the Method of Analysis section, traffic noise levels under Existing and Existing Plus Project conditions were estimated as part of the Noise Assessment and are shown in Table 4.4-10. The estimated noise levels are provided in terms of DNL at the nearest sensitive receptors to the roadways. In addition, the table includes an assessment of predicted traffic noise levels relative to the FICON noise-level-increase significance criteria presented in Table 4.4-7.



As shown below in Table 4.4-10, the increase in traffic noise levels attributable to the proposed project under Existing Plus Project conditions would be below the FICON increase significance criteria shown in Table 4.4-7. Additionally, noise-level increases attributable to project-generated traffic would all be less than 1.0 dB DNL, which is either generally similar to or, in the case of noise levels along Monarch Lane, less than the levels identified for traffic noise-level increases identified in Table 4.5-4 of the 2009 EIR for the Wildhorse Ranch Project. Therefore, similar to the Wildhorse Ranch Project, the increase in traffic noise levels at existing sensitive receptors due to the proposed project would be less than significant.

### Pool Complex and Obstacle Course Noise at Existing Noise-Sensitive Receptors

Given the residential nature of the proposed project, the primary source of noise associated with the proposed development would be project-generated traffic noise on local roadways. However, the currently proposed project includes dedication of land for future development of a USA Pentathlon Training Facility, pool complex, and obstacle course, which were not included in the Wildhorse Ranch Project, and accordingly, were not evaluated in the 2009 EIR. Noise generated by activities occurring within the USA Pentathlon Training Facility (fencing, laser pistol training, locker rooms, etc.) would be contained within the building. Use of the outdoor obstacle course would be limited to the hours of 7:00 AM to 9:00 PM. Noise generated by operation of the pool complex and obstacle course is discussed further below.

#### *Pool Complex Noise*

The pool complex would include one pool and associated equipment. The center of the pool complex would be set back approximately 400 feet from the nearest existing residences, located south of East Covell Boulevard, and approximately 500 feet from the nearest existing residences to the west of the project site.

According to the Noise Assessment, swimming activities (lap swimming, training, water aerobics, etc.) do not, by themselves, generate appreciable noise levels. Noise at the pool complex would be primarily generated by spectators during swim events and by the proposed public address (PA) system. Given the limited parking proposed at the proposed community-serving facilities (55 spaces), significant crowd sizes at the pool complex are not anticipated.

Conservatively assuming a crowd size of 60 people speaking and cheering at varying vocal levels (casual to loud) during swimming events, the predicted average and maximum noise levels at a distance of 400 to 500 feet from the nearest residences would be less than 40 dBA  $L_{eq}$  and 50 dBA  $L_{max}$ , when considering noise attenuation provided by intervening buildings to the west and the existing sound wall located south of East Covell Boulevard. The predicted noise levels associated with the pool complex would comply with the standards established by Chapter 24 of the Davis Municipal Code. In terms of General Plan compliance, pool-generated noise levels would be below 50 dBA DNL at the nearest noise-sensitive receptors to the project site, which is below the General Plan's 60 dB DNL exterior noise standard applicable at residential uses.





**Table 4.4-10  
Predicted Traffic Noise-Level Increases at Existing Sensitive Receptors – Existing Versus Existing Plus Project Conditions**

#	Roadway	Segment	Predicted DNL, dBA			Significance Threshold	Threshold Exceeded?	Sensitive Receptors Present? <sup>1</sup>	Significant Impact Identified? <sup>2</sup>
			Existing	Existing Plus Project	Increase				
1	West Covell Boulevard	West of F Street	66.6	66.8	0.2	1.5	No	Yes	No
2	East Covell Boulevard	F Street to J Street	66.5	66.7	0.2	1.5	No	Yes	No
3	East Covell Boulevard	J Street to L Street	62.7	62.9	0.2	3.0	No	Yes	No
4	East Covell Boulevard	L Street to Pole Line Road	64.7	65.0	0.3	3.0	No	No	No
5	East Covell Boulevard	Pole Line Road to Birch Lane	60.0	60.5	0.5	3.0	No	Yes	No
6	East Covell Boulevard	East of Birch Lane	64.2	64.7	0.5	3.0	No	Yes	No
7	East Covell Boulevard	West of Wright Boulevard	60.3	60.8	0.5	3.0	No	Yes	No
8	East Covell Boulevard	Wright Boulevard to Monarch Lane	60.4	60.9	0.5	3.0	No	Yes	No
9	East Covell Boulevard	Monarch Lane to Alhambra Drive	61.6	61.9	0.3	3.0	No	Yes	No
10	East Covell Boulevard	Alhambra Drive to Harper Junior High School	60.5	60.8	0.3	3.0	No	Yes	No
11	Mace Boulevard	Harper Junior High School to Alhambra Drive	61.1	61.4	0.3	3.0	No	Yes	No
12	Mace Boulevard	Alhambra Drive to 2 <sup>nd</sup> Street	63.8	64.0	0.2	3.0	No	Yes	No
13	Mace Boulevard	2 <sup>nd</sup> Street to Chiles Road	65.6	65.7	0.1	1.5	No	Yes	No
14	Mace Boulevard	Chiles Road to Cowell Boulevard	62.7	62.8	0.1	3.0	No	No	No
15	Mace Boulevard	South of Cowell Boulevard	62.9	62.9	0.0	3.0	No	Yes	No
16	F Street	North of East Covell Boulevard	61.7	61.7	0.0	3.0	No	Yes	No
17	F Street	South of East Covell Boulevard	59.0	59.1	0.1	5.0	No	Yes	No
18	Cannery Avenue	North of East Covell Boulevard	53.5	53.5	0.0	5.0	No	No	No
19	J Street	South of East Covell Boulevard	59.4	59.5	0.1	5.0	No	Yes	No
20	Pole Line Road	North of East Covell Boulevard	64.4	64.4	0.0	3.0	No	Yes	No
21	Pole Line Road	South of East Covell Boulevard	60.5	60.7	0.2	3.0	No	Yes	No
22	Birch Lane	South of East Covell Boulevard	57.3	57.3	0.0	5.0	No	Yes	No
23	Wright Boulevard	North of East Covell Boulevard	53.8	53.9	0.1	5.0	No	Yes	No
24	Monarch Lane	South of East Covell Boulevard	52.9	53.2	0.3	5.0	No	Yes	No
25	Alhambra Drive	South of East Covell Boulevard	54.4	54.5	0.1	5.0	No	Yes	No
26	Alhambra Drive	West of Mace Boulevard	55.7	55.7	0.0	5.0	No	Yes	No
27	County Road 32A	East of Mace Boulevard	60.3	60.3	0.0	3.0	No	No	No
28	2 <sup>nd</sup> Street	West of Mace Boulevard	65.0	65.1	0.1	3.0	No	No	No
29	Chiles Road	East of Mace Boulevard	61.6	61.6	0.0	3.0	No	No	No
30	Chiles Road	West of Mace Boulevard	63.7	63.8	0.1	3.0	No	No	No
31	Cowell Boulevard	East of Mace Boulevard	58.3	58.3	0.0	5.0	No	Yes	No
32	Cowell Boulevard	West of Mace Boulevard	59.7	59.9	0.2	5.0	No	Yes	No

<sup>1</sup> Sensitive receptors were considered to be residences of all densities, schools, and transient lodging facilities.

<sup>2</sup> A significant impact is identified only along segments where the project-related traffic noise level increase would exceed the significance threshold and where sensitive receptors are present along the roadway segment.

Source: Bollard Acoustical Consultants, Inc., 2024.



According to the project applicant, outdoor speaker usage is not anticipated, except potentially during national or world cup events, which would occur, at a maximum, once per year. The noise generation of PA systems is highly variable, depending on the location, number, orientation, and power settings of the speakers. Because the specific design of the PA system has not yet been completed, precisely predicting the noise generation of the PA system at the nearest existing residences to the north and northwest of the project site is not currently possible. Thus, noise exposure from the proposed pool complex at the nearest existing residences could be significant, due to PA system usage.

### *Obstacle Course Noise*

Obstacle course activities would include running, jumping, climbing, and maneuvering through a series of obstacles focused on strength and endurance. The obstacle course would be located in the southeast corner of the project site, adjacent to East Covell Boulevard and existing agricultural land to the east. The noise generation of the proposed obstacle course activities is expected to be comparable to noise generated by equipment found in neighborhood parks and gyms and is not anticipated to result in appreciable noise levels beyond the immediate obstacle course area.

Activities at the obstacle course would consist primarily of training, but infrequent competitions may be held at the site. Noise would be generated at the obstacle course primarily by athletes and spectators during training and competition events, and a small PA system, which may be used during competitions. Given the limited parking proposed at the community-serving area of the project site, significant crowd sizes at the obstacle course are not anticipated. Conservatively assuming a crowd size of 60 persons speaking and cheering at varying vocal levels (casual to loud), during obstacle course events (similar to swimming events), the predicted average and maximum noise levels at a distance of 300 feet from the effective noise center of the obstacle course to the nearest residences to the south would be less than 40 dBA  $L_{eq}$  and 45 dBA  $L_{max}$  (after consideration of noise attenuation provided by the existing sound wall located on the south side of East Covell Boulevard). Such noise levels would be satisfactory relative to the Davis Municipal Code daytime and nighttime noise level standards. In terms of General Plan compliance, noise levels generated by the obstacle course would be well below 50 dBA DNL at the nearest noise-sensitive receptors to the project site, which would be well below the City's General Plan 60 dB DNL exterior noise standard applicable at residential uses.

However, similar to the PA system of the pool complex, because the specific design of the PA system has not yet been finalized, precisely predicting the noise generation of the PA system at the nearest existing residences to the south of the obstacle course is not currently possible. Thus, noise exposure from the obstacle course at the nearest existing residences could be significant, due to PA system usage.

### Conclusion

Based on the above, without implementation of the new mitigation measure included below, the currently proposed project could result in a new significant impact related to the generation of a substantial permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies beyond what was previously identified in the 2009 EIR.



### Applicable Mitigation Measure(s) from the 2009 EIR

As discussed above, this chapter does not consider the effects of existing environmental noise on future project residents, given that such an analysis is not required pursuant to CEQA. CEQA is focused on the proposed project's effects on the surrounding physical environment, not the effects of the environment on the project. Therefore, Mitigation Measure 4.5-4 included in the 2009 EIR, which requires disclosure statements advising future project residents of nearby orchard and greenbelt maintenance noise, would no longer be applicable to the proposed project.

### Modified Mitigation Measure(s)

*None required.*

### New Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

#### *SEIR 4.4-2*

*In conjunction with submittal of a site plan for the USA Pentathlon Training Facility, pool complex, and obstacle course, the project applicant shall submit an acoustical noise study, which shall document the predicted average ( $L_{eq}$ ) and maximum ( $L_{max}$ ) noise levels associated with the facilities' public address (PA) system at the nearest sensitive receptors to the pool complex and obstacle course. The acoustical noise study shall include recommendations for reducing noise levels projected to exceed the City's applicable noise standards set forth in Davis Municipal Code Article 24.02 and the Davis General Plan's day/night average noise-level threshold of 60 dBA  $L_{dn}$  within outdoor activity areas of residential land uses. Such recommendations could include, but not necessarily be limited to, the following:*

- *Acoustic noise barriers;*
- *Monitoring of PA noise levels during national, world cup, and other organized swimming events to ensure such activities do not exceed standards contained in the City of Davis Noise Ordinance;*
- *Limitations on the hours during which the PA system may be used; and*
- *Disclosure statements provided to neighboring residences of the potential for elevated noise levels during organized events held at the pool complex.*

*The acoustic noise study shall be submitted for review and approval to the City of Davis Community Development and Sustainability Department prior to issuance of building permits.*



**4.4-3 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR did not evaluate potential impacts related to groundborne vibration. Nonetheless, during project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The nearest identified existing structures (newer engineered residences, which are not highly susceptible to damage by vibration) are located approximately 25 feet from where construction activities would occur within the project site.

Table 4.4-11 includes the range of vibration levels for equipment commonly used in general construction projects at a distance of 25 feet. Table 4.4-11 also includes predicted equipment vibration levels at a distance of 100 feet from proposed construction activities.

<b>Equipment</b>	<b>Maximum Vibration Level at 25 feet, VdB (RMS)</b>
Vibratory Roller	94
Hoe Ram	87
Large Bulldozer	87
Loaded Trucks	86
Jackhammer	79
Small Bulldozer	58

*Source: Bollard Acoustical Consultants, Inc., 2024.*

As shown in Table 4.4-11, vibration levels generated from construction activities are predicted to be below thresholds for damage to engineered residential structures (98 VdB) at a distance of 25 feet from such activities.

With respect to project operation, the currently proposed project would consist of a mixed-use community containing residential uses and community-serving facilities. Such uses do not typically have equipment that generates appreciable off-site vibration. Therefore, project operation would not result in potential vibration impacts.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe impact related to the generation of excessive groundborne vibration or groundborne noise levels beyond what was identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR  
*None applicable.*



Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**Cumulative Impacts and Mitigation Measures**

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 5, Statutorily Required Sections, of this EIR.

**4.4-4 Generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future buildout of the City of Davis. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond was previously identified in the 2009 EIR.**

Future development projects within the City of Davis, including the proposed project, would incrementally affect the future cumulative ambient noise environment. Given the primarily residential nature of the proposed project, the primary project component that could combine with noise impacts from surrounding development in the project region would be associated with vehicle traffic generated by the project and other planned development projects, which together, could potentially result in a significant cumulative impact related to transportation noise.

The 2009 EIR evaluated potential cumulative impacts associated with traffic noise level increases under Impact 4.5-5. As detailed therein, Cumulative Plus Project conditions within the project area would have included the generation of increased traffic on roads along the local roadway network. As shown in Table 4.5-4 of the 2009 EIR, Cumulative Plus Project conditions would not have resulted in increases to the cumulative noise levels, with the exception of the 1.0 dB  $L_{dn}$  increase along Monarch Lane. Pursuant to the project significance criteria, a substantial increase in cumulative traffic noise levels was defined in the 2009 EIR as 1.5 to 5.0 dB, depending on the pre-project traffic noise level. Thus, cumulative traffic noise level increases along project vicinity roadways would not have exceeded the applicable noise-level-increase thresholds, and the 2009 EIR concluded a less-than-significant cumulative impact would occur.

With respect to the currently proposed project, to assess the potential noise impacts due to traffic increases from the proposed project on the local roadway network under



Cumulative conditions, noise levels have been calculated for the Cumulative and Cumulative Plus Project conditions at the nearest existing sensitive land uses to the project area roadway network using the methodology described in the Method of Analysis section.

Table 4.4-12 compares Cumulative Plus Project against Cumulative conditions to determine if the proposed project's contribution to the cumulative noise environment is considerable. As shown in the table below, noise-level increases under Cumulative Plus Project conditions would not be above the applicable threshold.

Based on the above, under Cumulative Plus Project conditions, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*





**Table 4.4-12  
Predicted Traffic Noise-Level Increases at Existing Sensitive Receptors – Cumulative Versus Cumulative Plus Project Conditions**

#	Roadway	Segment	Predicted DNL, dBA			Significance Threshold	Threshold Exceeded?	Sensitive Receptors Present? <sup>1</sup>	Significant Cumulative Impact Identified? <sup>2</sup>
			Cumulative	Cumulative Plus Project	Increase				
1	West Covell Boulevard	West of F Street	67.2	67.4	0.2	1.5	No	Yes	No
2	East Covell Boulevard	F Street to J Street	67.1	67.2	0.1	1.5	No	Yes	No
3	East Covell Boulevard	J Street to L Street	63.2	63.5	0.3	3.0	No	Yes	No
4	East Covell Boulevard	L Street to Pole Line Road	65.1	65.4	0.3	1.5	No	No	No
5	East Covell Boulevard	Pole Line Road to Birch Lane	60.4	60.8	0.4	3.0	No	Yes	No
6	East Covell Boulevard	East of Birch Lane	64.6	65.0	0.4	3.0	No	Yes	No
7	East Covell Boulevard	West of Wright Boulevard	60.6	61.1	0.5	3.0	No	Yes	No
8	East Covell Boulevard	Wright Boulevard to Monarch Lane	60.8	61.3	0.5	3.0	No	Yes	No
9	East Covell Boulevard	Monarch Lane to Alhambra Drive	62.0	62.2	0.2	3.0	No	Yes	No
10	East Covell Boulevard	Alhambra Drive to Harper Junior High School	60.9	61.2	0.3	3.0	No	Yes	No
11	Mace Boulevard	Harper Junior High School to Alhambra Drive	61.5	61.8	0.3	3.0	No	Yes	No
12	Mace Boulevard	Alhambra Drive to 2 <sup>nd</sup> Street	64.6	64.8	0.2	3.0	No	Yes	No
13	Mace Boulevard	2 <sup>nd</sup> Street to Chiles Road	66.7	66.8	0.1	1.5	No	Yes	No
14	Mace Boulevard	Chiles Road to Cowell Boulevard	63.6	63.7	0.1	3.0	No	No	No
15	Mace Boulevard	South of Cowell Boulevard	63.4	63.4	0.0	3.0	No	Yes	No
16	F Street	North of East Covell Boulevard	62.2	62.2	0.0	3.0	No	Yes	No
17	F Street	South of East Covell Boulevard	59.5	59.6	0.1	5.0	No	Yes	No
18	Cannery Avenue	North of East Covell Boulevard	56.4	56.4	0.0	5.0	No	No	No
19	J Street	South of East Covell Boulevard	60.7	60.8	0.1	3.0	No	Yes	No
20	Pole Line Road	North of East Covell Boulevard	64.6	64.6	0.0	3.0	No	Yes	No
21	Pole Line Road	South of East Covell Boulevard	60.7	60.8	0.1	3.0	No	Yes	No
22	Birch Lane	South of East Covell Boulevard	58.0	58.1	0.1	5.0	No	Yes	No
23	Wright Boulevard	North of East Covell Boulevard	54.3	54.4	0.1	5.0	No	Yes	No
24	Monarch Lane	South of East Covell Boulevard	53.9	54.1	0.2	5.0	No	Yes	No
25	Alhambra Drive	South of East Covell Boulevard	54.8	54.9	0.1	5.0	No	Yes	No
26	Alhambra Drive	West of Mace Boulevard	57.6	57.6	0.0	5.0	No	Yes	No
27	Route 32A	East of Mace Boulevard	60.8	60.9	0.1	3.0	No	No	No
28	2 <sup>nd</sup> Street	West of Mace Boulevard	66.3	66.4	0.1	1.5	No	No	No
29	Chiles Road	East of Mace Boulevard	62.9	62.9	0.0	3.0	No	No	No
30	Chiles Road	West of Mace Boulevard	64.7	64.7	0.0	3.0	No	No	No
31	Cowell Boulevard	East of Mace Boulevard	58.8	58.8	0.0	5.0	No	Yes	No
32	Cowell Boulevard	West of Mace Boulevard	61.9	62.0	0.1	3.0	No	Yes	No

<sup>1</sup> Sensitive receptors were considered to be residences of all densities, schools, and transient lodging facilities.

<sup>2</sup> A significant impact is identified only along segments where the project-related traffic noise level increase would exceed the significance threshold and where sensitive receptors are present along the roadway segment.

Source: **Bollard Acoustical Consultants, Inc., 2024.**



---

---

## **4.5 PUBLIC SERVICES AND UTILITIES**

---

---

## 4.5 PUBLIC SERVICES AND UTILITIES

### 4.5.1 INTRODUCTION

Pursuant to CEQA Guidelines Section 15162, the Public Services and Utilities chapter of the Subsequent Environmental Impact Report (SEIR) assesses whether the proposed project would result in a new significant impact not previously identified in the Wildhorse Ranch Project EIR (2009 EIR) or a substantial increase in the severity of a significant impact previously identified in the 2009 EIR. The City of Davis has prepared the SEIR to analyze new potential or substantially more severe adverse effects that could occur as a result of the changes from the former Wildhorse Ranch Project to the currently proposed project. For further details related to the proposed project, refer to Chapter 3, Project Description, of this SEIR.

This chapter describes the existing setting and identifies potential new demands resulting from the proposed project on public services and utilities, including fire protection and law enforcement services, schools, parks, and recreation facilities, as well as water, sanitary sewer, electric power, natural gas, telecommunication, and solid waste disposal services. The chapter evaluates the sufficiency of water supplies to meet the project's water demand and assesses the adequacy of wastewater infrastructure required to serve the project. Pursuant to Section XV of CEQA Guidelines Appendix G, potential impacts to public services are identified if the proposed project would require the development of new facilities or expansion of existing facilities, the construction of which could have adverse physical effects on the environment. Information contained in the analysis is primarily based on a Water Study prepared for the project by Cunningham Engineering (see Appendix F of this SEIR)<sup>1</sup> and a Sewer Study prepared for the project by Cunningham Engineering (see Appendix G of this SEIR),<sup>2</sup> as well as a Water Supply Assessment (WSA) prepared for the City of Davis by Brown and Caldwell.<sup>3</sup> Further information was drawn from a Wastewater Treatment Plant Capacity Technical Memorandum (WWTP Capacity Memorandum)<sup>4</sup> and a Wastewater Collection System Technical Memorandum (Wastewater Collection Memorandum)<sup>5</sup> prepared by West Yost, as well as the City of Davis General Plan,<sup>6</sup> the City's General Plan EIR,<sup>7</sup> and the 2009 EIR.

Impacts related to groundwater, storm drainage facilities, and recreation are addressed in Chapter 4.7, Other Effects, of this SEIR.

<sup>1</sup> Cunningham Engineering. *Water Study*. Revised April 30, 2024.

<sup>2</sup> Cunningham Engineering. *Sewer Study*. Revised April 19, 2024.

<sup>3</sup> Brown and Caldwell. *Water Supply Assessment for City of Davis: Village Farms Davis, Shriners, Palomino Place, and DiSC 2022*. April 3, 2024.

<sup>4</sup> West Yost. *Technical Memorandum: Davis WWTP Capacity Impacts of Proposed Village Farms Development*. April 23, 2024.

<sup>5</sup> West Yost. *Technical Memorandum: Collection System Impacts of Proposed Village Farms Development*. April 23, 2024.

<sup>6</sup> City of Davis. *City of Davis General Plan*. Adopted May 2001, Amended January 2007.

<sup>7</sup> City of Davis. *Final Program EIR for the City of Davis General Plan Update and Final Project EIR for Establishment of a New Junior High School*. Certified May 2001.



## 4.5.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing public services in the City of Davis, including fire protection and law enforcement services, schools, and parks, as well as existing utilities and service systems in the project area, including water supply, wastewater conveyance and treatment, solid waste, and gas, electric, and telecommunications infrastructure.

### **Fire Protection Services**

The project site is currently located within the jurisdiction of the Davis Fire Department (DFD). According to the City, the DFD serves a 133-square-mile area and a population of 68,986 people, on a total annual budget of nearly \$11.5 million.<sup>8</sup> The DFD provides pre-hospital emergency medical services; minimizes loss from fires, hazardous materials incidents, natural disasters, and other emergencies; manages the City's emergency service resources; and coordinates citywide plans for large scale disasters and emergency incidents.

The DFD has contractual agreements with the East Davis County Fire Protection District, the Springlake Fire Protection District, and the No Man's Land Fire Protection District to provide emergency response to the foregoing areas. The land covered by the City of Davis and the three foregoing fire protection districts are divided into seven emergency first-response areas. The first-response areas provide clearly defined territories for dispatching the nearest fire and emergency medical service (EMS) personnel and equipment to an emergency. In addition, the DFD has an automatic aid agreement with University of California, Davis (UC Davis) and the cities of Woodland, West Sacramento, and Dixon and a mutual aid agreement with all other fire protection agencies in Yolo County and throughout California.

The DFD currently operates three fire stations within the City of Davis, including Station 31, located at 530 Fifth Street; Station 32, located at 1350 Arlington Boulevard; and Station 33, located at 425 Mace Boulevard. Station 33, located approximately 1.4 miles southeast of the project site, is the closest fire station to the project site. The response area for Station 33 is the eastern and southern portions of the City, including Interstate 80 (I-80) and the Causeway. Station personnel are also responsible for responding to the East Davis County Fire Protection District (which includes El Macero) and the No Man's Land Fire Protection District south of the City.<sup>9</sup>

The DFD maintains a staff of 36 shift personnel (nine captains and 27 firefighters), one fire chief, two administrative staff, three division chiefs, and one fire marshal, for a total of 43 employees. Shift personnel are divided into three 24-hour-a-day shifts. The DFD equipment consists of three engines, one rescue unit, one squad unit, two grass/wildland units, one water tender, two reserve engines, three command vehicles, and two fire prevention staff vehicles, as well as two antique fire apparatus units. The DFD does not currently have a ladder truck. For all incidents in the City requiring the response of a ladder truck, Truck 34 from the UC Davis Fire Department is dispatched to assist.

Currently, the required response time standard for the DFD is six minutes for more than 90 percent of all incidents, consistent with the National Fire Protection Association (NFPA) 1710

<sup>8</sup> City of Davis. *About DFD*. Available at: <https://www.cityofdavis.org/city-hall/fire-department/about-dfd>. Accessed April 2024.

<sup>9</sup> City of Davis. *Stations*. Available at: <https://www.cityofdavis.org/city-hall/fire-department/about-dfd/stations>. Accessed May 2024.



response time standard.<sup>10</sup> NFPA 1710 Section 4.1.2.1 establishes the following performance objectives: 240 seconds (four minutes) or less travel time for the arrival of the first engine company at a fire suppression incident; and 360 seconds (six minutes) or less travel time for the arrival of the second company with a minimum staffing of four personnel at a fire suppression incident.<sup>11,12</sup> The six-minute response time accounts for a one-minute dispatch processing time, a one-minute turnout time, and a four-minute driving response time. The project site is currently located outside of the four-minute drive time zone (see Figure 4.5-1).

The DFD primarily obtains funds from several revenue sources through the City's General Fund, which is funded from revenues generated by local sales and property taxes, motor vehicle-in-lieu fees, the municipal service tax, business license tax, and by revenues generated from permits and fees.<sup>13</sup> The City's General Fund contributes toward the DFD facilities, apparatus, and equipment necessary to maintain adequate service levels. The fiscal year 2021-2022 General Fund expenditures for the DFD were \$14.7 million.

### **Police Protection Services**

The Davis Police Department (DPD) is located at 2600 Fifth Street, approximately 0.84-mile south of the project site. The DPD provides services to approximately 66,000 City residents. Of the 95 full-time employees, 61 are sworn officers and 34 are civilian support positions.<sup>14</sup> The DPD staff is supplemented by over 60 volunteers. The DPD is organized into the following four divisions:

- **Administration Division:** The Administration Division provides overall management, planning, coordination, and evaluation of department functions.
- **Patrol Division:** The Patrol Division provides first-line emergency response to crimes in progress, accidents, and tactical situations.
- **Investigations Division:** The Investigations Division handles major criminal investigations of all types involving adult and juvenile offenders, as well as missing persons of all ages.
- **Records and Communications Division:** The Records and Communications Division is the hub of the department, which receives all emergency 911 and nonemergency calls for service and ensures that appropriate resources are dispatched in a timely manner.

The largest division in the DPD is the Patrol Division, which is comprised of five patrol teams and the Traffic Unit. According to the City, the Patrol Division is staffed with two lieutenants, six sergeants, five corporals, and 31 officers. Sworn officers perform law enforcement tasks, as well as administration and supervision, and civilian personnel are involved in administration, support services, supervision, dispatch, parking enforcement, and community service duties.

---

<sup>10</sup> Sandholdt, Patrick, Fire Marshal, Davis Fire Department. Personal communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. April 10, 2024.

<sup>11</sup> Sandholdt, Patrick, Fire Marshal, City of Davis Fire Department. Personal Communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. March 12, 2024.

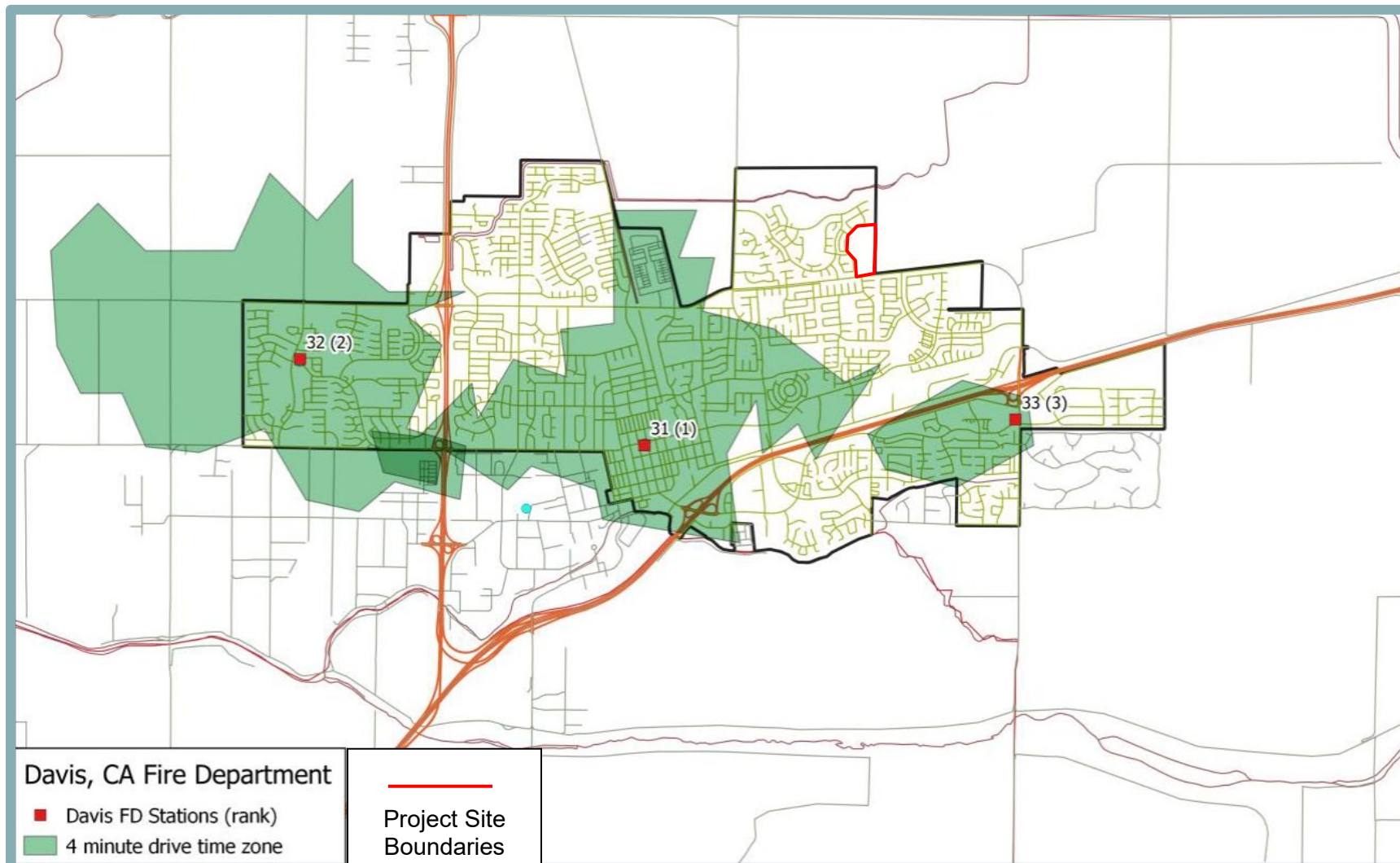
<sup>12</sup> Sandholdt, Patrick, Fire Marshal, Davis Fire Department. Personal communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. April 10, 2024.

<sup>13</sup> City of Davis. *Budget in Brief: FY 2021-2022 Adopted Budget*. 2021.

<sup>14</sup> City of Davis. *Administration*. Available at: <https://www.cityofdavis.org/city-hall/police-department/administration>. Accessed April 2024.



**Figure 4.5-1  
DFD Drive Time Zone**



Source: Davis Fire Department, 2024.





UC Davis also maintains an on-campus police department that has a mutual aid agreement with the City for major incidents. Similar to the DFD, the DPD primarily obtains funds through the City’s General Fund. The collected funds contribute to DPD facilities, apparatus, and equipment determined necessary by the City for the DPD to meet applicable response time and staffing level standards. The fiscal year 2021-2022 General Fund expenditures for the DPD were \$21.8 million.<sup>15</sup>

### **Schools**

The project site is located within the boundaries of the Davis Joint Unified School District (DJUSD), which consists of nine elementary schools, four junior high schools, three high schools, a K-12 school, an adult and community education program, and a preschool center. According to the California Department of Education’s enrollment data, the DJUSD served a total of 8,361 students during the 2023-24 academic year, including 4,149 elementary school students, 1,680 junior high students, 2,521 high school students, and 11 students in nonpublic and nonsectarian schools.<sup>16</sup> The project site is located within District 2, which is provided elementary school service by Birch Lane Elementary School, located 0.66-mile to the west of the site, and Oliver Wendell Holmes Junior High, located approximately 1.3 miles southwest of the site. Davis Senior High School is located approximately two miles west of the project site. Table 4.5-1 shows the enrollment total of schools within the DJUSD for the 2023-24 academic year.

<b>School Facility</b>	<b>2022-23 Enrollment</b>
Birch Lane Elementary	564
Cesar Chavez Elementary	492
Da Vinci Charter Academy	582
Davis School for Independent Study	145
Davis Senior High	1,789
Fairfield Elementary	45
Frances Ellen Watkins Harper Junior High	552
Fred T. Korematsu Elementary at Mace Ranch	522
King (Martin Luther) High (Continuation)	50
Marguerite Montgomery Elementary	451
Nonpublic, Nonsectarian Schools	11
North Davis Elementary	575
Oliver Wendell Holmes Junior High	621
Patwin Elementary	399
Pioneer Elementary	568
Ralph Waldo Emerson Junior High	488
Robert E. Willett Elementary	507

**Source: California Department of Education, May 2024.**

With respect to school capacity, the DJUSD maintains an Inter-District Transfer (IDT) agreement with surrounding school districts. The IDT program allows parents and/or legal

<sup>15</sup> City of Davis. *City Budget & Financial Reporting*. Available at: <https://www.cityofdavis.org/city-hall/finance/city-budget>. Accessed April 2024.

<sup>16</sup> California Department of Education. *DataQuest*. Available at: <https://dq.cde.ca.gov/dataquest/>. Accessed May 2024.



guardians to enroll their student at a DJUSD school even if the school is located outside of the district in which the student resides. If a student's parent or legal guardian works more than 10 hours a week in the City of Davis, the student meets the Resident by Employment standard established by California Education Code Section 48204. Resident by Employment students cannot be denied admittance into the DJUSD if space is available to accommodate them, and the students' IDT qualification cannot be revoked in the future once the students are admitted.

The number of IDT students increased over the past five years, in contrast to DJUSD's declining enrollment. According to the DJUSD, enrollment has declined by nearly 300 students since the 2017-18 school year. In addition, the number of DJUSD non-resident students in 2023 was 1,046. Of the total non-resident students, 90 were legally required to be accepted by reason of employment. Based on the declining enrollment rate overall and the consistent acceptance of IDT students, the DJUSD currently has the capacity to accept new students.

The DJUSD Facilities Master Plan outlines the district's long-range educational program goals and facility improvements.<sup>17</sup> The Facilities Master Plan includes a facility needs assessment for each school to assess the existing conditions, identify needs, and estimate project costs. Projected improvements to schools within the district include modernizing classrooms, improving physical education facilities, enhancing exterior environments, including learning courts, quads, gardens, and amphitheaters, and improving technological infrastructure. In accordance with Proposition 1A/Senate Bill (SB) 50, which is discussed further below in the Regulatory Context section, the DJUSD assesses developer fees on new construction. The current fees are \$2.97 per square foot (sf) for new residential construction and additions and \$0.47 per sf for new commercial and industrial development.

In addition, on November 2, 2023 the DJUSD Board of Trustees voted to place a parcel tax renewal measure known as Measure N on the March 5, 2024, ballot.<sup>18</sup> The measure was approved by voters, which renewed an existing parcel tax at \$768 per year that is anticipated to total approximately \$11.7 million per year. The tax gathered under Measure N will continue to act as a source of funding for DJUSD schools.

### **Parks and Recreation Facilities**

The City's Parks and Community Services Department maintains over 485 acres of parks and greenbelts across 37 neighborhood and community parks, which consist of various amenities, including 65 play areas; 12 large, reservable picnic areas, as well as many smaller picnic areas; 33 tennis courts; and other recreational amenities, such as horseshoe pits, disc golf, basketball courts, and exercise courses (see Figure 4.5-2).

Pursuant to Table 14 of the City's General Plan, the City maintains a standard of five acres of parkland per 1,000 residents within the City limits. In addition, according to the City's Parks and Recreation Facilities Master Plan Update, the City requires community parks to be located within 1.5 miles of all residential units.

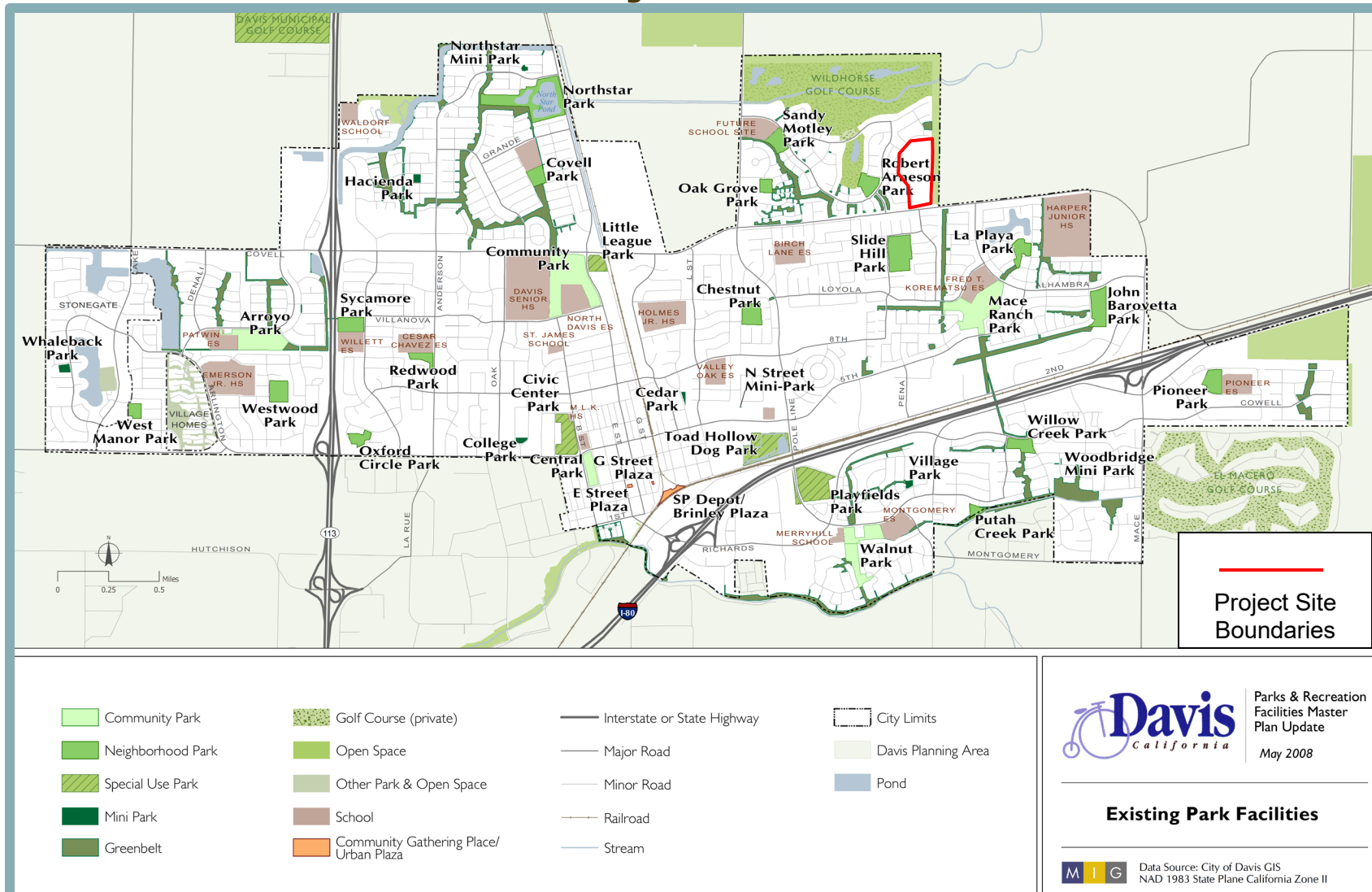
---

<sup>17</sup> Davis Joint Unified School District. *Facilities Master Plan*. Available at: <https://www.djUSD.net/cms/one.aspx?portalId=117173&pageId=3165267>. Accessed June 2024.

<sup>18</sup> Davis Joint Unified School District. *Measure N – Parcel Tax Renewal 2024*. Available at: [https://www.djUSD.net/about/parcel\\_tax](https://www.djUSD.net/about/parcel_tax). Accessed April 2024.



**Figure 4.5-2  
 Existing Park Facilities**



Source: City of Davis, Parks and Recreation Facilities Master Plan Update, May 2008.



The City further requires neighborhood parks to be located within three-eighths of a mile of all residential units,<sup>19</sup> and recommends that 10 percent of new residential development be dedicated to greenbelt areas.

The nearest existing parks to the proposed project are Duchamp Park to the north, Robert Arneson Park to the west, and Nugget Fields further to the west. In addition, the Wildhorse Agricultural Buffer abuts the eastern site boundary and extends north to the Wildhorse Golf Course. The City's parks are funded through development impact fees and various City funds, including the parkland dedication fees consistent with Section 36.08.040 of the City's Municipal Code, particularly subsections (e) and (g).

### **Other Public Facilities**

The Yolo County Library maintains eight library branches, an archive and historic collections center, and is actively planning a new Davis branch library known as the Walnut Park Library approximately 1.6 miles south of the project site at 2700 Lillard Drive. The existing Davis branch library, the Mary L. Stephens Davis Library, is located at 315 East 14<sup>th</sup> Street, approximately 1.76 miles west of the project site. The library features six study rooms and offers free Wi-Fi access and computer use to the public. In addition, the South Davis Montgomery Library is located approximately 1.58 miles south of the project site at 1441 Danbury Street within the Marguerite Montgomery Elementary School and is open to the public during public library hours.

The Yolo County Library funds libraries through the County's property tax. Pursuant to Yolo County Chapter 14, the County's Facilities Authorization and Fee is imposed on new residential projects and commercial improvements within the County. Revenues generated from the fee are used for countywide library programs and operations.

### **Water Supply**

The City provides water service to all residential, commercial, industrial, and irrigation customers within the City limits. Water is also provided by the City for open space and fire protection uses. As shown in Figure 4.5-3, which includes the City's current service area as well as additional service areas associated with future proposed development projects, the City's water system serves customers within the City of Davis, the El Macero and Willowbank County Service Areas (CSAs), and the Davis Creek Mobile Home Park. An additional CSA known as North Davis Meadows (NDM) is located north of the City within the City's water service area, but is pending connections to the City's water system. The system is supplied surface water from the Woodland-Davis Clean Water Agency (WDCWA) Regional Water Treatment Facility (RWTF) and groundwater from local wells. A portion of the WDCWA surface water is delivered to UC Davis through the surface water transmission main owned and maintained by the City prior to delivery to UC Davis' transmission main.

### **Surface Water**

The City of Davis began participating in the WDCWA in 2016, after certification of the 2009 EIR. The WDCWA was created in 2009 to convey water from the Sacramento River, transmit the water for treatment to the RWTF, and deliver wholesale treated surface water to the cities of Davis and Woodland, and to UC Davis for use in their respective service areas.

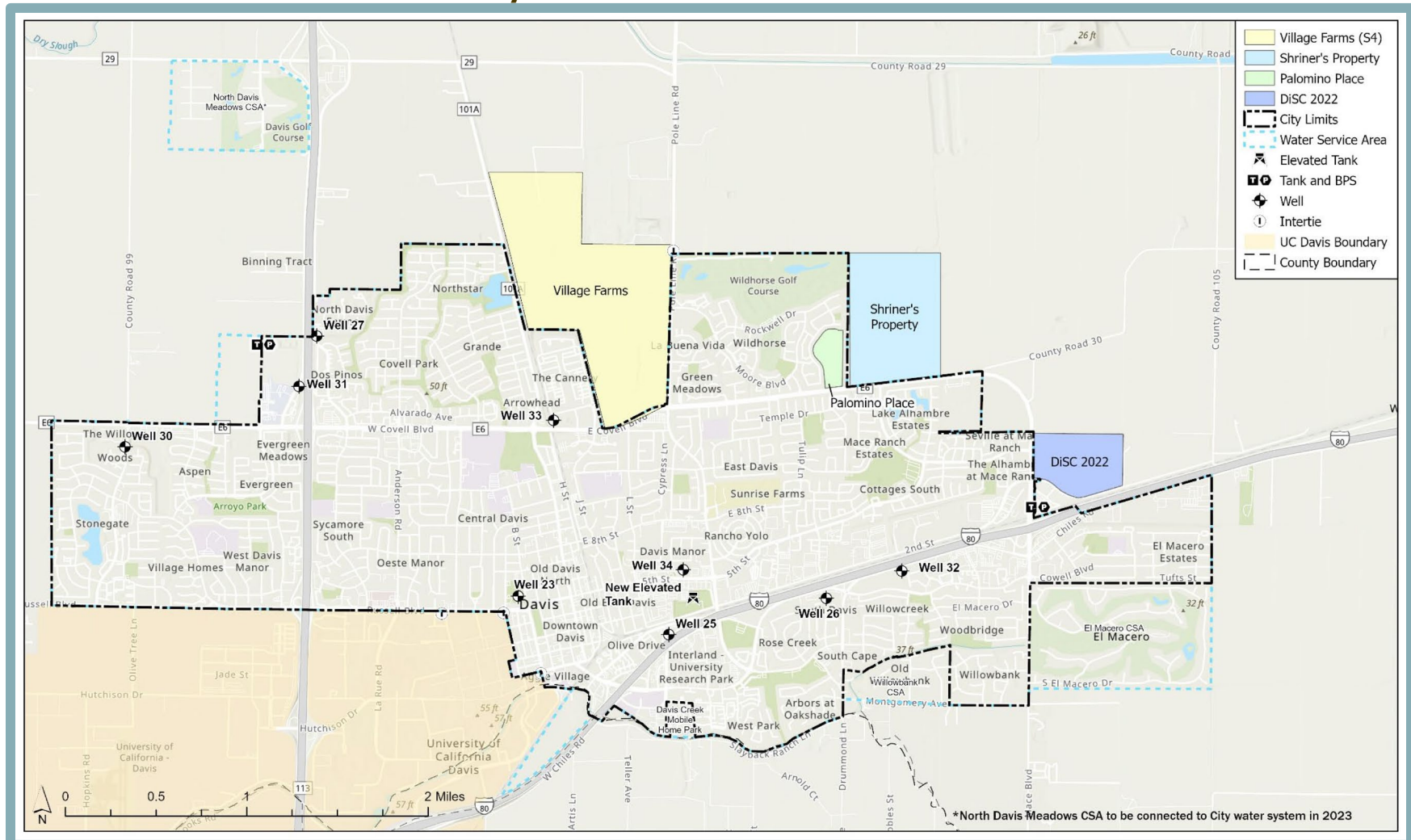
---

<sup>19</sup> City of Davis. *Parks and Recreation Facilities Master Plan Update*. Adopted 2012.





**Figure 4.5-3  
 City of Davis Water Service Area**



Source: Brown and Caldwell, April 2024.



According to the WSA, the WDCWA has two separate surface water rights: 45,000 acre-feet per year (AFY) under Permit 20281 from the State Water Resources Control Board (SWRCB), and up to 10,000 AFY from a supplemental water right purchased from the Conaway Preservation Group (CPG). Both surface water rights have conditions that can limit WDCWA’s ability to divert water. Permit 20281 is subject to the SWRCB’s Term 91, which requires permittees to cease diverting water when the State Water Project and the Central Valley Project are releasing stored water to meet water quality and flow requirements in the Sacramento-San Joaquin Delta.

The CPG water right is subject to limitation based on Lake Shasta water levels. The City is entitled to deliveries of 10.2 million gallons per day (mgd) from the WDCWA in a normal year, totaling approximately 11,420 AFY. Table 4.5-2 summarizes the projected wholesale surface water supplies for a normal year, a single dry year, and multiple dry years. The City does not anticipate any agreement changes with the WDCWA.

Year Type	2025	2030	2035	2040	2045
Normal Year	10,520	10,520	10,520	10,520	10,520
Single Dry Year	2,460	2,460	2,460	2,460	2,460
Multiple Dry Years	2,460	2,460	2,460	2,460	2,460

*Source: Brown and Caldwell, April 2024.*

### Groundwater

The City pumps groundwater from the Yolo Subbasin, which is a portion of the larger Sacramento Valley Groundwater Basin. According to the WSA, the Department of Water Resources (DWR) does not consider the basin to be in overdraft. Municipal water users of the Yolo Subbasin include the cities of Davis, Woodland, and Winters; UC Davis; various community services districts and areas within Yolo County; Reclamation Districts 150, 307, and 999; and the Yolo County Flood Control and Water Conservation District (YCFCWCD). Areas outside of the cities and community service districts are predominantly agricultural. Most agricultural areas to the north of the City of Davis use groundwater, while other agricultural users within Yolo County are able to use surface water from the Sacramento River, Colusa Basin Drain, Putah Creek, Cache Creek, Yolo Bypass, Tule Canal, Willow Slough, and the Tehama-Colusa Canal.

The aquifer system under the Yolo Subbasin includes the upper Tehama Formation and is generally divided into three zones: shallow, intermediate, and deep. The City’s major groundwater production zones for water supply are the intermediate and deep aquifer zones. The distinction is based on water chemistry, though both zones are geologically part of the larger Tehama Formation. The intermediate aquifer begins at a depth of approximately 200 feet and the deep aquifer at 700 feet below ground surface. Groundwater in the deep aquifer is more desirable for residential uses, while groundwater from the intermediate aquifer is more suited for irrigation water uses. Overall, high-quality water exists in the portion of the aquifer from which public community water systems draw.

According to the WSA, the projected sustainable yield of the Yolo Subbasin is 346,000 AFY. In addition, according to the Davis 2020 Urban Water Management Plan (UWMP), the





groundwater storage capacity of the Yolo Subbasin between the depths of 20 to 420 feet is approximately 6.5 million AFY.<sup>20</sup> Seasonal variations show the shallowest depth to water levels occurs in the spring (March/April) with greatest depths in summer (July/August), when groundwater levels are at their lowest. The City tracks groundwater levels in the intermediate and deep wells, which generally decline during dry conditions due to continued reliance on groundwater for agricultural and municipal demands. However, groundwater levels substantially recover during wet years. Over the years, the depth to water was greatest from 2013 to 2015 and from 2021 to 2022 during the recent droughts. Groundwater levels rebounded after 2015 with the start of conjunctive use programs that coordinate the use of both surface water and groundwater, and were consistent from 2018 to 2020. Similarly, groundwater levels have since rebounded again after notable wet seasons in 2021 through 2023.

The Yolo Subbasin is subject to the 2014 Sustainable Groundwater Management Act (SGMA), which became effective January 31, 2015. The SGMA applies to the 127 high and medium priority groundwater basins designated by DWR Bulletin 118, which account for approximately 96 percent of groundwater use in California. The Yolo subbasin is designated as a high priority subbasin under the SGMA. The SGMA requires high and medium priority basins subject to critical conditions of overdraft to be managed under a Groundwater Sustainability Plan (GSP) by January 31, 2020 (Water Code Section 10720.7[a][1]) and requires all other groundwater basins designated as high or medium priority basins to be managed under a GSP by January 31, 2022 (Water Code Section 10720.7 [a][2]). In addition, the SGMA requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally based management plans. The SGMA provides substantial time (20 years) for GSAs to implement plans and achieve long-term groundwater sustainability.

The Yolo Subbasin Groundwater Agency (YSGA), which includes the City of Davis as a member agency, adopted the Yolo Subbasin GSP on January 24, 2022.<sup>21</sup> The Yolo Subbasin GSP was approved by DWR on October 26, 2023. The Yolo Subbasin GSP establishes various standards, including, but not limited to, sustainability goals, minimum thresholds for groundwater conditions, interim milestones, monitoring protocols for the collection of groundwater, and reporting standards. Table 4.5-3 summarizes the projected groundwater supplies for a normal year, a single dry year, and multiple dry years. The City’s groundwater supply would meet demands during dry years when minimal surface water supply is available. During a dry year, the City’s surface water supplies would be reduced, but groundwater supplies would be increased to meet demands.

<b>Table 4.5-3</b>				
<b>Projected Groundwater Supply, AFY</b>				
<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>
12,800	12,800	12,800	12,800	12,800
<i>Source: Brown and Caldwell, April 2024.</i>				

### **Water Delivery**

The City’s water distribution system includes three water storage tanks, nine groundwater wells comprised of five deep aquifer wells and four intermediate wells, and 191 miles of distribution

<sup>20</sup> City of Davis. *2020 Urban Water Management Plan*. June 15, 2021.

<sup>21</sup> Yolo Subbasin Groundwater Agency. *Yolo Subbasin Groundwater Agency 2022 Groundwater Sustainability Plan Yolo County, CA*. Approved January 24, 2022.



and transmission mains.<sup>22</sup> The three water storage tanks include the Elevated Tank, West Area Tank, and the East Area Tank. The three tanks have a combined storage of 8.2 million gallons. The West Area Tank has a booster pumping capacity of 4,200 gallons per minute (gpm) and the East Area Tank has a total pumping capacity of 8,000 gpm. The West and East Area Tanks fill during off-peak demand periods, and the booster station pumps send water back into the system during peak periods based on time and system pressure.

The City's water pipes range from two to 14 inches in diameter. Approximately 90 percent of the distribution system consists of six- to 10-inch diameter pipelines. The City's pipeline system was originally constructed to support localized supply, with wells spread throughout the City, which did not require large diameter transmission mains. However, as a result of the recent changes to the City's water supply system, treated surface water from the RWTF is distributed by way of a six-mile, 30-inch pipeline along Pole Line Road.

Currently, the City of Davis maintains a 12-inch domestic water main on the south side of East Covell Boulevard to the south of the project site, and an eight-inch main within the Caravaggio Drive/Bonnard Street intersection to the west of the site.

### **Wastewater Collection and Treatment**

The City of Davis provides wastewater conveyance and treatment for all residents and businesses within the City of Davis and the unincorporated areas of North Davis Meadows, El Macero, Davis Creek Mobile Home Park, and the Teichert Construction Complex.

### **Wastewater Treatment Plant Capacity**

The City of Davis is authorized by the Central Valley Regional Water Quality Board (RWQCB) to discharge treated wastewater from the City's WWTP under Order R5-2018-0086 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0079049, effective as of December 7, 2018.<sup>23</sup> Under the Permit Order, the WWTP is permitted to treat an average dry-weather flow (ADWF) of 7.5 mgd. ADWF is defined as the average of the three consecutive lowest-flow calendar months, which for the City usually coincides with the period of July through September. The existing treatment system design capacity is 6.0 mgd ADWF. The City has the ability to discharge treated wastewater from two different discharge points (Discharge Point Nos. 001 and 002). The treatment system for both discharge points consists of a mechanical bar screen, aerated grit tank, three primary sedimentation tanks, three facultative oxidation ponds, two aerated ponds, a polishing pond, an overland flow system, disinfection, and dechlorination. However, prior to the discharge at Discharge Point No. 002, the disinfected effluent passes through treatment wetlands. Each discharge point is located in a different receiving water. Treated wastewater is discharged from Discharge Point No. 001 to the Willow Slough Bypass, a water of the U.S., and part of the Yolo Bypass flood protection structure within the Sacramento River watershed. Treated wastewater is discharged from Discharge Point No. 002 to the Conaway Ranch Toe Drain, a water of the U.S., and a part of the Yolo Bypass within the Sacramento River watershed.

<sup>22</sup> City of Davis. *City Water Infrastructure*. Available at: <https://www.cityofdavis.org/city-hall/public-works-utilities-and-operations/water/city-water-infrastructure>. Accessed April 2024.

<sup>23</sup> Central Valley Regional Water Quality Control Board. *Order R5-2018-0086, NPDES No. CA0079049, Waste Discharge Requirements for the City of Davis Wastewater Treatment Plant, Yolo County*. Adopted December 2018.



## **Wastewater Collection System**

The City of Davis wastewater collection system conveys wastewater for the area within the City limits to the WWTP, located at 45400 County Road (CR) 28H. The collection system includes 164 miles of gravity sewers, 3,224 manholes, six pump stations, 2.63 miles of force mains ranging in size from four to 14 inches, and approximately 123 miles of sewer laterals.<sup>24</sup>

Within the project vicinity, the existing sewer collection system includes six-inch pipes in Caravaggio Drive to the west, eight-inch pipes in Monarch Lane to the south, and the 42-inch trunk main to the north along the northern boundary of the Wildhorse Golf Course. The existing infrastructure in Caravaggio Drive has limited capacity and shallow depths that do not allow for gravity connection with the proposed project. The sewer infrastructure to the south, in Monarch Lane, includes an existing sewer lift station. The project site is currently served by a septic tank without connections to the City system.

## **Solid Waste Disposal**

Solid waste collection and disposal in the City of Davis is provided by Recology Davis, which was renamed from Davis Waste Removal. Recology Davis has a drop-off and buy-back center and provides residential curbside, apartment, and business collection services. In addition to the weekly garbage service, Recology Davis provides green waste and recycling pickup and street sweeping service. Recoverable items include mixed paper, glass, aluminum cans, steel and tin cans, some plastics, corrugated cardboard, yard waste, and used motor oil. In July of 2016, Recology Davis began an organics collection program to allow for collection of organic material and food waste. The program will help achieve the City's goal of diverting waste sufficient to reduce citywide waste disposal to zero pounds per person per day by year 2025.

All non-recyclable, non-organic waste generated by the City of Davis is disposed of at the 770-acre Yolo County Central Landfill, which is located off CR 28H, near its intersection with CR 104. The landfill is owned and operated by the Yolo County Department of Public Works and Transportation. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Yolo County Central Landfill is permitted to accept a maximum of 49,035,200 cubic yards of waste.<sup>25</sup> The landfill has a remaining capacity of 33,140,373 cubic yards and is anticipated to operate through the year 2124. The landfill also includes a recycling drop-off facility, a wood processing facility, and a methane gas collection facility, and accepts drop-offs of household hazardous waste free to County residents on designated Saturdays.

## **Electricity and Natural Gas**

Gas and electric service in the City of Davis, including the project site, has been historically provided by Pacific Gas & Electric Co. (PG&E) under a franchise granted to PG&E by the City. Based in San Francisco, PG&E is the largest provider of gas and electric services in Northern and Central California. PG&E provides electricity to roughly 5.1 million customers and provides natural gas to nearly 4.2 million customers. A mix of generating sources, including hydropower, gas-fired steam, and nuclear energy, powers the electric system.

<sup>24</sup> City of Davis. *Wastewater*. Available at: <https://www.cityofdavis.org/city-hall/public-works-utilities-and-operations/wastewater>. Accessed April 2024.

<sup>25</sup> California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details Yolo County Central Landfill (57-AA-0001)*. Available at: <https://www2.calrecycle.ca.gov/SolidWaste/Site/Details/689>. Accessed April 2024.



On October 25, 2016, the Davis City Council adopted Resolution Number 16-153, Series 2016, which approved the Joint Exercise of Powers Agreement with Yolo County to form the Valley Clean Energy Alliance, which is now referred to as Valley Clean Energy (VCE). The resolution adopted by the City, along with similar resolutions adopted by the City of Woodland and Yolo County led to the formation of the VCE joint powers authority. Beginning in June 2018, the VCE began serving the electricity needs of the cities of Woodland, Davis, and unincorporated areas of Yolo County. Customers within the participating areas have the opportunity to continue receiving service from PG&E or receive energy procured by VCE. While VCE supplies the energy for customers enrolled in the VCE program, VCE electricity is transmitted through PG&E-owned and operated distribution and power lines.

### **Telecommunications**

Residents in Davis subscribe to a mix of wireline providers and resellers including AT&T of California, Comcast, Omsoft, and Davis Community Network. A few businesses also use fixed wireless providers, including DigitalPath, Inc. and Winters Broadband.

Comcast has provided six-strands of fiber to 22 “Major Facilities” throughout the City, which connect to three Yolo County facilities within the City of Davis and provide interconnection with the greater Yolo County fiber network. The Comcast network, known as the “I-Net” or Institutional Network, enables the City to provide connectivity for municipal operations, utilities, public safety, and general administration.<sup>26</sup>

### **4.5.3 REGULATORY CONTEXT**

The following discussion contains a summary review of regulatory controls pertaining to public services and utilities, including federal, State, and local laws and ordinances.

#### **Federal Regulations**

The federal environmental laws and policies relevant to public services and utilities are primarily related to water quality, which is addressed in Chapter 4.7, Other Effects, of this SEIR.

#### **State Regulations**

The following are the State environmental laws and policies relevant to public services and utilities.

#### **California Green Building Standards Code**

The 2022 California Green Building Standards Code, otherwise known as the CALGreen Code (California Code of Regulations [CCR] Title 24, Part 11), is a portion of the California Building Standards Code (CBSC), which became effective on January 1, 2023. The CBSC is adopted every three years by the Building Standards Commission (BSC).

The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen standards regulate the method of use, properties, performance, types of materials used in construction, alteration repair, improvement and rehabilitation of a structure or improvement to property. The provisions of the code apply to the

<sup>26</sup> Magellan Advisors, LLC. *Final Yolo Broadband Strategic Plan*. March 26, 2015.



planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the current CALGreen Code include, but are not limited to, the following measures:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the DWR's Model Water Efficient Landscape Ordinance (MWELO);
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of electric vehicle (EV) charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. According to Section A4.602 of Appendix A4 of the CALGreen Code, CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs. The City of Davis has adopted Tier 1 of the CALGreen standards.

### **California Fire Code**

The California Fire Code (CFC) contains regulations related to construction, maintenance, and use of buildings. Topics addressed in the CFC include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The CFC contains specialized technical regulations related to fire and life safety.

### **California Health and Safety Code**

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, including regulations for building standards (as also set forth in the CBSC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

### **Senate Bill 7**

On September 25, 2016, SB 7 was signed into law. The purpose of SB 7 is to further the State's water conservation efforts by requiring that new apartment buildings constructed after January 1, 2018, include submeters for every rental unit. Specifically, the bill authorizes the Department of Housing and Community Development to develop, and propose for adoption, building standards that require the installation of water meters or submeters in multi-family residential





buildings. In addition, if submeters are used to charge tenants separately for water use, SB 7 imposes requirements on landlords related to sub-metered water service to individual dwelling units.

### **Proposition 1A/Senate Bill 50**

Proposition 1A/SB 50 (Chapter 407, Statutes of 1998) is a school construction measure primarily for modernization and rehabilitation of older school facilities and construction of new school facilities. Proposition 1A/SB 50 implemented significant fee reforms by amending the laws governing developer fees and school mitigation.

- Establishes the base (statutory) amount (indexed for inflation) of allowable developer fees at \$1.93 per sf for residential construction and \$0.31 per sf for commercial construction.
- Prohibits school districts, cities, and counties from imposing school impact mitigation fees or other requirements in excess of or in addition to those provided in the statute.

Proposition 1A/SB 50 also prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any “[...] legislative or adjudicative act [...] involving [...] the planning, use, or development of real property” (Government Code Section 65996[b]). Additionally, a local agency cannot require participation in a Mello-Roos for school facilities; however, the statutory fee is reduced by the amount of any voluntary participation in a Mello-Roos. Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be “full and complete mitigation.” The law identifies certain circumstances under which the statutory fee can be exceeded, including preparation and adoption of a “needs analysis,” eligibility for State funding, and satisfaction of two of four requirements (post-January 1, 2000) identified in the law including: year-round enrollment, general obligation bond measure on the ballot over the last four years that received 50 percent plus one of the votes cast, 20 percent of the classes in portable classrooms, or specified outstanding debt. Assuming a district qualifies for exceeding the statutory fee, the law establishes ultimate fee caps of 50 percent of costs where the State makes a 50 percent match, or 100 percent of costs where the State match is unavailable. District certification of payment of the applicable fee is required before the City can issue the building permit.

### **California Water Code**

The California Water Code requires coordination between land use lead agencies and public water purveyors. The purpose of this coordination is to ensure that prudent water supply planning has been conducted and that planned water supplies are adequate to meet both existing demands and the demands of planned development.

Water Code Sections 10910 – 10915 (inclusive), sometimes referred to as SB 610, require land use lead agencies: 1) to identify the responsible public water purveyor for a proposed development project, and 2) to request from the responsible purveyor a WSA. The purposes of the WSA are (a) to describe the sufficiency of the purveyors’ water supplies to satisfy the water demands of the proposed development project, while still meeting the current and projected water demands of customers, and (b) in the absence of a currently sufficient supply to describe the purveyor’s plans for acquiring additional water. Water Code Sections 10910 - 10915 delineate the specific information that must be included in the WSA.





As stated in CEQA Guidelines Section 15155, which reflects SB 610 requirements, any development with water demand exceeding the equivalent demand associated with 500 dwelling units is considered a “water-demand project” and is required to prepare a WSA. The proposed project includes up to 175 dwelling units and a USA Pentathlon Training Facility and pool complex. The proposed project would result in an average water demand of 53,025 gallons per day (gpd). By comparison, a 500-unit single-family residential development would result in an average water demand of approximately 306,000 gpd, based on the City’s standard water demand rate included in the City of Davis Public Works Design Standards (612 gpd per dwelling unit). Thus, a WSA was not required to be prepared for the proposed project; however, the proposed project was included as part of the WSA associated with several potential future developments within City of Davis to provide the City a more complete analysis of potential increases in future water demands.

### **Quimby Act**

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds.

### **California Integrated Waste Management Act—Assembly Bill 939**

To minimize the amount of solid waste that must be disposed of by transformation (i.e., recycling) and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), effective January 1990. According to AB 939, all cities and counties are required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city’s AB 939 plan will be integrated within the respective County plans, which must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal. Cities and counties that do not meet this mandate are subject to \$10,000-per-day fines.

In 2007, SB 1016 amended portions of AB 939, which allows the California Integrated Waste Management Board (CIWMB) to use per capita disposal as an indicator in evaluating compliance with the requirements of AB 939. Jurisdictions track and report their per capita disposal rates to CalRecycle.

### **Assembly Bill 1327**

AB 1327, the Solid Waste Reuse and Recycling Access Act of 1991, requires jurisdictions to adopt ordinances requiring development projects to provide adequate storage area for collection and removal of recyclable materials. The City of Davis has adopted a solid waste management ordinance under Chapter 32 of the Davis Municipal Code.

### **Assembly Bill 1881**

AB 1881, the Water Conservation in Landscaping Act of 2006, required the DWR to update the MWELo. AB 1881 also required local agencies to adopt the updated model ordinance or an equivalent ordinance by January 1, 2010. If local jurisdictions failed to adopt the updated model ordinance or an equivalent by January 1, 2010, the DWR’s updated model ordinance would automatically be adopted by statute. The City has adopted the MWELo (City of Davis Municipal Code Section 39.02.045[a][4]).



## **Local Regulations**

The following are the local regulations relevant to public services and utilities.

### **City of Davis General Plan**

The applicable Davis General Plan policies and standards related to public services and utilities are presented below.

#### **Police and Fire Chapter**

Goal POLFIRE 1 Provide high quality police and fire protection services to all areas of the City.

Policy POLFIRE 1.1 Recruit and maintain a staff of high-quality police officers and firefighters.

Policy POLFIRE 1.2 Develop and maintain the capacity to reach all areas of the City with emergency police and fire service within a five-minute emergency response time, 90% of the time. Response time includes alarm processing, turnout time and travel time.

Goal POLFIRE 2 Provide for an emotionally and physically safe environment where the people of Davis are able to live without fear of violence or other forms of abuse.

Policy POLFIRE 2.1 Reduce crime through community policing, public education, crime prevention, neighborhood watch and outreach programs.

Goal POLFIRE 3 Increase fire safety through provision of adequate fire protection infrastructure, public education and outreach programs.

Policy POLFIRE 3.1 Provide adequate infrastructure to fight fires in Davis.

Policy POLFIRE 3.2 Ensure that all new development includes adequate provision for fire safety.

Policy POLFIRE 3.3 Make fire protection services visible and accessible to Davis residents.

#### **Youth and Education Chapter**

Goal Y&E 8 Plan for the costs of new school facilities when planning for specific new residential development.

Policy Y&E 8.1 It shall be the policy of the city to require to the extent legally permissible the full mitigation of school impacts resulting from new residential development within the boundaries of the city.

Goal Y&E 9 Construct new public schools to meet the needs of residential growth.



Policy Y&E 9.1 It shall be the policy of the City to take all legally permissible steps to ensure the full mitigation of impacts of new development on school facilities.

### Parks and Open Space

Goal POS 1 Provide ample, diverse, safe, affordable and accessible parks, open spaces, and recreation facilities and programs to meet the current and future needs of Davis' various age and interest groups and to promote a sense of community, pride, family and cross-age interaction.

Policy POS 1.2 Provide informal areas for people of all ages to interact with natural landscapes, and preserve open space between urban and agricultural uses to provide a physical and visual edge to the City.

Policy POS 1.7 Use all available mechanisms for preservation of open space.

Goal POS 2 Develop an Urban Agricultural Transition Area around Davis, as shown on the Land Use Map in the Land Use and Growth Management Chapter and according to the concepts illustrated in Figure 32 [of the City's General Plan].

Policy POS 2.1 Develop the Urban Agricultural Transition Area to have segments which vary in overall size and configuration, level of development, and type of intended activity.

Goal POS 3 Identify and develop linkages, corridors and other connectors to provide an aesthetically pleasing and functional network of parks, open space areas, greenbelts and bike paths throughout the City.

Policy POS 3.1 Require creation of neighborhood greenbelts by project developers in all residential projects, in accordance with Policy LU A.5.

Policy POS 3.2 Develop a system of greenbelts and accessways in new non-residential development areas.

Goal POS 4 Distribute parks, open spaces and recreation programs and facilities throughout the City.

Policy POS 4.1 Preserve existing parks, greenbelts and open space areas.

Policy POS 4.2 Construct new parks and recreation facilities.

Goal POS 5 Respect natural habitat areas and agricultural land in planning and maintaining the City's park system.



---

Policy POS 5.1	Protect and retain wildlife habitat, agricultural land and open space when planning and maintaining City park lands.
Goal POS 6	Encourage local organizations, the Davis Joint Unified School District, UC Davis, and the private sector to provide, develop and maintain needed parks, open space, recreation facilities, programs, activities and special events to the greatest extent possible.
Policy POS 6.1	Give local organizations, the School District, UC Davis, and the private sector opportunities and support for devising and implementing creative solutions for meeting recreation program and facility needs.
Policy POS 6.2	Require dedication of land and/or payment of an in-lieu fee for park and recreational purposes as a condition of approval for subdivisions, as allowed by the Quimby Act (Government Code 66477).

### Land Use and Growth Management Chapter

Policy LU A.5	Require neighborhood greenbelts in all new residential development areas. Require that a minimum of 10 percent of newly-developing residential land be designated for use as open space primarily for neighborhood greenbelts.
---------------	--

### Water

Goal WATER 1	Minimize increases in water use. Reduce per capita water consumption by 20 percent as compared to historic use through programs encouraging water conservation.
Policy WATER 1.1	Give priority to demand reduction and conservation over additional water resource development.
Policy WATER 1.2	Require water conserving landscaping.
Policy WATER 1.3	Do not approve future development within the City unless an adequate supply of quality water is available or will be developed prior to occupancy.
Goal WATER 5	Remain within the capacity of the City wastewater treatment plant.
Policy WATER 5.1	Evaluate the wastewater production of new large scale development prior to approval to ensure that it will fall within the capacity of the plant.
Policy WATER 5.2	Provided that the existing plant capacity is not exceeded, require new large scale development to pay



its fair share of the cost of extending sewer service to the site.

### Materials, Solid Waste and Recycling

Goal MAT 1 Enhance the quality of the environment by conserving resources and minimizing waste by reducing, reusing, recycling, and re-buying.

Policy MAT 1.1 Promote reduced consumption of non-renewable resources.

Goal MAT 2 Provide adequate waste disposal capacity for Davis.

Policy MAT 2.1 Plan for the long-term waste disposal needs of Davis.

### **Davis Municipal Code**

The Davis Municipal Code ordinances related to public services and utilities that are applicable to the proposed project are presented below.

#### Davis Municipal Code Section 8.01.010, Adoption by Reference of the California Building Standards Code

The current standards set forth by the CBSC (CCR Title 24, Part 9), including, but not limited to, the CBC (CCR Title 24, Part 2) and CFC (CCR Title 24, Part 9), and CALGreen Code (CCR Title 24, Part 11) are adopted by reference through Davis Municipal Code Section 8.01.010. The CBC and CFC address roofing materials, automatic sprinkler systems, emergency access, access gates, sprinkler systems, fire alarms within buildings, and construction of access roads to accommodate fire apparatus. The CFC requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new one- and two-family dwellings. The CALGreen standards regulate the method of use, properties, performance, types of materials used in construction, alteration repair, improvement and rehabilitation of a structure or improvement to property.

#### Davis Municipal Code Section 36.08.040, Parkland Dedication

The City's standard for the provision of parkland acreage by new developments is codified in Davis Municipal Code Section 36.08.040. The standard requires dedication of 0.0131-acre of parkland per dwelling unit. Based on the proposed project's 175 total dwelling units, the project would be required to provide approximately 2.29 acres of parkland. Fees may be approved in lieu of parkland dedication.

#### Davis Municipal Code Article 38.01, Underground Utility Districts

Davis Municipal Code Article 38.01 requires that if underground construction is necessary to provide utility service within an area where poles, overhead wires, and associated overhead structures are prohibited, the supplying utility must furnish that portion of the conduits, conductors, and associated equipment required, consistent with the requirements established by the California Public Utilities Commission. Underground construction must occur in accordance with established construction standards and completed in such time to allow for the removal of overhead facilities deemed to be a risk to public health and safety.





### Davis Municipal Code Article 40.42, Water Efficient Landscaping

The purpose of the landscaping standards set forth by Davis Municipal Code Article 40.42 is to comply with the Water Conservation in Landscaping Act of 2006, Government Code Sections 65591 et. seq. and to establish standards and procedures that promote the design, installation, and management of water-efficient landscaping. Article 40.42 applies to residential projects with developer-installed and homeowner-provided landscaping, non-residential projects and public agency projects, existing landscaping, and cemeteries.

### Davis Municipal Code Chapter 32 Management of Solid Waste

Davis Municipal Code Article 32.01 contains various requirements and standards for existing and new developments related to solid waste, including specific regulations for waste collection service in individually serviced residences, commercial businesses, and other generators, including multi-family residences. Additionally, Article 32.04 of the Municipal Code establishes requirements for the diversion of construction and demolition debris, which includes requiring construction projects to provide proof of diversions.

### **City of Davis 2020 Urban Water Management Plan**

In June 2021, the City of Davis prepared the UWMP to address current and future water demands and supplies, as required by the Urban Water Management Planning Act of 1983. The UWMP also discusses the conservation and efficient use of water in the City's service area, and the development and implementation of plans to assure reliable water service in the future. The UWMP contains projections for future water use, discusses the reliability of the City's water supply, describes the City's water treatment system, and contains a water shortage contingency plan. The UWMP also contains demand management measures to reduce water demands.

### **Parks and Recreation Facilities Master Plan Update**

In general, a parks and facilities master plan provides an overall framework to guide the dedication of parks, recreation and related services in the community. In 2007, the City began the process of updating its 1998 Parks and Facilities Master Plan, but was stalled until resuming efforts to complete the update in 2010. The City's Parks and Facilities Master Plan Update was adopted by the City in 2012, and includes a 10-year plan and funding strategy that prioritizes parks and recreation capital projects determined to be necessary to maintain existing amenities, responds to community requests for enhanced opportunities, and provides for expanded facilities as the City's population grows.

## **4.5.4 IMPACTS AND MITIGATION MEASURES**

The section below describes the standards of significance and methodology used to analyze and determine the proposed project's potential project-specific impacts related to public services and utilities. In addition, a discussion of the project's impacts, as well as mitigation measures, where necessary, is also presented.

### **Standards of Significance**

In accordance with Appendix G of the CEQA Guidelines, impact determinations regarding public services and utilities require consideration as to whether the proposed project would:

- 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:

- Fire protection;
- Police protection;
- Schools;
- Parks;
- Other public facilities;
- 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;
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment;
- 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;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- 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; or
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Impacts related to groundwater and storm drainage facilities are addressed in Chapter 4.7, Other Effects, of this SEIR.

### **Method of Analysis**

The analysis of this SEIR is focused generally on the changes in circumstances following the City's certification of the 2009 EIR, pursuant to CEQA Guidelines Section 15162. The analysis of this chapter is based on the 2009 EIR, the WSA prepared for the City of Davis that includes the proposed project, the Water Study and Sewer Study prepared for the currently proposed project by Cunningham Engineering, and the technical memorandums prepared by West Yost that include evaluations of the City's ability to provide water and wastewater services to cumulative development.

As discussed throughout this SEIR, the environmental baseline for this SEIR is appropriately considered to be the approved Wildhorse Ranch Project, which included a 191-unit residential development comprised of 73 detached single-family residences and 78 two- and three-story single-family townhomes on 11.95 acres, as well as 40 attached affordable housing units on 1.92 acres. In addition, the Wildhorse Ranch Project included the dedication of 2.26 acres of additional agricultural buffer, 1.61 acres of interior greenbelt, and 4.4 acres of interior open space.

Below are descriptions of the methodologies used in the Water Study (see Appendix F of this SEIR) and Sewer Study (see Appendix G of this SEIR) to utilities and service systems



associated with the currently proposed project. The results of the impact analyses were compared to the standards of significance discussed above in order to determine the associated level of impact.

### Water Study

The Water Study prepared for the proposed project evaluated the water demand and supply associated with the proposed project using the unit demand factors identified in Table 4.5-4 below to represent the average day demand for the proposed project.

<b>Table 4.5-4 2023 Unit Water Demand Factors</b>		
<b>Type of Use</b>	<b>Unit Water Demands</b>	<b>Unit of Measure</b>
Single Family Residential	345	Gallons per Dwelling Unit per Day
Multiple Family Residential	174	Gallons per Dwelling Unit per Day
Commercial/Institutional/Industrial	2,400	Gallons per Acre per Day
Landscape	2,712	Gallons per Acre per Day
<i>Source: Cunningham Engineering, 2024.</i>		

The water demands are significantly lower than the values used by the City in former years, due to the increased use of high-efficiency water fixtures compliant with current standards. The proposed unit demand factors identified above represent the Average Day Demand for the proposed project. The maximum day peaking factor is 1.81, and the peak-hour peaking factor is 1.8, in accordance with the City of Davis Public Works Design Standards. Assuming that the proposed landscaping within the development is served by the City of Davis water system, the Water Study determined the potable water demands of the proposed project, which are detailed further under Impact 4.5-6 below.

### Sewer Study

The Sewer Study prepared for the proposed project evaluated the wastewater unit demand factors and the wastewater generation associated with the proposed project, as well as the capacity of wastewater conveyance infrastructure. The City of Davis average day sewer generation rates for residential, recreation, office, and retail are based on 1991 typical usage rates within the City, which are summarized in Table 4.5-5 below.

<b>Table 4.5-5 City of Davis, 1991, Unit Wastewater Demand Factors</b>		
<b>Type of Use</b>	<b>Design Flow (gallons)</b>	<b>Unit of Measure</b>
Single Family Residential	330	Gallons per Dwelling Unit per Day
Cottages	230	Gallons per Dwelling Unit per Day
Multi-Family Residential	230	Gallons per Dwelling Unit per Day
Pentathlon/Aquatic Center	55	Gallons per Member
<i>Source: Cunningham Engineering, 2024.</i>		

The proposed project would include water-efficient fixtures and water-conservation methods in accordance with the most current CALGreen standards, as adopted by the City of Davis. The project does not anticipate any high-use facilities or functions that would generate a large amount of wastewater. Therefore, according to the Sewer Study, a 20 percent reduction was used for the sewer generation rates, as presented in Table 4.5-6 below.



Type of Use	Design Flow (gallons)	Unit of Measure
Single Family Residential	264	Gallons per Dwelling Unit per Day
Cottages	185	Gallons per Dwelling Unit per Day
Multi-Family Residential	185	Gallons per Dwelling Unit per Day
Pentathlon/Aquatic Center	44	Gallons per Employee

*Source: Cunningham Engineering, 2024.*

**Project-Specific Impacts and Mitigation Measures**

The following discussion of impacts related to public services and utilities is based on implementation of the proposed project in comparison with the baseline and the standards of significance presented above.

**4.5-1 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. Based on the analysis below, and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The relevant CEQA threshold concerning public services, and in this case, those services related to fire protection, is whether new or physically altered stations are needed to meet response times or other performance objectives, the construction of which could cause environmental impacts. The 2009 EIR evaluated potential impacts associated with an increased demand for fire protection services under Impact 4.9-4 and identified a significant and unavoidable impact. As discussed therein, the project site was identified as being located outside the DFD’s response time area. According to the 2009 EIR, fire response times to the eastern portion of the City would have remained deficient until construction of an additional fire station to serve the northwestern portion of the City. The 2009 EIR included Mitigation Measure 4.9-4, which required contribution of funds to the DFD, but noted that the Davis City Council, as part of certification of the General Plan EIR, had previously determined that feasible mitigation measures did not exist to reduce the potential impact to a less-than-significant level. While Mitigation Measure 4.9-4 required the Wildhorse Ranch Project to contribute funding towards the provision of needed fire facilities, which could include a fourth fire station, the balance of needed funding was not guaranteed. Thus, the impact was found to remain significant and unavoidable.

With respect to the currently proposed project, the nearest DFD station to the project site is Station 33, located approximately 1.4 miles southeast of the project site. As shown in Figure 4.5-1, the project site is located outside of the DFD’s four-minute drive time zone. Thus, the DFD may not currently meet the NFPA 1710 response



time standard when responding to fire events at the project site. However, a fourth fire station site is included in two development proposals along the East Covell Boulevard corridor: the Village Farms Davis Project, located less than a mile to the west of the Palomino Place Project site, and the Shriners Property Project, located adjacent to the east of the Palomino Place Project site. Construction of the new fire station is anticipated to occur at one of the foregoing development sites (if approved by the City Council and voters) and would allow the DFD to respond to fire and emergency medical events at the project site within the NFPA 1710 response time standard. It should be noted that the potential environmental impacts of the fire station construction will be analyzed within the associated EIRs being prepared for each project.

The proposed Palomino structures, including the proposed residences and USA Pentathlon Training Facility and pool complex, would be constructed in accordance with Davis Municipal Code Section 13.01.010 and all applicable provisions of the CFC. Consistent with the CFC, the proposed project would include features, such as fire sprinklers and smoke alarms to reduce potential fire hazards. Such features would reduce the potential for fires to occur and spread within the proposed structures, thereby reducing the demand for fire protection services associated with the proposed project to the maximum extent feasible.

The Wildhorse Ranch Project included up to 191 residential units, whereas the currently proposed project would result in up to 175 new residential units, a net reduction of 16 residential units. Although the proposed project, unlike the Wildhorse Ranch Project, is anticipated to include future construction of a USA Pentathlon Training Facility and pool complex, as previously discussed, the foregoing facilities would be constructed in accordance with applicable CFC standards, ensuring the potential for fires within the structures are reduced. Therefore, the currently proposed project would not result in substantial new demand for DFD services beyond what was anticipated for the City-approved Wildhorse Ranch Project.

Since certification of the 2009 EIR, the City has adopted a public safety development impact fee that collects monies from new development projects to help fund needed fire protection facilities and services. Notwithstanding, because a fourth fire station is not included in the City's current Capital Improvement Program (CIP), payment of the City's public safety development impact fee would not collect the project's fair share toward construction of a fourth fire station. As a result, in addition to the citywide public safety development impact fee, the proposed project would also be required to implement Mitigation Measure 4.9-4 of the 2009 EIR, which will specifically ensure that the project pays a fair share toward a fourth fire station.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to new or expanded fire protection facilities, the construction of which could cause significant environmental impacts, beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

The following mitigation measure would be applicable to the proposed project. While implementation of Mitigation Measure 4.9-4 would require the applicant to provide a



fair share payment toward construction of a fourth fire station, the mitigation measure would not result in the actual construction of a fourth fire station, as that is dependent on additional factors, such as collection of the balance of needed funds and voter approval of other pending projects along East Covell Boulevard. Thus, even with payment of the City's public safety development impact fee, alone, similar to the 2009 EIR, the impact would remain *significant and unavoidable*.

- 4.9-4 *Prior to the issuance of building permits, the applicant shall contribute funds to the Davis Fire Department for the provision of facilities needed to provide adequate fire protection service to the proposed project. These facilities may include but are not necessarily limited to a fourth City fire station and a ladder truck. The amount of funding shall be determined by the Community Development Director and the Davis Fire Chief.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**4.5-2 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. Based on the analysis below, and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts associated with increased demand for DPD services under Impact 4.9-5 and identified a significant impact. As discussed therein, the Wildhorse Ranch Project was anticipated to result in a potential population increase of 474 residents, which would have resulted in the need for an additional 0.57 officers. The DPD had indicated the department had inadequate resources to meet its then-current obligations. Thus, the 2009 EIR required Mitigation Measure 4.9-5, which necessitated contribution of funds to the DPD to provide additional staffing. With implementation of Mitigation Measure 4.9-5, the 2009 EIR concluded that the potential impact would be reduced to a less-than-significant level.

The currently proposed project would similarly result in an increase in the demand for DPD services. Using the 2.57 persons/household average household size for the City of Davis as noted in the City's Housing Element, the proposed 175 residential units would generate an estimated 450 new residents. While such an amount would





increase the demand for DPD services, the currently proposed project would not be anticipated to result in new demand for DPD services beyond what was anticipated for the City-approved Wildhorse Ranch Project. In addition, the proposed project would be designed in accordance with the City's minimum security building standards, established by Davis Municipal Code Article 8.14, including various minimum security requirements for new single- and multi-family residences, which are reviewed by the City as part of the construction documents. More specifically, Davis Municipal Code Section 8.14.050 includes security features for all residential buildings and requires all single-family residences to display a street number in a prominent location to aid approaching emergency vehicles. Features required for multi-family dwellings include self-locking devices on exterior doors, proper unit identification, properly secured garages, and lighting standards for common areas. For non-residential structures, required features include similar construction and locking requirements for exterior doors as required for residential buildings, and the use of burglar resistant glass. Davis Municipal Code Article 8.14 also includes regulations to ensure that proper lighting is provided in stairwells, walkways, and parking lots. The inclusion of the aforementioned design features would increase security at the project site, thereby minimizing security risks and reducing the project's demand for police services.

Since certification of the 2009 EIR, the City has adopted a public safety development impact fee that collects monies from new development projects to help fund needed police protection facilities and services. The project would be required to pay the City's public safety development impact fee.

With respect to Mitigation Measure 4.9-5 of the 2009 EIR, the mitigation measure required the Wildhorse Ranch Project to contribute funds to the DPD for an additional 0.57 officer. As the courts have made clear since certification of the 2009 EIR, funding for needed public services is not a CEQA impact.<sup>27</sup> Rather, for public services, the focus of CEQA analysis should be limited to physical environmental impacts related to the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives. Therefore, it is appropriate not to require Mitigation Measure 4.9-5 for the currently proposed project, and, as previously stated, the project's payment of the City's public safety development impact fee would nevertheless constitute the project's fair share towards police protection services.

In addition, the DPD is located at 2600 Fifth Street, approximately 0.84-mile south of the project site and new or expanded facilities are not needed for the DPD to adequately serve the project.

---

<sup>27</sup> First District Court of Appeal. *City of Hayward v. Board of Trustees of the California State University*. (November 30, 2015) 242 Cal.App.4th 833. The First District Court of Appeal affirmed that "[t]he need for additional fire protection services is not an environmental impact that CEQA requires a Project Proponent to mitigate." As such, the creation of additional demand for DPD police protection services as part of the proposed project would not constitute an impact on the environment, as established by the CEQA Guidelines.



Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to new or expanded police protection facilities, the construction of which could result in environmental impacts, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

The 2009 EIR included Mitigation Measure 4.9-5, which required the Wildhorse Ranch Project to contribute funds to the DPD for an additional 0.57 officer. Since certification of the 2009 EIR, the courts have made clear that the focus of CEQA analysis should be limited to physical environmental impacts. In addition, the project's payment of the City's public safety development impact fee would constitute the project's fair share towards police protection services. Therefore, Mitigation Measure 4.9-5 of the 2009 EIR would not be applicable to the currently proposed project.

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**4.5-3 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for schools. Based on the analysis below, and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts associated with an increased demand for school resources under Impact 4.9-6. As discussed therein, the Wildhorse Ranch Project was anticipated to generate 132 additional students within the DJUSD. While the DJUSD had sufficient capacity to meet the additional demand generated by the Wildhorse Ranch Project, the 2009 EIR required Mitigation Measure 4.9-6 to ensure payment of school development impact fees. With incorporation of Mitigation Measure 4.9-6, the 2009 EIR concluded that the potential impact would be reduced to a less-than-significant level.

The currently proposed project is located within the boundaries of DJUSD District 2, which is provided elementary school service by Birch Lane Elementary School, located 0.66-mile to the west of the site; Oliver Wendell Holmes Junior High, located approximately 1.3 miles southwest of the site; and Davis Senior High School, approximately two miles west of the site. The increase in population of 450 new residents generated by the proposed project would also include an increase in student population and an associated increase in demand for schools. Using the



2009 EIR's student-generation rate of 0.69 students per single-family residence, the proposed cottages, half-plex townhomes, and single-family residences would be anticipated to result in approximately 90 new students. Because the 2009 EIR did not include multi-family student-generation rates, the 0.44 yield rate for multi-family housing from Table 5C-6 in the City's General Plan EIR was used, which would result in a total of 20 new students (45 multi-family apartments x 0.44 students). Overall, the proposed project could result in as many as 110 new students that would be served by the DJUSD, which would be less than the 132 new students anticipated to be generated by the Wildhorse Ranch Project.

As previously discussed, the overall DJUSD declining enrollment rate in combination with the consistent acceptance of IDT students has resulted in available DJUSD capacity for accepting new students. In addition, Davis voters' renewal of the Measure N parcel tax ensures an existing parcel tax of \$768 per year and totaling approximately \$11.7 million per year is available to help fund DJUSD facilities and services. Future residents of the proposed project would be subject to the Measure N tax and contribute to the funding of DJUSD schools. Furthermore, as necessitated by Mitigation Measure 4.9-6 of the 2009 EIR, the proposed project would be subject to the DJUSD developer fees, which are currently maintained at \$2.97 per sf for all residential construction and \$0.47 per sf for commercial development. Payment of such fees would satisfy the requirements set forth by Proposition 1A/SB 50. Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." Therefore, payment of the necessary DJUSD developer fees by the project applicant would be full and satisfactory CEQA mitigation.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to new or expanded school facilities, the construction of which could result in environmental impacts, beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

#### Modified Mitigation Measure(s)

Mitigation Measure 4.9-6 from the 2009 EIR has been modified to clarify the current statutory requirements to which the proposed project would be subject. Modifications are shown in ~~striketrough~~ and double-underline below. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- 4.9-6                      *Prior to the issuance of building permits, the applicant shall show proof to the Community Development Department of payment of current Proposition 1A/SB50 and ~~AB-16~~ school impacts fees.*

#### New Mitigation Measure(s)

*None required.*



**4.5-4 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for parks, or other public facilities; or result in an increase in 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, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Based on the analysis below, and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

Potential impacts related to the provision of new or physically altered parks or other public facilities, the construction of which could result in environmental impacts, are discussed further below.

Parks

The 2009 EIR evaluated potential impacts associated with an increased demand for park and recreation services and facilities under Impact 4.9-8. As discussed therein, the anticipated population increase of 474 residents associated with the Wildhorse Ranch Project would not have generated sufficient demand to require additional park facilities. In addition, the project site was within proximity to existing community and neighborhood parks to meet the standards set forth in the City's General Plan that necessitate all dwelling units should be within 1.5 miles to a community park and three-eighths of a mile to a neighborhood park. Nonetheless, to ensure that the Wildhorse Ranch Project satisfied payment of in-lieu parkland dedication fees consistent with the Quimby Act, the 2009 EIR required Mitigation Measure 4.9-8, which necessitated payment of in-lieu fees. The 2009 EIR concluded that Mitigation Measure 4.9-8 would reduce the identified significant impact to a less-than-significant level.

Unlike the Wildhorse Ranch Project, the currently proposed project would include a USA Pentathlon Training Facility, pool complex, and obstacle course. The proposed USA Pentathlon Training Facility would serve to aggregate the training equipment and facilities in a single location. In addition, the pool complex would be available to pentathletes and local swim organizations, and would include privately owned, community programming for all ages, including youth groups, senior-focused groups, and recreational and competitive swimming programs. The proposed obstacle course, which would include a series of structures for the obstacle training, would be located in the adjacent Wildhorse Agricultural Buffer. Development of the foregoing facilities would serve to aggregate training equipment and facilities that currently



occur in two to three separate locations within the City. As such, the proposed project would free up availability at existing facilities elsewhere in the City, and the project would not exacerbate the use of existing recreational facilities elsewhere in the City such that substantial physical deterioration of the City's existing facilities would occur or be accelerated. In addition, all potential physical environmental impacts that could result from development of the proposed project, including the proposed on- and off-site recreational facilities, have been evaluated throughout the technical chapters of this SEIR.

The project site continues to meet the standards set forth in the City's General Plan that necessitate all dwelling units should be within 1.5 miles to a community park and three-eighths of a mile to a neighborhood park. In addition, the proposed project would generate approximately 450 new residents, which would be less than the 474 residents anticipated to be generated by the Wildhorse Ranch Project. As such, the currently proposed project would not result in new demand for park services beyond what was anticipated for the City-approved Wildhorse Ranch Project.

Based on the parkland provision requirements established by Davis Municipal Code Section 36.08.040, the proposed project would be required to provide approximately 2.29 acres of parkland on-site (0.0131 acres x 175 proposed units). While the proposed project would include approximately 3.22 acres of interior open space and trails, the foregoing acreage would not constitute parkland, pursuant to the City's requirements. However, in cases where parkland is not dedicated, Section 36.08.040 of the Davis Municipal Code allows for payment of in-lieu fees. Payment of all applicable fees, including the parkland in-lieu fee, would ensure the proposed project complies with Davis Municipal Code Section 36.08.040. Thus, the proposed project would be subject to Mitigation Measure 4.9-8.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to new or expanded park facilities, the construction of which could result in environmental impacts, beyond what was previously identified in the 2009 EIR.

#### Other Public Facilities

The 2009 EIR did not specifically evaluate potential impacts to other public facilities. With respect to the currently proposed project, residents of the proposed project would have access to the South Davis Montgomery Library, located at 1441 Danbury Street, approximately 1.58 miles south of the project site, and the Mary L. Stephens Davis Branch Library, located at 315 East 14<sup>th</sup> Street, approximately 1.76 miles west of the project site. In addition, the Yolo County Library is actively planning a new Davis branch library known as the Walnut Park Library approximately 1.6 miles south of the project site at 2700 Lillard Drive.

While the proposed project's estimated 450 residents could result in increased demand for services offered by the Yolo County Library, future residents of the project would be subject to the County property taxes. Pursuant to Chapter 14, County Facilities Authorization and Fee, in Title 3, Finance, of the Yolo County Code, the tax is imposed on residential projects and commercial improvements within the County. Revenues generated by Yolo County property taxes, are used for



countywide library programs and operations. Payment of annual property taxes would ensure the proposed project does not result in a new significant impact related to new or physically altered library facilities, the construction of which would result in environmental impacts, beyond what was identified in the 2009 EIR.

### Conclusion

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to new or expanded parks and/or other public facilities, the construction of which could result in environmental impacts; increases in the use of existing recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or adverse physical effect on the environment associated with new or expanded recreational facilities, beyond what was previously identified in the 2009 EIR.

### Applicable Mitigation Measure(s) from the 2009 EIR

Implementation of the following mitigation measure from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

4.9-8                      *Prior to the issuance of building permits, the applicant shall pay in-lieu Quimby fees for required park acreage.*

### Modified Mitigation Measure(s)

*None required.*

### New Mitigation Measure(s)

*None required.*

**4.5-5      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. Based on the analysis below, and with implementation of mitigation, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The following discussions evaluate the potential for the proposed water, wastewater, electric power, natural gas, and telecommunication improvements to result in significant environmental effects.

### Water Conveyance Infrastructure

The 2009 EIR evaluated the ability of the City's water conveyance facilities to meet project water demands under Impact 4.9-1 and concluded that a significant impact would occur. As discussed therein, the City's goal is to provide adequate system capacity to meet flow requirements necessary for responding to a major fire occurring simultaneously during periods of maximum consumption demand;





however, the 2009 EIR found that if the largest capacity well typically used for meeting demand was offline, a major fire occurring during peak demand periods would result in system fire flow pressure below the City's minimum pressure standard. The 2009 EIR anticipated that the City would complete various water supply system capacity improvements by 2011. Such improvements included the completion of the East Area Tank, the East Area Main Upsize, and the West Area Main Upsize. When completed, the 2009 EIR determined that the improvements would provide adequate system capacity under post-project conditions to meet flow requirements necessary for the DFD to respond to a major fire occurring simultaneously during periods of maximum consumption demand without system fire flow pressure falling below the City's minimum pressure standard. To address the identified significant impact, the 2009 EIR required Mitigation Measures 4.9-1(a) and 4.9-1(b), which necessitated inclusion of the foregoing improvements in the City's Capital Improvement Plan and required that the Wildhorse Ranch Project ensure a fair-share contribution is made towards the improvements, respectively. The 2009 EIR concluded that Mitigation Measures 4.9-1(a) and 4.9-1(b) would reduce the potential impact to a less-than-significant level. It should be noted that two of the improvements identified by the 2009 EIR, the East Area Tank and East Area Main Upsize, were completed in 2010. The East Area Tank is a water tank located at 44085 County Road 32A with a four-million-gallon capacity. The East Area Main Upsize project was constructed concurrently with the East Area Tank.

With respect to the currently proposed project, water service would be provided by the City of Davis. From the existing eight-inch water line in Caravaggio Drive west of the project site, new eight-inch water lines would be installed and extended into the project site within the new on-site internal streets. From the new water lines, water service would be provided to each structure through new water laterals. Using the methodology described above in the Method of Analysis section, the Water Study determined that the proposed project would result in an average day demand of 53,025 gpd, as summarized in Table 4.5-7.

Installation of the new water supply infrastructure, including new fire water lines and hydrants, would occur either in existing road right-of-way (ROW) or in areas proposed for disturbance as part of development of the proposed project. All potential physical environmental impacts that could result from development of the proposed project, including the new water distribution infrastructure, have been evaluated throughout the technical chapters of this SEIR. In addition, all new water infrastructure would be designed consistent with the applicable standards established by the City of Davis Public Works Department Standard Specifications.

As previously discussed, the Wildhorse Ranch Project included up to 191 residential units, whereas the currently proposed project would result in 175 new residential units, a net reduction of 16 residential units. While the proposed project, unlike the Wildhorse Ranch Project, includes future construction of the USA Pentathlon Training Facility and pool complex, none of the foregoing components would require installation of water supply infrastructure to serve the proposed structures that would be substantially different from what was anticipated as part of the Wildhorse Ranch Project. Nonetheless, the Water Study concluded that a future study would be required to further refine the proposed water line sizes throughout the project site in order to meet domestic and fire flow demands. Therefore, the proposed project



would be subject to new Mitigation Measure SEIR 4.5-5, which would ensure that the potential impact is less than significant. The proposed project would not require improvements to the City’s existing off-site water distribution system.<sup>28</sup> Thus, the project would not be subject to 2009 EIR Mitigation Measure 4.9-1(a). Similarly, because the East Area Tank and East Area Main Upsize have already been completed and water service to the proposed project would not affect the level of water service in the western portion of the City limits, the proposed project would not be subject to 2009 EIR Mitigation Measure 4.9-1(b).

<b>Table 4.5-7 Potable Water Demand</b>				
<b>Land Use</b>	<b>Acres</b>	<b>Average Day Demand (gpd)</b>	<b>Maximum Day Demand (gpd)</b>	<b>Peak Hour Demand (gpd)</b>
Cottages	0.97	6,600	11,880	21,384
Half-Plex Units	2.53	10,000	18,000	32,400
Single-Family Residences – Medium	3.58	10,700	19,260	34,668
Single-Family Residences – Large	7.27	17,600	31,680	57,024
Ranch Home	0.48	300	540	972
Multi-Family Apartments	0.72	7,800	14,040	25,272
USA Pentathlon Training Facility	1.40	4,400	7,920	14,256
Internal Streets	5.42	-	-	-
East Covell Boulevard Right-of-Way Dedication	0.46	-	-	-
Open Space	2.76	7,500	13,500	24,300
Trail Connections	0.46	1,200	2,160	3,888
<b>Total</b>	<b>25.8</b>	<b>65,500</b>	<b>117,900</b>	<b>212,220</b>
<i>Source: Cunningham Engineering, 2024.</i>				

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects, beyond what was previously identified in the 2009 EIR.

Wastewater Conveyance Infrastructure

The 2009 EIR evaluated potential impacts related to wastewater conveyance to the project site under Impact 4.9-3 and concluded a significant impact would occur. As discussed therein, the following four preliminary options were identified for establishing sewer service:

<sup>28</sup> Gryczko, Stan, Director of Public Works, City of Davis. Personal communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. May 3, 2024.



1. A gravity system connecting to the existing Wildhorse neighborhood sewer system;
2. A gravity drain connecting to the existing 42-inch trunk sewer north of the Wildhorse Golf Course;
3. Construction of an on-site central lift station and force main to the 42-inch trunk sewer north of the Wildhorse Golf Course; and
4. Construction of a gravity sewer system to an existing line in Monarch Lane.

Options 2 and 4 above were identified as the preferred options; however, the 2009 EIR concluded that additional information would be needed to determine the feasibility of the two options. Thus, Mitigation Measure 4.9-3 was required, which necessitated a design-level wastewater report associated with the Wildhorse Ranch Project. The 2009 EIR determined that Mitigation Measure 4.9-3 would reduce the potential impact to a less-than-significant level.

The currently proposed sewer infrastructure improvements would include approximately 2,270 lineal feet of 12-inch pipe extending off-site north to the existing 42-inch trunk main north of the Wildhorse Golf Course, as well as new eight-inch sewer lines that would be extended within the internal streets. From the eight-inch sewer lines, sewer conveyance would be provided to each structure through new sewer laterals. Using the methodology described above in the Method of Analysis section, the Sewer Study determined that the proposed project would result in a daily ADWF of approximately 43,300 gpd and a daily peak wet-weather flow (PWPF) of approximately 157,600 gpd, as summarized in Table 4.5-8.

<b>Table 4.5-8 Daily Peak Wet Weather Flows (gpd)</b>				
<b>Land Use</b>	<b>Acres</b>	<b>Daily Average Dry Weather Flows</b>	<b>Infiltration and Inflow Allowance</b>	<b>Daily Peak Wet Weather Flows</b>
Cottages	0.97	3,500	600	13,200
Half-Plex Units	2.53	7,700	1,500	27,200
Single-Family Residences – Medium	3.53	8,200	2,100	29,300
Single-Family Residences – Large	7.16	13,500	4,300	47,100
Ranch Home	0.48	300	300	1,700
Multi-Family Apartments	0.72	8,300	400	27,900
USA Pentathlon Training Facility	1.40	1,800	800	7,700
Internal Streets	5.33	-	3,200	3,200
East Covell Boulevard Right-of-Way Dedication	0.41	-	-	-
Open Space	2.76	-	-	-
Trail Connections	0.46	-	300	300
<b>Total</b>	<b>25.75</b>	<b>43,300</b>	<b>13,500</b>	<b>157,600</b>

*Source: Cunningham Engineering, 2024.*

All potential physical environmental impacts that could result from development of the proposed project, including new on- and off-site sewer infrastructure, have been



evaluated throughout the technical chapters of this SEIR. In addition, the new sewer infrastructure would be designed and constructed in accordance with the applicable standards set forth in the City of Davis Public Works Design Standards, ensuring the new sewer lines and pump station are constructed in conformance with proper materials and sizing. All necessary sewer conveyance infrastructure for the proposed project would be financed by the project applicant. Nonetheless, the Sewer Study concluded that a future study would be required to further refine the proposed sewer line sizes throughout the project site in order to meet peak flows. Therefore, the proposed project would be subject to Mitigation Measure 4.9-3 from the 2009 EIR, which would ensure that the potential impact is less than significant.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to the relocation or construction of new or expanded sewer facilities, the construction or relocation of which could cause significant environmental effects, beyond what was previously identified in the 2009 EIR.

#### Electricity, Natural Gas, and Telecommunications Infrastructure

The 2009 EIR evaluated potential impacts to gas and electric facilities under Impact 4.9-9 and concluded that a less-than-significant impact would occur. As discussed therein, adequate capacity was available to accommodate the Wildhorse Ranch Project, which would have included the necessary infrastructure to connect to existing systems.

With respect to the currently proposed project, the project would connect to existing electricity and telecommunications infrastructure located in the project vicinity. It should be noted that the proposed residences would be all-electric and, thus, would not connect to existing natural gas infrastructure. Given that the project site currently contains former residential structures and is surrounded by existing development, the proposed project would not require major infrastructure improvements related to existing electrical and telecommunications utilities beyond the necessary infrastructure to connect to existing systems. The new connections to existing electricity, natural gas, and telecommunications infrastructure would be installed consistent with Davis Municipal Code Article 38.01, ensuring that the new infrastructure is installed underground in accordance with established construction standards, as well as with the rules and regulations authorized by the State Public Utilities Commission. Although the currently proposed project, unlike the Wildhorse Ranch Project, would include the USA Pentathlon Training Facility and pool complex, such facilities would not require substantially different electrical and telecommunication infrastructure connections from what would have been necessary as part of development of the Wildhorse Ranch Project.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to the relocation or construction of new or expanded electricity, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects, beyond what was previously identified in the 2009 EIR.



### Conclusion

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to the relocation or construction of new or expanded water, sewer, electricity, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects, beyond what was previously identified in the 2009 EIR.

### Applicable Mitigation Measure(s) from the 2009 EIR

The 2009 EIR included Mitigation Measures 4.9-1(a), which required the inclusion of various water system improvements in the City's Capital Improvement Plan. Such improvements included the completion of the East Area Tank, the East Area Main Upsize, and the West Area Main Upsize to provide adequate system capacity and to meet flow requirements necessary for the DFD to respond without system fire flow pressure falling below the City's minimum pressure standard. The 2009 EIR also included Mitigation Measure 4.9-1(b), which required that the Wildhorse Ranch Project ensure a fair-share contribution was made towards the aforementioned water system improvements.

As discussed above, the currently proposed project would not require improvements to the City's existing off-site water distribution system. In addition, the East Area Tank and East Area Main Upsize have already been completed. Furthermore, water service to the proposed project would not affect the level of water service in the western portion of the City. Therefore, Mitigation Measures 4.9-1(a) and 4.9-1(b) of the 2009 EIR would not be applicable to the currently proposed project.

### Modified Mitigation Measure(s)

Mitigation Measure 4.9-3 from the 2009 EIR has been modified to adjust the timing of the improvement plan submittal. Modifications are shown in ~~striketrough~~ and double-underline below. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- 4.9-3                    ~~Prior to the approval of a tentative map~~ In conjunction with the submittal of improvement plans for the ~~Wildhorse Ranch~~ proposed project, the applicant shall submit a design-level wastewater report for the proposed project that demonstrates how the project's wastewater will be delivered to the Wastewater Treatment Plant. Included in the report shall be a determination of the capacity of downstream sewer lines and what improvements, if any, need to be constructed to accommodate and convey the project's additional wastewater, and the construction and operational costs of the options. The wastewater report shall be subject to approval by the City Engineer. The applicant shall be required to fully fund and construct the necessary wastewater improvements determined by the wastewater report.

### New Mitigation Measure(s)

Implementation of the following new mitigation measure would reduce the above potential impact to a *less-than-significant* level.





*SEIR 4.5-5 In conjunction with the submittal of improvement plans for the Palomino Place Project, the applicant shall submit a design-level water report for the proposed project that demonstrates how the project's water lines meet the City's applicable standards related to domestic water and fire flow demands, as well as how the proposed water lines will provide adequate water flows during each phase of development. The water report shall be subject to approval by the City Engineer. The applicant shall be required to fully fund and construct the necessary water improvements determined by the water report.*

**4.5-6 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts associated with water supply under Impact 4.9-2 and identified a significant impact associated with increased water demand. As discussed therein, the City's water demand was met primarily through pumping of groundwater from the Sacramento Valley Groundwater Basin, with the supply system designed to meet peak-hour demands until surface water was made available in 2020. To ensure that water demand associated with the Wildhorse Ranch Project was reduced to the extent feasible, a number of water-reduction measures were included, such as using an on-site agricultural well for landscape irrigation, installation of domestic water-saving fixtures and appliances in the proposed residences, and adoption of a "water-budget" approach landscape design. The 2009 EIR determined that the on-site water-reduction measures, in combination with planned improvements to the City's water system discussed above under Impact 4.5-5, would result in the City having sufficient supply to serve the Wildhorse Ranch Project. However, because the City's UWMP had previously determined that groundwater supplies to serve the City beyond 2020 would not be sufficient, the 2009 EIR required Mitigation Measure 4.9-2, which ensured the Wildhorse Ranch Project's payment of a fair share towards future water supply projects required by the City to meet water demand beyond 2020. The 2009 EIR concluded that Mitigation Measure 4.9-2 would reduce the potential impact to a less-than-significant level.

Subsequent to the City's certification of the 2009 EIR, surface water was made available to the City. As described in the Existing Environmental Setting section above, the City began participating in the WDCWA in 2016. The City now receives 10.2 mgd from the WDCWA in a normal year. With respect to the currently proposed project, Table 4.5-9 below summarizes the supply and demand of each water year type provided in the WSA, which includes the additional 60 AFY demand associated with the proposed project. As shown below, the City is projected to have a surplus of water supplies in all water year types through 2045. Because the proposed project is included in the City's water demand projections and the WSA identifies a surplus of





water supply through 2045, the proposed project would not be subject to Mitigation Measure 4.9-2.

<b>Table 4.5-9                      Projected Water Supply and Demand During Normal, Single Dry, and Multiple Dry Years (AFY)</b>					
	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>
<b>Normal Year</b>					
Total Supply	23,320	23,320	23,320	23,320	23,320
Total Demand	9,790	10,310	10,300	10,290	10,290
<b>Surplus</b>	<b>13,530</b>	<b>13,010</b>	<b>13,020</b>	<b>13,030</b>	<b>13,030</b>
<b>Single Dry Year</b>					
Total Supply	15,260	15,260	15,260	15,260	15,260
Total Demand	9,790	10,310	10,300	10,290	10,290
<b>Surplus</b>	<b>5,740</b>	<b>4,950</b>	<b>4,960</b>	<b>4,970</b>	<b>4,970</b>
<b>Multiple Dry Years</b>					
Total Supply	15,260	15,260	15,260	15,260	15,260
Total Demand	9,790	10,310	10,300	10,290	10,290
<b>Surplus</b>	<b>5,740</b>	<b>4,950</b>	<b>4,960</b>	<b>4,970</b>	<b>4,970</b>
<i>Source: Brown and Caldwell, April 2024.</i>					

Based on the above, the City could accommodate the proposed project’s operational water demand, and the proposed project would not result in a new significant impact or substantially more severe significant impact related to water supply beyond what were previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

The 2009 EIR included Mitigation Measure 4.9-2, which ensured the Wildhorse Ranch Project’s payment of a fair share towards future water supply projects required by the City to meet water demand beyond the 2020 horizon year. As discussed above, surface water was made available to the City in 2016, after the certification of the 2009 EIR. Because the proposed project is included in the City’s projections, which anticipated a surplus of water through 2045, the currently proposed project would not require additional mitigation to ensure sufficient water supply. Therefore, Mitigation Measure 4.9-2 of the 2009 EIR would not be applicable to the currently proposed project.

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*



**4.5-7 Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts related to the City of Davis WWTP's capacity under Impact 4.9-3. As discussed therein, the Wildhorse Ranch Project's wastewater flows were calculated to be 0.045 mgd. Based on the remaining capacity of 1.25 mgd available at the City's WWTP at the time of the 2009 EIR, the 2009 EIR found that sufficient capacity existed to serve the proposed project.

As previously discussed, using the methodology described above in the Method of Analysis section, the WWTP Capacity Memorandum determined that wastewater flows under the existing development scenario (which includes the proposed project) would be 4.2 mgd. Given that the City's WWTP has an existing ADWF capacity of 6.0 mgd, the City would have adequate capacity to serve the project's wastewater treatment demands in addition to the City's existing commitments. Furthermore, according to the Sewer Study, the ADWF flows associated with the proposed project would be approximately 0.043 mgd. Thus, the proposed project would result in less sewer flows than the flows anticipated for the Wildhorse Ranch Project.

Based on the above, the proposed project would not result in a new significant impact or substantially more severe significant impact related to the City having adequate capacity to serve the project's wastewater treatment demands in addition to the City's existing commitments beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*



**4.5-8 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, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential impacts related to increased demand for solid waste disposal and/or recycling services under Impact 4.9-7. As discussed therein, a solid waste generation rate of 3.12 pounds per person per day was used to calculate the Wildhorse Ranch Project's total daily waste of 1,479 pounds (0.00032 million cubic yards per year). Based on the remaining capacity at the Yolo County Central Landfill at the time of the 2009 EIR, the 2009 EIR concluded that a less-than-significant impact would occur.

Currently, solid waste services (collection and recycling) are provided to the City of Davis by Recology Davis. All non-recyclable wastes collected from the City continue to be disposed of at the 770-acre Yolo County Central Landfill in the northeast portion of the Davis planning area. The City does not contain any special landfill sites. According to CalRecycle, the Yolo County Central Landfill has a remaining capacity of 33,140,373 cubic yards (or 68 percent remaining capacity) and has a current anticipated closure date of 2124.<sup>29</sup>

Following development of the project site, the currently proposed project would result in a maximum building square footage of 451,500 sf. As discussed further in Chapter 3, Project Description, of this SEIR, the aforementioned square footage is a conservative estimate based on the maximum sf of the maximum number of units (2,500 sf per unit x 175 units), as well as the proposed USA Pentathlon Training Facility and pool complex. According to the U.S. Environmental Protection Agency (USEPA) report, Estimating 2003 Building-Related Construction and Demolition Materials Amounts, residential construction activities generate an average of 4.39 pounds per square foot (lbs/sf) of waste.<sup>30</sup> Therefore, applying such an amount to buildout of the proposed project would produce approximately 1,982,085 (991.04 tons) of construction waste (4.39 lbs/sf x 451,500 sf).

The construction waste estimate presented above represents a conservative analysis of the maximum potential waste production from construction of the proposed project. The CALGreen Code requires at least 65 percent diversion of construction waste for projects permitted after January 1, 2017. As such, a minimum

<sup>29</sup> California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details Yolo County Central Landfill (57-AA-0001)*. Available at: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/689?siteID=4033>. Accessed April 2024.

<sup>30</sup> U.S. Environmental Protection Agency. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*. 2009.



of 644.18 tons of waste would be diverted away from landfill disposal during construction. Considering the applicable CALGreen Code requirements, buildout of the proposed project would be anticipated to produce up to 346.86 tons of waste during construction. Construction waste generation represents a short-term increase in waste generation. Considering that the Yolo County Central Landfill has a remaining capacity of 68 percent of the total permitted capacity of the landfill, the proposed project's construction waste would represent only an incremental contribution to the waste received at the landfill, and a less-than-significant impact would occur.

With respect to project operations, the currently proposed project is anticipated to generate approximately 450 new residents. Based on the solid waste generation rate of 3.12 pounds per person per day from the 2009 EIR, the currently proposed project would generate a total of 1,404 pounds of waste per day (0.70 tons), which is less than the amount anticipated by the 2009 EIR for the Wildhorse Ranch Project. The Yolo County Central Landfill has a permitted throughput of 3,000 tons/day, and thus, would be able to accommodate the operational waste generated by the proposed project. In addition, considering that the Yolo County Central Landfill has a remaining capacity of 68 percent, the proposed project's operational waste would represent only an incremental contribution to the waste received at the landfill. Applying the 3.12 pounds per person per day metric to the proposed project also represents a conservative analysis, as current recycling and composting requirements likely result in less daily waste generation among Davis residents.

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to generation of solid waste in excess of State or local standards or the capacity of local infrastructure or impairing the attainment of solid waste reduction goals or conflict with federal, State, and local management and reduction statutes and regulations, beyond what was previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**Cumulative Impacts and Mitigation Measures**

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.



The cumulative setting for impacts related to public services and utilities encompasses buildout of the proposed project in conjunction with the development of the Davis General Plan planning area, as well as a list of present and probable future projects. For more details regarding the cumulative setting, refer to Chapter 5, Statutorily Required Sections, of this SEIR.

**4.5-9 Cumulative impacts to public services. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential long-term impacts to public services and facilities in combination with existing and future development under Impact 4.9-10. As discussed therein, the goals and policies contained within the City's General Plan ensure that sufficient public services and facilities would be available for the buildout of the planning area. The 2009 EIR concluded that future projects would be subject to the same City policies and fees as the Wildhorse Ranch Project. Other future development projects would have been required by the City to pay fair shares toward the expansion and creation of public services and facilities. Therefore, although certain facilities could have been adversely impacted as a result of the Wildhorse Ranch Project, the 2009 EIR concluded that the cumulative impact would be less than significant through incorporation of the project-specific mitigation measures identified therein.

Potential cumulative impacts associated with the currently proposed project related to fire and police protection services, schools, public services and government facilities, and parks and recreation are discussed below.

Fire Protection Services

Cumulative development, in conjunction with the proposed project, would increase the demand for fire protection services provided by the DFD. As discussed above, the required response time standard for the DFD is six minutes (with a four-minute drive time) for more than 90 percent of all incidents, consistent with the NFPA 1710 response time standard.

The City funds the DFD budget, in part, through revenues generated by the City's General Fund, which collects funds from building permits and development impact fees, and from public safety development impact fees. Similar to the proposed project, cumulative development within the City's General Plan planning area would be subject to applicable permits and fees, which would be reviewed by the City to ensure payment. Therefore, revenues generated through fee payments associated with cumulative development would pay fair shares toward any new DFD facilities deemed necessary by the City, which would be required to be designed and constructed in accordance with applicable regulations and standards, and if necessary, undergo CEQA review. In addition, as discussed above, all structures included as part of buildout of the City's General Plan would be constructed in compliance with the CBC and CFC, which would reduce the potential for fires to occur within the planning area and thereby reduce the demand for fire protection services in the City.



Finally, one of two proposed development projects within the City could include construction of a new fire station along the East Covell Boulevard corridor: either the Village Farms Davis Project, located less than a mile to the west of the Palomino Place Project site, or the Shriners Property Project, located adjacent to the east of the Palomino Place Project site. Construction of the new fire station would allow the DFD to respond to fire events at the project site and the eastern portion of the City limits within the NFPA 1710 response time standard. It should be noted that the potential environmental impacts of the fire station construction would be analyzed within the associated EIRs being prepared for each project, which would both be subject to Davis City Council approval and a vote by Davis residents.

Based on the above, cumulative development within the City of Davis, in conjunction with the proposed project, would result in a less-than-significant impact related to the need for new or improved fire protection facilities, the construction of which could cause significant environmental impacts.

### Police Protection Services

Cumulative development, in conjunction with the proposed project, would increase the demand for law enforcement services provided by the DPD. Similar to the DFD, the DPD is funded, in part, through the City's General Fund and public safety development impact fee. Cumulative development within the City would be subject to applicable permit application and development impact fees. Additionally, new residents generated by cumulative development would be subject to local taxes. Thus, future projects and residents would pay fair shares toward new DPD facilities deemed necessary by the City, all of which would be required to be designed and constructed in accordance with applicable regulations and standards, and if necessary, undergo CEQA review.

In addition, cumulative development within the City would be designed in accordance with the minimum security building standards established by Davis Municipal Code Article 8.14. The City of Davis requires various security measures to be included in new structures, and reviews development construction documents for consistency. Implementation of the required security measures would help to reduce cumulative demand for police protection services.

Based on the above, cumulative development within the City would not result in the need for new or improvements to existing police protection facilities, the construction of which could cause significant environmental impacts, and a less-than-significant impact would occur.

### Schools

Cumulative development, in conjunction with the proposed project, would increase the demand for school services provided by the DJUSD. However, as discussed above, development as part of cumulative buildout would be subject to DJUSD developer fees, which fund the cost of improving and expanding school facilities and equipment needed to accommodate additional student population induced by new development. Payment of the fees would be deemed to be "full and complete mitigation," as established by Proposition 1A/SB 50. In addition, Davis voters' renewal of the Measure N parcel tax ensures an existing parcel tax of \$768 per year





and totaling approximately \$11.7 million per year is available to help fund DJUSD facilities and services. The proposed project would increase the number of parcels subject to the tax.

Based on the above, cumulative development within the City would not result in the need for new or improvements to existing school facilities, the construction of which could cause significant environmental impacts, and a less-than-significant impact would occur.

#### Parks and Other Facilities

Cumulative development, in conjunction with the proposed project, would increase the demand for park facilities operated by the City of Davis Parks and Community Services Department. However, development facilitated by buildout of the General Plan planning area would be subject to the City's parkland provision requirements as established by Davis Municipal Code Section 36.08.040. With respect to libraries, revenues generated by Yolo County property taxes, State funds, and library fees are used to fund countywide library programs and operations. Cumulative development within the area would be required to be designed and constructed in accordance with applicable regulations and standards, pay all applicable fees and taxes, and if necessary, undergo CEQA review.

Based on the above, cumulative development within the City, in conjunction with the proposed project, would result in a less-than-significant impact related to the need for new or improved parks and/or other public facilities, the construction of which could cause significant environmental impacts.

#### Conclusion

Based on the above, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to an increased demand for public services in combination with future buildout in the City of Davis beyond what was previously identified in the 2009 EIR.

#### Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

#### Modified Mitigation Measure(s)

*None required.*

#### New Mitigation Measure(s)

*None required.*



**4.5-10 Increase in demand for utilities and service systems associated with the proposed project, in combination with future buildout of the Davis General Plan. Based on the analysis below, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR.**

The 2009 EIR evaluated potential long-term impacts to utilities in combination with existing and future development under Impact 4.9-10, and concluded that cumulative impacts would be less than significant with the mitigation measures provided therein. The 2009 EIR concluded that development of the project site with urban uses would exceed the demand for public services and facilities anticipated in the Davis General Plan, which designated the project site as Agriculture. However, the mitigation measures included in the 2009 EIR would reduce all identified significant utilities impacts to a level of insignificance. Furthermore, the 2009 EIR found that future development projects would be required by the City to pay fair shares towards the expansion and creation of public facilities, further reducing cumulative impacts.

The following discussions provide an analysis of the proposed project's contribution to cumulative impacts associated with water supply, wastewater, dry utilities, and solid waste under cumulative conditions, which includes the proposed project in combination with future buildout of the City, including reasonably foreseeable projects, such as the Village Farms Davis Project and Shriners Property Project.

Water Supply

Cumulative development, in conjunction with the proposed project, would result in increased demand for water supplies provided by the City (see Table 4.5-10). As previously discussed, the WSA prepared for the City estimated the total projected water supply in a normal year would be 23,320 AFY and would be 15,260 AFY in single and multiple dry years from 2025 through 2045. Based on the demand in AFY presented in Table 4.5-10 below, the City is anticipated to have a surplus of water supplies in all water year types to accommodate buildout of the City's General Plan planning area and present and future probable projects, including the proposed project.

In addition, new water infrastructure required as part of cumulative development within the City would be required to be designed and constructed in compliance with the applicable standards set forth in the City of Davis Public Works Design Standards. Compliance with the foregoing standards would ensure new water lines installed as part of buildout of the City of Davis are constructed in conformance with proper materials and sizing.

Based on the above, adequate water supply would be available to serve cumulative development within the City, in conjunction with the proposed project, and a less-than-significant impact would occur.



**Table 4.5-10  
 Total Cumulative Water Demand (AFY)**

<b>Area</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>
Existing Water Service Area	9,790	10,271	10,261	10,251	10,251
Village Farms Davis	0	410	850	850	850
Shriners Property	0	570	570	570	570
Palomino Place	0	60	60	60	60
DiSC 2022	0	128	350	350	350
<b>Total</b>	<b>9,790</b>	<b>11,439</b>	<b>12,091</b>	<b>12,081</b>	<b>12,081</b>
<b>Water Supply</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>
Total Supply – Normal Year	23,320	23,320	23,320	23,320	23,320
Total Supply – Single Dry and Multiple Dry Years	15,260	15,260	15,260	15,260	15,260
<b>Deficit?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Source: Brown and Caldwell, April 2024.*

Wastewater

With respect to wastewater, cumulative development includes all present and probable future projects along the Mace Boulevard/East Covell Boulevard corridor in conjunction with the proposed project. According to the WWTP Capacity Memorandum, cumulative development would result in increased demand for wastewater treatment services, with the ADWF flows under cumulative buildout conditions at 4.9 mgd. The WWTP Capacity Memorandum also concluded that based on a 2022 Capacity Analysis Report prepared by West Yost, the City’s WWTP facilities have available capacity at or above a 5.3 mgd influent ADWF design target, with the exception of the facility’s anaerobic digesters, which have a firm capacity at a slightly lower ADWF of 5.1 mgd. Therefore, the Technical Memorandum concluded that all of the City’s WWTP facilities would have sufficient capacity to support flows and loads associated with cumulative buildout of the City.

In addition, based on the results of the Wastewater Collection Memorandum for cumulative buildout conditions, the City identified four gravity sewer main segments where flows would exceed the applicable ratio of flow depth (d) to pipe diameter (D) of 0.6 (see Table 2 in the Wastewater Collection Memorandum). However, the Wastewater Collection Memorandum concluded that the impacts to the gravity mains under the cumulative development scenario are very slight and improvements to the City’s wastewater conveyance system are not recommended as sewer flows can be accommodated by the existing conveyance system.

Based on the above, adequate wastewater treatment services would be available to serve cumulative development within the City of Davis, in conjunction with the proposed project, and a less-than-significant impact would occur.

Electricity, Natural Gas, and Telecommunications

Environmental effects associated with the construction of new or expanded electricity, natural gas, and telecommunications facilities would primarily be project-specific, rather than cumulative. As noted under Impact 4.5-5, while the project would include new connections to existing infrastructure located in the project vicinity, substantial extension of existing off-site electrical or telecommunications infrastructure would not be required. Therefore, the proposed project would result in



a less-than-significant cumulative impact related to construction of new or expanded electricity, natural gas, and telecommunications facilities.

### Solid Waste

As previously discussed, according to CalRecycle, the Yolo County Central Landfill is anticipated to cease operations by 2124. Construction waste generated by development facilitated by buildout of the General Plan planning area would be required to comply with the applicable provisions of the CALGreen Code, which requires at least 65 percent diversion of construction waste for projects permitted after January 1, 2017. In addition, the Yolo County Central Landfill has a remaining capacity of 33,140,373 cubic yards, or 68 percent of the total capacity. Considering the remaining capacity at the landfill to serve future development, adequate capacity would be available to serve cumulative development within the City, in conjunction with the proposed project, and a less-than-significant cumulative impact would occur.

### Conclusion

Based on the above, the proposed project, in conjunction with regional development, would not result in a new significant cumulative impact or substantially more severe significant cumulative impact related to increased demand for utilities and service systems within the City of Davis beyond what was previously identified in the 2009 EIR.

### Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

### Modified Mitigation Measure(s)

*None required.*

### New Mitigation Measure(s)

*None required.*



---

---

## **4.6 TRANSPORTATION**

---

---

## 4.6 TRANSPORTATION

### 4.6.1 INTRODUCTION

Pursuant to CEQA Guidelines Section 15162, the Transportation chapter of this Subsequent Environmental Impact Report (SEIR) assesses whether the changes to the proposed project or changes in circumstances would result in a new significant impact not previously identified within the Wildhorse Ranch Project EIR (2009 EIR), or a substantial increase in the severity of a significant impact previously identified in the 2009 EIR. The City of Davis is conducting the SEIR to analyze the proposed net decrease of 16 residential units and the addition of a USA Pentathlon Training Facility and pool complex. For further details related to the proposed project, refer to Chapter 3, Project Description, of this SEIR.

The information contained within this chapter is primarily based on the Transportation Impact Study (TIS) prepared for the proposed project by Fehr & Peers (see Appendix H of this SEIR),<sup>1</sup> as well as the City of Davis General Plan,<sup>2</sup> the City of Davis General Plan EIR,<sup>3</sup> and the 2009 EIR.

Pursuant to the CEQA Guidelines Section 15064.3, effective July 1, 2020 (after the certification of the 2009 EIR), environmental documents must use vehicle miles traveled (VMT) rather than level of service (LOS) as the metric to analyze transportation impacts. Therefore, the analysis included in this chapter focuses on VMT. The State's requirement to transition from LOS to VMT is aimed at promoting infill development, public health through active transportation, and a reduction in greenhouse gas (GHG) emissions. However, an analysis of LOS will be provided in a separate project-specific report prepared by Fehr & Peers, and will be used by the City in the project review process for determining consistency with General Plan LOS goals and policies.

### 4.6.2 EXISTING ENVIRONMENTAL SETTING

The majority of the approximately 25.8-acre project site is undeveloped and consists of ruderal grasses that were previously used as pasture/grazing land; although, it should be noted that agricultural activity does not currently occur on-site. Within the central portion of the project site, the site includes a ranch home, two duplexes, a horse barn, and an equestrian training facility that is not currently in use. A paved driveway extends into the site from East Covell Boulevard and bisects the majority of the site in a north-to-south direction. Since publication of the 2009 EIR, the project site has not been substantially altered. The section below describes the physical and operational characteristics of the existing transportation system within the study area, including the surrounding roadway network, transit, bicycle, and pedestrian facilities. With respect to CEQA Guidelines 15162 considerations, the configurations of the roadways and transit, bicycle, and pedestrian facilities in the project vicinity have not changed since the 2009 EIR was published.

<sup>1</sup> Fehr & Peers. *Palomino Place Transportation Impact Study*. July 2024.

<sup>2</sup> City of Davis. *City of Davis General Plan*. Adopted May 2001, Amended January 2007.

<sup>3</sup> City of Davis. *Final Program EIR for the City of Davis General Plan Update and Final Project EIR for Establishment of a New Junior High School*. Certified May 2001.





## **Existing Roadways**

Vehicular access to the project site is provided by East Covell Boulevard and Monarch Lane. Other key roadways that would accommodate project-generated vehicular traffic include Mace Boulevard, Pole Line Road, State Route 113 (SR 113) and Interstate 80 (I-80). The project site and the surrounding roadways are shown in Figure 4.6-1. The following sections provide a summary of the existing roadways within the project area.

### **East Covell Boulevard**

East Covell Boulevard is a four-lane east-west major arterial that traverses the City of Davis. To the west, East Covell Boulevard connects to Pole Line Road, F Street, Anderson Road, and SR 113, before continuing further west. To the east, East Covell Boulevard transitions into Mace Boulevard at the Mace Curve. East Covell Boulevard borders the south edge of the project site. Vehicular access to and from the project site is provided by the existing East Covell Boulevard/Monarch Lane side-street stop-controlled intersection. Within the vicinity of the project site, East Covell Boulevard has a posted speed limit of 40 miles per hour (mph).

### **Mace Boulevard**

Mace Boulevard is a two- to four-lane north-south major arterial. Mace Boulevard transitions from East Covell Boulevard at the Mace Curve and extends south with connections to I-80 and South Davis before continuing south. Mace Boulevard is four lanes on the segment between Alhambra Drive and Cowell Boulevard and two lanes north and south of the segment.

### **Pole Line Road**

Pole Line Road is a two-lane north-south road that connects East Davis and South Davis across I-80. Pole Line Road is a major arterial and minor arterial north and south of East Covell Boulevard, respectively. Pole Line Road transitions into Lillard Drive south of I-80 and County Road (CR) 102 north of the City limits. CR 102 continues north to the City of Woodland and Interstate 5 (I-5).

### **Monarch Lane**

Monarch Lane is a two-lane north-south road that extends between East Covell Boulevard and Loyola Drive in East Davis. Monarch Lane is a collector between East Covell Boulevard and Temple Drive and a residential street between Temple Drive and Loyola Drive.

### **State Route 113**

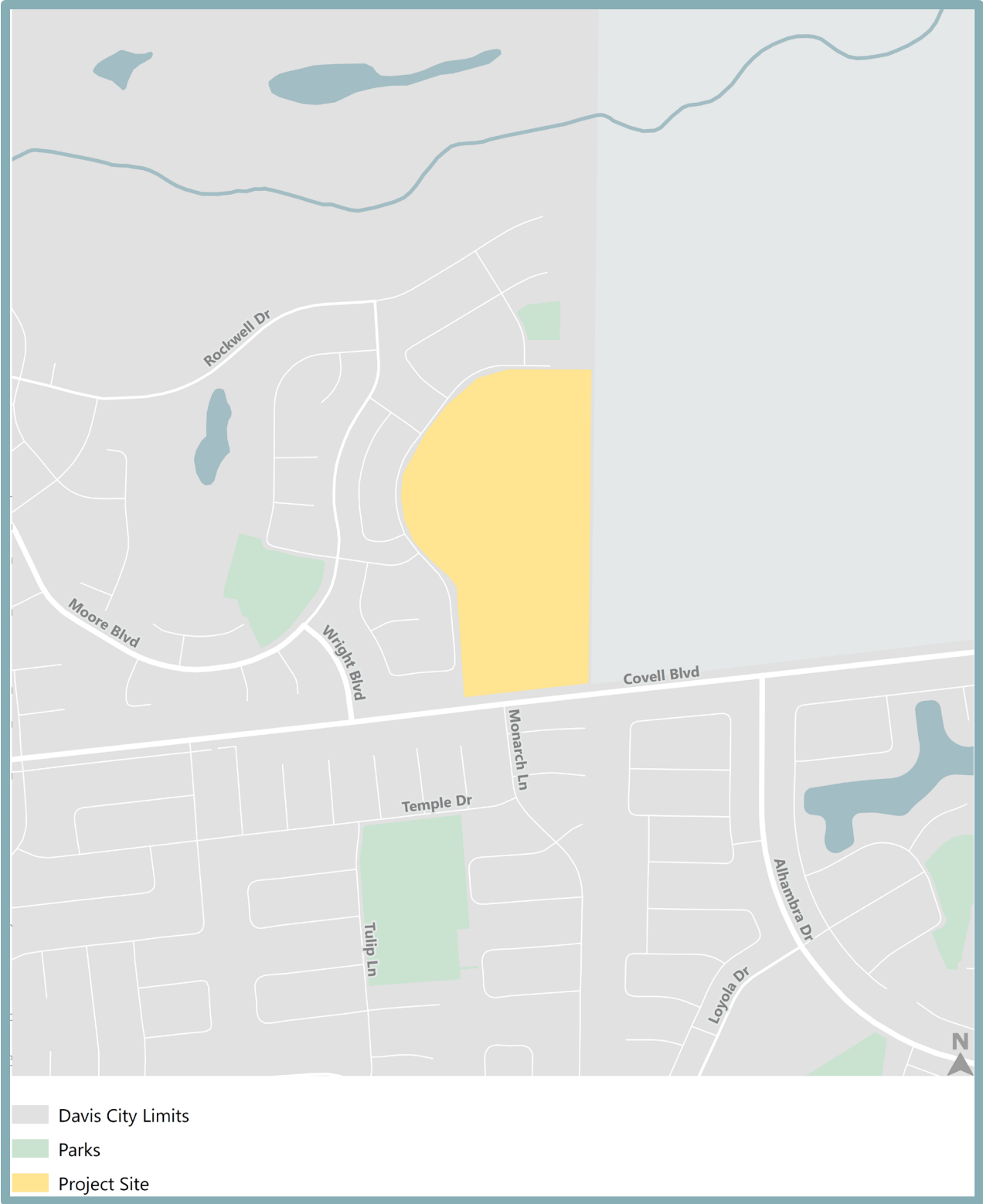
SR 113 is a four-lane, north-south freeway that extends from I-80 at the Yolo/Solano County line north to I-5 in Woodland. SR 113 serves Davis via interchanges at Covell Boulevard and Russell Boulevard. Additional SR 113 interchanges within the vicinity of Davis include the Hutchison Drive interchange at the University of California, Davis (UC Davis) campus and the CR 29 interchange in Yolo County. SR 113 and its interchanges are owned and operated by the California Department of Transportation (Caltrans).

### **Interstate 80**

I-80 is an east-west interstate freeway near the southern boundary of the project site. From Davis, I-80 connects with the San Francisco Bay Area to the west and Sacramento and the Lake Tahoe Basin to the east. I-80 provides three travel lanes per direction in the vicinity of the project site. I-80 serves Davis via interchanges at Mace Boulevard and Richards Boulevard.



**Figure 4.6-1  
Existing Roadway Facilities**



Source: Fehr & Peers, 2024.



Additional I-80 interchanges within the vicinity of Davis include the Old Davis Road interchange at the UC Davis campus and the CR 32A interchange in Yolo County. I-80 and its interchanges are owned and operated by Caltrans.

### **Existing Pedestrian Facilities**

Pedestrian facilities are comprised of crosswalks, sidewalks, pedestrian signals, and off-street paths, which provide safe and convenient routes for pedestrians to access the destinations such as institutions, businesses, public transportation, and recreation facilities. The City of Davis has an extensive system of off-street shared-use paths and sidewalks available for use by pedestrians, including the following existing facilities within the project site vicinity:

- East-west shared-use path situated on the north side of East Covell Boulevard between Pole Line Road and the easterly project site boundary. At its easterly terminus, the path connects to a grade separated bicycle/pedestrian crossing underneath East Covell Boulevard, where the path continues south into the Mace Ranch greenbelt system. Near the project site, the shared-use path provides connections into the Wildhorse neighborhood at Bearden Drive and Caravaggio Drive. The path traverses the southern project site boundary;
- East-west shared-use path situated on the south side of East Covell Boulevard between Poplar Lane and Harper Junior High School. West of Poplar Lane, pedestrians can continue along a sidewalk on the south side of Denison Drive (which parallels East Covell Boulevard);
- Unpaved path along the Wildhorse Urban Agricultural Transition Area (UATA), which extends north of East Covell Boulevard along the eastern project site boundary. The path continues along the entire periphery of the Wildhorse neighborhood. Near the project site, this path provides connections into the Wildhorse neighborhood at Caravaggio Drive, Duchamp Park, Bellows Court, and Rockwell Court;
- Sidewalks on both sides of nearby collectors and arterials, including Monarch Lane, Wright Boulevard, Moore Boulevard, and Alhambra Drive; and
- Sidewalks on residential streets and several off-street paths within the Wildhorse, Mace Ranch, and Slide Hill Park neighborhoods.

At the East Covell Boulevard/Monarch Lane intersection, a marked crosswalk is provided on the south leg of the intersection. Additionally, the East Covell Boulevard shared-use path extends across the north leg where a driveway currently extends into the project site. The intersection does not have marked or unmarked crosswalks across East Covell Boulevard on either its east or west legs.

From the East Covell Boulevard/Monarch Lane intersection, the nearest pedestrian crossings of East Covell Boulevard are available at a marked crosswalk on the west leg of the signalized East Covell Boulevard/Wright Boulevard intersection (approximately 900 feet to the west) and at the grade-separated bicycle and pedestrian crossing underneath East Covell Boulevard, approximately 640 feet to the east.

### **Existing Bicycle Facilities**

The project site is situated on the edge of the City of Davis bicycle network, which is comprised of an extensive network of on- and off-street bicycle facilities. Bicycle facilities are classified into four types, as described below:



- **Class I Multi-Use Off-Street Paths** (also known as shared-use paths) are paved trails that are separated from roadways, and allow for shared use by both cyclists and pedestrians;
- **Class II On-Street Bike Lanes** are designated for use by bicycles by striping, pavement legends, and signs;
- **Class III On-Street Bike Routes** are designated by signage for shared bicycle use with vehicles but do not necessarily include any additional pavement width for bicyclists.
- **Class IV Separated Bikeways** (also known as protected bikeways or cycle tracks) are separated bikeways designed to improve upon buffered bike lanes by providing vertical separation between bike lanes and the adjacent travel lanes. Vertical separation can be provided with concrete curb and gutter, bollards, or on-street parking.

Figure 4.6-2 displays existing bicycle facilities in the project vicinity. In addition to the previously discussed shared-use paths, Class II bike lanes are provided in both directions on the following roadways near the project site:

- East Covell Boulevard;
- Wright Boulevard;
- Moore Boulevard;
- Rockwell Drive; and
- Alhambra Drive.

East Covell Boulevard, which traverses the southern project site boundary, is the only continuous east-west arterial that traverses the entire City of Davis. To facilitate bicycle and pedestrian travel across this roadway, the City of Davis has required the construction of bicycle/pedestrian grade separations for new developments located on the north side of Covell Boulevard. Existing grade separations on Covell Boulevard are located west of F Street, east of F Street (to/from The Cannery), and east of Monarch Lane (approximately 640 feet east of the East Covell Boulevard/Monarch Lane intersection that serves the project site). According to the City's General Plan, a future facility is planned on West Covell Boulevard east of Denali Drive.

### **Transit Service and Facilities**

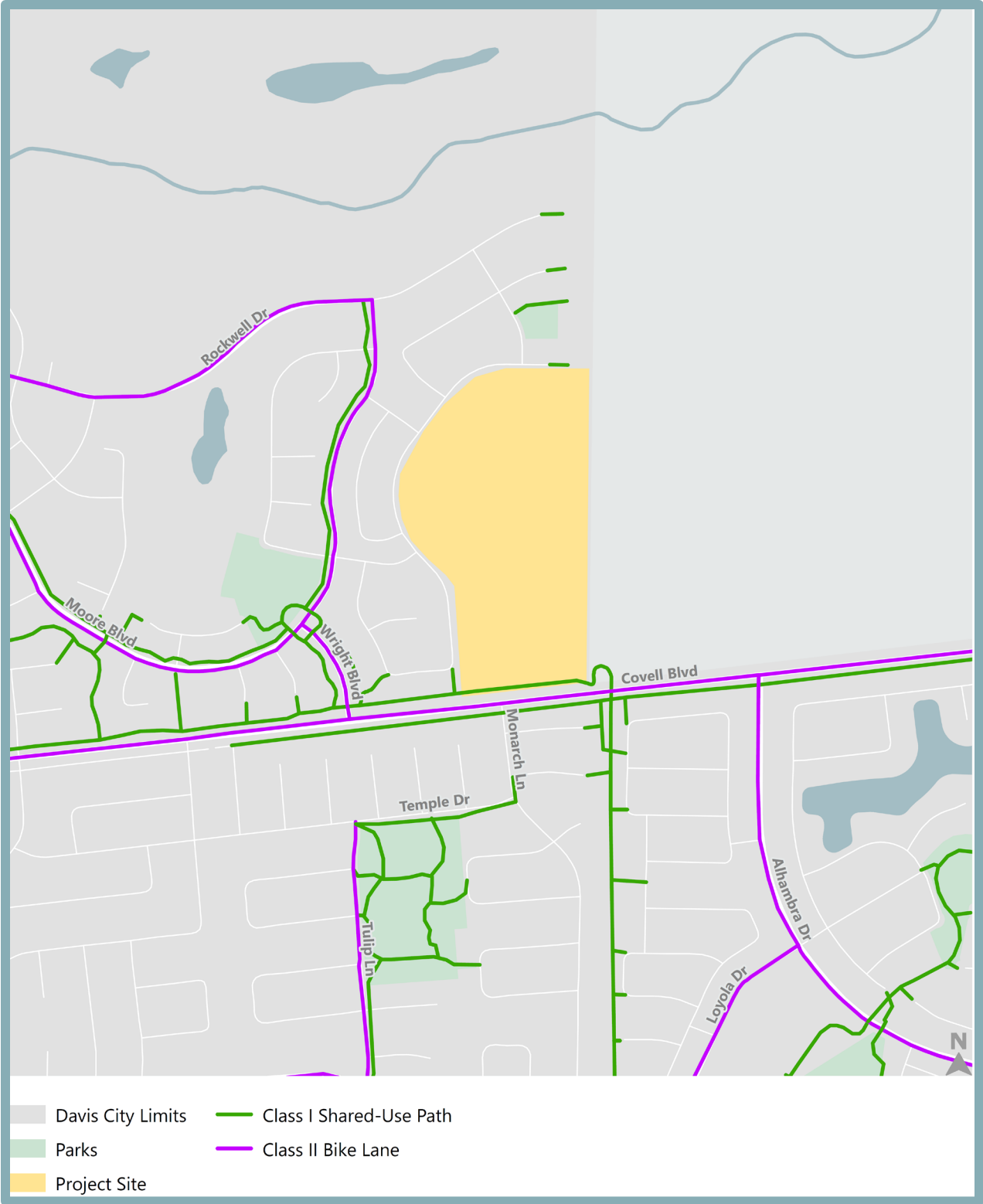
Transit serving the project site includes local bus service connecting the project site to destinations throughout the City of Davis (e.g., Downtown Davis, the Davis Train Depot, etc.) and the UC Davis campus. Additionally, the project site is served by an intercity bus service that is primarily oriented towards serving Davis residents commuting to and from work in Downtown Sacramento. Transit service in the City of Davis is provided by Unitrans (local bus), Yolobus (intercity bus), Amtrak (intercity rail), and Davis Community Transit (local paratransit).

### **Unitrans**

Unitrans provides local fixed route bus service to the project site. Jointly operated between the Associated Students, UC Davis (ASUCD) and the City of Davis, Unitrans offers 19 routes serving the UC Davis campus and City of Davis neighborhoods, shopping centers, schools, and medical centers. Unitrans operates as a radial bus system with the UC Davis campus serving as the central hub. The main terminals on the UC Davis campus are at the Memorial Union on Howard Way and at the Silo on Hutchison Drive.



**Figure 4.6-2  
Existing Bicycle Facilities**



Source: Fehr & Peers, 2024.



Specific service spans and frequencies vary by route. Generally, Unitrans operates from 6:30 AM to 11:30 PM Monday through Thursday and until 9:00 PM on Fridays. Weekend service is available from 8:00 AM to 7:00 PM. Unitrans routes operate every 15 to 60 minutes during weekdays and every 60 minutes during weekends and evenings. Table 4.6-1 summarizes the weekday and weekend frequency and span for Unitrans bus routes serving the project site.

Route	Weekday		Friday		Weekend	
	Peak Frequency (min)	Span	Peak Frequency (min)	Span	Peak Frequency (min)	Span
L – East 8 <sup>th</sup> /Pole Line/Moore/Loyola	60	7 AM to 11 PM	60	7 AM to 9 PM	--	--
P – MU/Davis Perimeter CCW	30	6 AM to 11 PM	30	6 AM to 9 PM	60	8 AM to 7 PM
Q – MU/Davis Perimeter CW	30	6 AM to 11 PM	30	6 AM to 9 PM	60	8 AM to 7 PM

Notes: CCW = counterclockwise; CW = clockwise.

**Source: Fehr & Peers, 2024.**

The current Unitrans one-way fare is \$1.25, with monthly, quarterly, and annual passes available at a discounted price. Free rides are available to UC Davis undergraduate students (fee assessed quarterly with registration), seniors, disabled passengers, City of Davis employees, and transferring Sacramento Regional Transit, YoloBus, Capitol Corridor, and Fairfield Transit passengers.

The City of Davis Short Range Transit Plan indicates that 91 to 95 percent of all Unitrans riders are UC Davis undergraduate students, three to six percent of riders are UC Davis graduate students, and just over five percent of riders are not UC Davis affiliates.

### **Yolobus**

Yolobus provides fixed-route bus and paratransit service throughout Yolo County, as well as commuter bus service to downtown Sacramento. Single rides are available for \$2.00, \$2.25, and \$3.25 for local, intercity, and express services, respectively. Discounted daily and monthly passes are also available.

The project site is served by Yolobus express bus Route 43, which is oriented towards serving Davis residents working in Downtown Sacramento (i.e., morning service is eastbound-only, and afternoon/evening service is westbound-only).

### **Amtrak**

Amtrak serves the Davis Transit Depot near Second and G Streets in Downtown Davis, approximately three miles west of the project site. Amtrak Capitol Corridor service is available at the depot, connecting passengers to Sacramento and Roseville to the east and the Bay Area to the west. Currently, 15 daily Capitol Corridor roundtrips are available at the station during regular weekday service. In addition to regular Capitol Corridor service, Amtrak serves the Davis Transit Depot with daily Coast Starlight service (to Los Angeles and Seattle) and intercity bus connections to other Amtrak rail lines (e.g., the Amtrak San Joaquin lines at Sacramento Valley Station).





Figure 4.6-3 displays the bus stops and routes serving the project site vicinity. The primary bus stops serving the project site are located on Monarch Lane immediately south of East Covell Boulevard (served by Unitrans Route L and Yolobus Route 42) and on East Covell Boulevard immediately west of Wright Boulevard (served by Unitrans Routes P and Q).

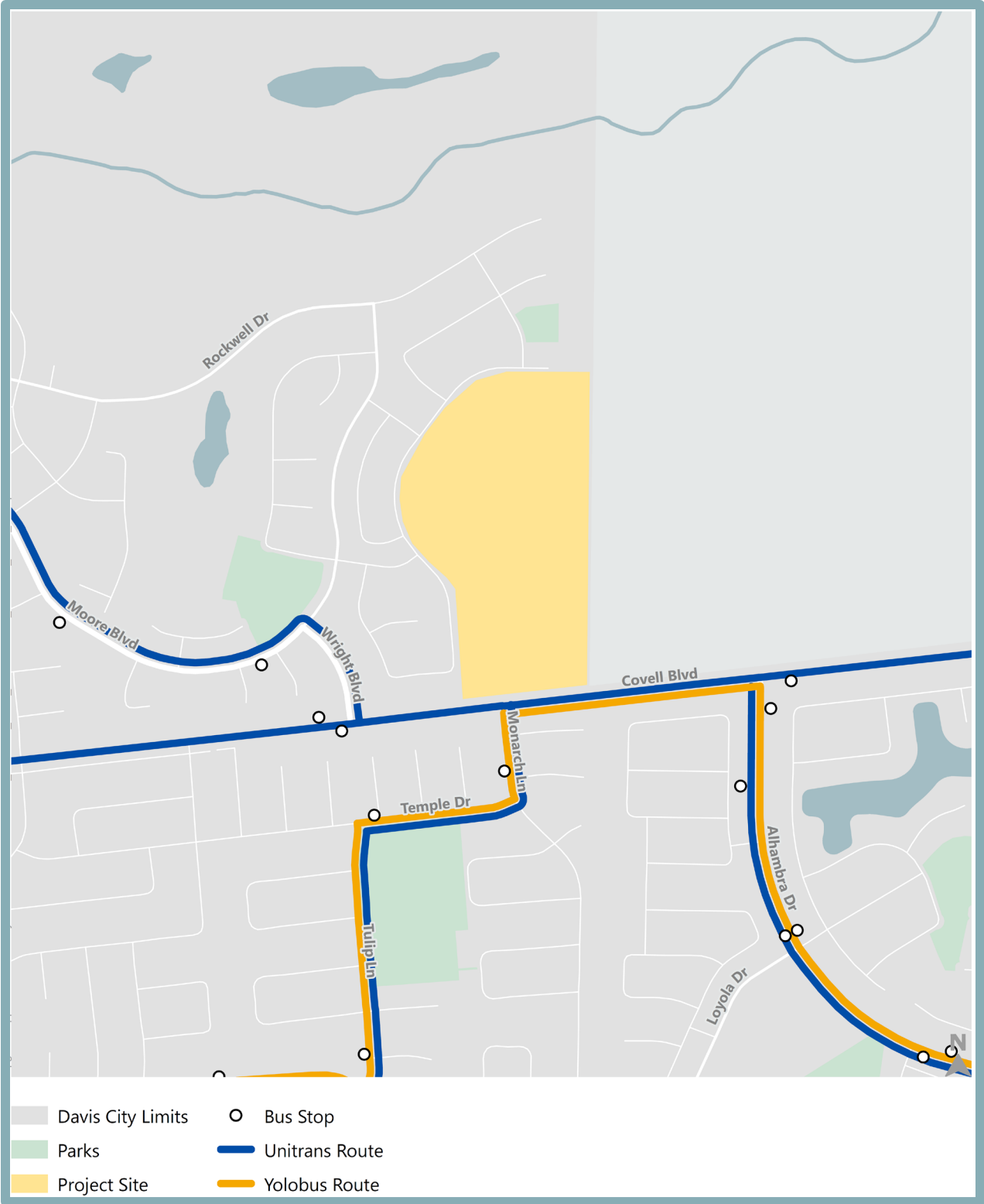
### **Emerging Transportation Technology and Travel Options**

Transportation and mobility are being transformed through a number of forces ranging from new technologies, different personal preferences, and the unique effects of the COVID-19 pandemic, the combination of which could alter traditional travel demand relationships in the near- and long-term. These disruptive trends increase uncertainty in forecasting future travel conditions, especially considering that new technologies such as automated vehicles (AVs) may be operating on future transportation networks once the project would be complete and operational. Information about how technology is affecting and will affect travel is accumulating over time.

- **COVID-19 pandemic.** The COVID-19 pandemic and subsequent actions by federal, State, and local governments to curtail mobility and encourage physical distancing (i.e., limit in-person economic and social interactions) temporarily but profoundly changed travel conditions. While travel activity has returned to some form of normality as the pandemic has subsided, it is possible that some of these temporary changes will influence people's travel choices into the future, including either accelerating or diminishing some of the emerging trends in transportation that were already underway prior to the pandemic. Some of the emergent changes already influencing travel behavior that could accelerate in the future include the following:
  - Substituting telework for in-office work/commute travel.
  - Substituting internet shopping and home delivery for some shopping or meal-related travel.
  - Substituting participating on social media platforms for social/recreational travel.
  - Substituting telemedicine appointments for eligible in-person medical appointments.
- **Using new travel modes and choices.** Transportation network companies such as Uber and Lyft, car sharing, bicycle/scooter sharing, and on-demand microtransit services have increased the options available to travelers in the Sacramento area and have contributed to changes in traditional travel demand relationships. For example, combined bus and rail ridership on Sacramento Regional Transit has declined by approximately 19 percent between 2016 and 2019. The travel demand model used for the TIS, known as SACSIM19 and discussed in further detail below, was calibrated to 2016 conditions and may not fully capture all the factors influencing transit ridership declines today or in the future.
- **Automation of vehicles.** Both passenger vehicles and commercial vehicles and trucks are evolving to include more automation. Research, development, and deployment testing is proceeding on AVs; AVs do not require an operator and navigate roadways autonomously. Forecasts of how quickly research, development, and deployment testing will transition to full deployment and marketing of AVs vary widely both on the pace of the transition and the market acceptance of fully automated operation. More uncertainty exists around the behavioral response to AVs.



**Figure 4.6-3  
Existing Transit Facilities**



Source: Fehr & Peers, 2024.



In terms of VMT impacts on the transportation system and the environment, the worst-case scenario would be one in which AVs are privately owned, as they are now, but the automated function of AVs would cause them to be used more, as described below.

AVs could be repositioned to serve different members of a household (e.g., have an AV drop a worker at their workplace, then drive back home empty to serve another trip such as taking a student to school). The repositioning of AVs could add significantly to traffic volumes and VMT.

AVs could reduce the value travelers place on time spent in a vehicle, resulting in an increase in willingness to make longer trips. For example, if a person could read or do work in an AV instead of focusing on driving, they might be willing to commute longer distances to work. Conversely, a worker who would prefer to live in a rural area but is unwilling to drive far enough to act on that preference in a conventional vehicle may be willing to do so using an AV.

AVs could increase willingness to drive more to avoid parking costs or tolls. For example, a person going to a sporting event in an area that charges for parking might use an AV to be dropped off at the venue, and then re-position and park the AV in an area that does not charge for parking.

- **Connected vehicles.** Connected vehicles (CVs) can communicate wirelessly with its surroundings, including other vehicles, bicyclists, pedestrians, roadway infrastructure (i.e., traffic signals, toll facilities, and traffic management facilities), and the internet. The influence that CVs may have is still speculative but includes potential for reductions in collisions and congestion and greater overall network performance optimization.
- **Navigation apps.** The increased prevalence and use of navigation apps (e.g., Google Maps, WAZE, etc.) in recent years provides motorists with real-time and predictive travel time information that can influence route selection. The use of navigation apps can result in changes to travel patterns and traffic volumes during different times of the day and days of the week, particularly during recurrent congested time periods or when incidents occur that affect travel times (e.g., a crash on the freeway that requires lane closures). Diverted local and regional traffic can occur on roadways near the project site during extended periods of very low travel speeds on eastbound I-80 from the causeway, through Davis, and into Solano County. During congested conditions, low mainline travel speeds substantially increase travel times for motorists on eastbound I-80. Hence, diverting off of I-80 onto local roadways such as Covell Boulevard and Mace Boulevard often provides a faster alternative to remaining on the freeway through Davis. Similarly, locally generated traffic utilizing eastbound I-80 can experience faster travel times by accessing I-80 as far east as possible (e.g., motorists departing Downtown Davis for Sacramento accessing I-80 at Mace Boulevard or County Road 32A instead of Richards Boulevard).

While the SACSIM19 model represents state of the practice or advance practice, travel behavior and the transportation systems are changing quickly in response to emerging trends, new technologies, and different preferences. The trajectory of deployment, market acceptance, and government regulation of the new travel options and technologies is difficult to predict, and such elements directly influence the inputs and algorithms for the SACSIM19 model. As such, SACSIM19 as a travel forecasting model has limitations in the ability to capture the full range of potential travel effects from emerging travel options and technologies.



The SACSIM19 model does include some scenario testing capabilities that can begin to test different hypotheses of aforementioned impacts, but until more research is done about the likely behavioral responses to new modes and technologies is completed, travel models cannot fully capture such changes in a reliable way. Initial testing of AVs effects using SACSIM19, such as lowering costs to use vehicles and making them more convenient by eliminating parking at trip ends, does generate increases in overall vehicle travel and reductions in transit ridership with all else being equal. The information suggests the model is sensitive to how cost and convenience influence travel behavior but within the limits of the observed data used to develop the model.

### **Vehicle Miles Travelled**

VMT is a measure of the total amount of vehicle travel occurring on a given roadway system. VMT is a metric that accounts for the number of vehicle trips generated and the length or distance of those trips. For analysis purposes, VMT refers to automobile VMT, specifically passenger vehicles and light trucks; heavy truck traffic is typically excluded. VMT does not directly measure traffic operations; instead, VMT is a measure of transportation network use and efficiency, especially when expressed as a function of population (i.e., VMT per capita). The key VMT metric used for the analysis of the residential component of the proposed project is residential VMT per capita, which is defined as all automobile (i.e., passenger cars and light-duty trucks) vehicle-trips that start or end at the home are traced, but non-home-based trips made by residents elsewhere on the network are excluded. The key VMT metric used for the analysis of the non-residential component of the proposed project is total VMT, which is defined as all vehicle trips (i.e., passenger and commercial vehicles) assigned on the network within a specific geographic boundary; vehicle volume on each link is multiplied by link distance.

As a result of Senate Bill (SB) 743, passed in 2013 and effective July 1, 2020, local jurisdictions may not rely on vehicle LOS and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA. Thus, consistent with the CEQA Guidelines, VMT is the primary metric used to identify transportation impacts to roadway systems within this chapter. The City of Davis has not yet adopted VMT procedures or standards. However, the Sacramento Area Council of Governments (SACOG), the most relevant responsible agency with respect to VMT impact analysis for local land use projects, has developed the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The VMT estimates and forecasts contained in this analysis were obtained from the SACOG travel demand model, known as SACSIM19. According to the TIS, the existing residential VMT per capita for the City of Davis and the SACOG region is 30.1 and 21.7 VMT per capita, respectively.

Residential VMT per capita generated by existing residential uses within the project site vicinity is approximately 33 VMT per capita, 10 percent above the existing City average and 52 percent above the existing SACOG region average.

### **4.6.3 REGULATORY CONTEXT**

Existing transportation policies, laws, and regulations that would apply to the proposed project are summarized below and provide a context for the impact discussion related to the project's consistency with the applicable regulatory conditions. Federal plans, policies, regulations, or laws related to transportation and circulation are not directly applicable to the proposed project. Rather, the analysis presented herein focuses on State and local regulations, which govern the regulatory environment related to transportation and circulation at the project level.



## **State Regulations**

The following are the regulations pertinent to the proposed project at the State level, organized chronologically.

### **Assembly Bill 32**

Assembly Bill (AB) 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that “(a) the statewide GHG emissions limit shall remain in effect unless otherwise amended or repealed; (b) it is the intent of the Legislature that the statewide GHG emissions limit continues in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020; and (c) the California Air Resources Board (CARB) shall make recommendations to the Governor and the Legislature on how to continue reductions of GHG emissions beyond 2020.”

While AB 32 does not contain specific expectations related to individual land use projects, it does set statewide expectations for GHG reduction that have influenced VMT reduction expectations from land development projects as part of SB 375 and SB 743.

### **Senate Bill 375**

SB 375 requires metropolitan planning organizations (MPO) to prepare an SCS as part of their RTP. The SCS demonstrates how the region could meet its GHG reduction targets through integrated land use, housing, and transportation planning. Specifically, the SCS must identify land use and transportation strategies that combined with the RTP project list will reduce GHG emissions from automobiles and light trucks in accordance with targets set by the CARB.

### **Senate Bill 743**

SB 743 creates or encourages several statewide changes to the evaluation of transportation and traffic impacts under the CEQA. First, SB 743 directs the Governor’s Office of Planning and Research (OPR) to amend the CEQA Guidelines to establish new metrics for determining the significance of transportation impacts of projects within transit priority areas (TPA) and allows OPR to extend use of the new metrics beyond TPAs. In the amended CEQA Guidelines, OPR selected automobile VMT as the preferred transportation impact metric and applied their discretion to recommend its use statewide. The California Natural Resources Agency certified and adopted the amended CEQA Guidelines in December 2018. The amended CEQA Guidelines state that “generally, VMT is the most appropriate measure of transportation impacts” and the provisions requiring the use of VMT apply statewide as of July 1, 2020. The amended CEQA Guidelines further state that land use “projects within 0.5 mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less-than-significant transportation impact.”

SB 743 establishes that aesthetic and parking impacts of residential, mixed-use residential, or employment center projects on an infill site within a TPA are not considered significant impacts on the environment. SB 743 added Section 21099 to the California Public Resources Code (PRC), which states that automobile delay, as described by LOS or similar measures of vehicular capacity or traffic congestion, is not considered a significant impact on the environment upon certification of the CEQA Guidelines by the California Natural Resources Agency. Following certification of the amended CEQA Guidelines in December 2018, LOS or similar measures of vehicular capacity or traffic congestion are not considered a significant impact on the environment.



Finally, SB 743 establishes a CEQA exemption for residential, mixed-use, and employment center projects a) within transit priority areas, b) consistent with a specific plan for which an EIR has been certified, and c) consistent with a SCS. The exemption requires further review if the project or circumstances changes significantly.

The 2009 EIR was released for public review in April 2009, prior to the statewide requirement for VMT evaluation in CEQA review. As such, a project-specific, quantitative analysis of VMT was not included in the 2009 EIR.

### Technical Advisory on Evaluating Transportation Impacts in CEQA

In December of 2018, the OPR published the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory), which is a guidance document to provide advice and recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The Technical Advisory is intended to be a resource for the public to use at their discretion, and the OPR does not enforce any part of the recommendations contained therein. The Technical Advisory includes recommendations regarding methodology, screening thresholds, and recommended thresholds per land use type. Lead agencies may consider and use these recommendations at their discretion.

The Technical Advisory identifies screening thresholds to quickly identify when a project is expected to cause a less-than-significant impact without conducting a detailed study. The Technical Advisory suggests that projects meeting one or more of the following criteria should be expected to have a less-than-significant impact on VMT:

- Small projects – Projects consistent with an SCS and local general plan that generate or attract fewer than 110 trips per day;
- Projects near major transit stops – Certain projects (residential, retail, office, or a mix of these uses) proposed within 0.5 mile of an existing major transit stop or an existing stop along a high-quality transit corridor;
- Affordable residential development – A project consisting of a high percentage of affordable housing may be a basis to find a less-than-significant impact on VMT;
- Local-serving retail – Local-serving retail development tends to shorten trips and reduce VMT. The Technical Advisory encourages lead agencies to decide when a project will likely be local-serving, but generally acknowledges that retail development including stores larger than 50,000 square feet might be considered regional-serving. The Technical Advisory suggests lead agencies analyze whether regional-serving retail would increase or decrease VMT (i.e., not presume a less-than-significant impact); and
- Projects in low-VMT areas – Residential and office projects that incorporate similar features (i.e., density, mix of uses, transit accessibility) as existing development in areas with low VMT will tend to exhibit similarly low VMT.

The Technical Advisory also identifies recommended numeric VMT thresholds for residential, office, and retail projects, as described below:

- Residential development that would generate vehicle travel exceeding 15 percent below existing residential VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as a regional VMT per capita or as city VMT per capita;





- Office projects that would generate vehicle travel exceeding 15 percent below existing regional VMT per employee may indicate a significant transportation impact; and
- Retail projects that result in a net increase in total VMT may indicate a significant transportation impact.

For mixed-use projects, the Technical Advisory suggests either evaluating each component independently and applying the significance threshold for each project type included (e.g., residential and retail), or evaluating VMT associated only with the project's dominant use.

The Technical Advisory also provides guidance on impacts on transit. Specifically, the Technical Advisory suggests that lead agencies generally should not treat the addition of new transit users as an adverse impact. As an example, the Technical Advisory suggests that “an infill development may add riders to transit systems and the additional boarding and alighting may slow transit vehicles, but it also adds destinations, improving proximity and accessibility. Such development also improves regional vehicle flow by adding less vehicle travel onto the regional network.”

### **California Department of Transportation**

Caltrans is responsible for planning, designing, constructing, operating, and maintaining the State Highway System (SHS), including in Yolo County. As part of these responsibilities, Caltrans reviews local development projects subject to CEQA to assess potential impacts on the SHS based on the following technical guidance.

#### Vehicle Miles Traveled-Focused Transportation Impact Study Guide

The VMT Focused Transportation Impact Study Guide (TISG) outlines how Caltrans will review land use projects with a focus on supporting State land use goals, State planning priorities, and GHG emissions reduction goals. The VMT TISG endorses OPR's Technical Advisory as the basis for transportation impact analysis methodology and thresholds, including the use of screening to streamline qualified projects because they help achieve the State's VMT reduction and mode shift goals.

#### Caltrans Safety Impact Guidance

The Caltrans Safety Impact Guidance provides technical instructions on how to evaluate potential safety impacts on the SHS. The guidance largely focuses on the actions of Caltrans district staff in performing the analysis and providing relevant impact information to lead agencies. The interim guidance recommends that safety analyses include a review of three primary elements related to transportation safety: design standard compliance, collision history, and collision risk (consistent with the Federal Highway Administration's Systemic Approach to Safety). The interim guidance does not establish specific analysis methods or significance thresholds for determining safety impacts under CEQA. Additionally, Caltrans notes that local agencies may use the interim guidance at their own discretion as a guide for review of local facilities.

### **Local Regulations**

Local rules and regulations applicable to the proposed project are discussed below.

### **Sacramento Area Council of Governments**

SACOG is the MPO governing the six counties and 22 cities within the Sacramento Region. The counties include El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba. SACOG is responsible for the preparation of, and updates to, the RTP/SCS for the region. The current SACOG RTP/SCS is entitled 2020 MTP/SCS. The MTP/SCS provides a 20-year transportation vision and



corresponding list of projects. The 2020 MTP/SCS was adopted by the SACOG board in November 18, 2019.

The SACOG 2020 MTP/SCS provides the basis for air quality conformity findings related to the federal Clean Air Act and determinations of whether the region is complying with GHG reduction targets for automobiles and light trucks established under SB 375. Major projects that are inconsistent with the plan could jeopardize the plan's effectiveness for air pollution and GHG reduction. Consequently, consistency with the MTP/SCS is a potential basis for determining adverse impacts related to these environmental topics.

### **City of Davis General Plan**

The City of Davis General Plan Transportation Element was updated in 2013. The following goals, performance objectives, policies, and actions related to transportation and circulation are applicable to the project:

Goal #1 Davis will provide a comprehensive, integrated, connected transportation system that provides choices between different modes of transportation.

Performance Objective #1.1 Achieve at least the following mode share distribution for all trips by 2035:

- 10 percent of trips by walking;
- 10 percent of trips by public transportation; and
- 30 percent of trips by bicycle.

Performance Objective #1.2 Increase use of walking, bicycling, and public transportation to and from the following places:

- Work;
- Schools (elementary, junior high, and senior high);
- UC Davis; and
- Downtown.

Goal #2 The Davis transportation system will evolve to improve air quality, reduce carbon emissions, and improve public health by encouraging usage of clean, energy-efficient, active (i.e. human powered), and economically sustainable means of travel.

Performance Objective #2.1 Reduce carbon emissions from the transportation sector 61 percent by 2035.

Performance Objective #2.2 Reduce vehicle miles traveled (VMT) 39 percent by 2035.

Performance Objective #2.3 Annually increase funding for maintenance and operation needs of the transportation system, until fully funded.



Goal #3	Davis will provide a safe and convenient Complete Streets network that meets the needs of all users, including children, families, older adults, and people with disabilities.
Performance Objective #3.1	Improve the quality of service for all users of the transportation system.
Performance Objective #3.2	Reduce the total number of collisions between motor vehicles and bicyclists or pedestrians by 50 percent by 2035.
Policy TRANS 1.6	Reduce carbon emissions from the transportation system in Davis by encouraging the use of non-motorized and low carbon transportation modes.
Policy TRANS 1.7	Promote the use of electric vehicles and other low-polluting vehicles, including Neighborhood Electric Vehicles (NEV).
Policy TRANS 2.1	Provide Complete Streets to meet the needs of drivers, public transportation vehicles and riders, bicyclists, and pedestrians of all ages and abilities in all transportation planning, programming, design, construction, reconstruction, retrofit, operations, and maintenance activities and products. The City shall view all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in Davis, and recognizes bicycle, pedestrian, fixed-route transit, and demand-response para-transit modes as integral elements of the transportation system along with motor vehicles.
Policy TRANS 2.2	Implement state-of-the-art street design solutions to improve bicycle/pedestrian access, comfort, and safety that may include: <ul style="list-style-type: none"><li>• Bicycle boxes at intersections;</li><li>• Cycletracks;</li><li>• Shared lane markings (sharrows);</li><li>• Contraflow bicycle lanes;</li><li>• Improved bicycle detection at intersections;</li><li>• Two-stage turn queue boxes;</li><li>• Colored bicycle lanes; and</li><li>• Bicycle route wayfinding.</li></ul>
Policy TRANS 2.3	Apply best practices in sustainability to new streets and redesigns of existing streets/corridors.



Policy TRANS 2.4	As part of the initial project review for any new project, a project-specific traffic study may be required. Studies shall identify impacted transportation modes and recommend mitigation measures designed to reduce these impacts to acceptable levels.
Policy TRANS 2.5	Create a network of street and bicycle facilities that provides for multiple routes between various origins and destinations.
Policy TRANS 2.7	Minimize impacts of vehicle traffic on local streets to maintain or enhance livability of the neighborhoods. Consider traffic calming measures along collector and minor arterial streets, where appropriate and feasible, to slow speeds.
Policy TRANS 2.8	Improve the function, safety, and appearance of selected corridors as illustrated.
Policy TRANS 2.10	Prohibit through truck traffic on streets other than identified truck routes shown in the Transportation Element.
Policy TRANS 3.1	Facilitate the provision of convenient, reliable, safe, and attractive fixed route, commuter, and demand responsive public transportation that meets the needs of the Davis community, including exploring innovative methods to meet specialized transportation needs.
Policy TRANS 3.3	Require new development to be designed to maximize transit potential.

Goal #4 Davis will strengthen its status as a premier bicycling community in the nation by continuing to encourage bicycling as a healthy, affordable, efficient, and low-impact mode of transportation accessible to riders of all abilities, and by continuously improving the bicycling infrastructure.

Policy TRANS 4.2	Develop a continuous trails and bikeway network for both recreation and transportation that serves the Core, neighborhoods, neighborhood shopping centers, employment centers, schools and other institutions; minimize conflicts between pedestrians, bicyclists, equestrians, and automobiles; and minimize impacts on wildlife. Greenbelts and separated bike paths on arterials should serve as the backbone of much of this network.
------------------	---



Policy TRANS 4.5	Establish and implement bicycle parking standards for new developments and significant redevelopment.
Policy TRANS 4.7	Develop a system of trails around the edge of the City and within the City for recreational use and to allow pedestrians and bicyclists to reach open space and natural areas.
Policy TRANS 4.10	Maintain existing bicycle paths in good repair.
Policy TRANS 5.1	Use parking management techniques to efficiently manage motor vehicle parking supply and promote sustainability.
Policy TRANS 5.2	Existing and future off-street parking lots in development should contribute to the quality of the urban environment and support the goals of this chapter to the greatest extent possible.

### **Beyond Platinum Bicycle Action Plan**

The City of Davis Beyond Platinum Bicycle Action Plan (Bicycle Action Plan), adopted in 2014, includes discussions regarding goals and objectives, bicycle facility guidelines, engineering standards, and implementation and funding.<sup>4</sup> Appendix C of the Bicycle Action Plan includes a variety of proposed bicycle facilities throughout the City, including the following proposed bicycle facility enhancements within the vicinity of the project site:

- Buffered bike lanes on East Covell Boulevard between F Street and Birch Lane (now completed in the westbound direction between Pole Line Road and J Street/Cannery Avenue) and on Second Street between Mace Boulevard and L Street.
- Bike intersection crossing markings at the East Covell Boulevard/Birch Lane Intersection.
- Bike lane conflict markings (green) at the East Covell Boulevard/Pole Line Road intersection.
- Shared lane markings (green) on Birch Lane between East Covell Boulevard and Pole Line Road.
- Shared lane markings on several streets within East Davis, including Temple Drive, Tulip Lane, and Baywood Lane.
- Traffic calming on Tulip Lane between Temple Drive and Loyola Drive.

### **4.6.4 IMPACTS AND MITIGATION MEASURES**

This section describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to transportation and circulation.

#### **Standards of Significance**

Consistent with Appendix G of the CEQA Guidelines, a significant impact related to transportation would occur if the project would result in any of the following:

<sup>4</sup> City of Davis. *Beyond Platinum Bicycle Action Plan*. February 2014.



- Conflict with a program, plan, ordinance, or policy, addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

### **VMT Standards of Significance**

As of May 2024, the City of Davis has not adopted VMT procedures standards. Therefore, the VMT analysis within this chapter relies on guidance from the OPR Technical Advisory. Pursuant to the Technical Advisory, the proposed project would result in a significant VMT impact if it would cause the following:

- The project residential component would generate residential VMT per capita exceeding 15 percent below baseline local or regional residential VMT per capita for residential uses.
- The project non-residential component (i.e., the aquatic complex and the USA Pentathlon Training Facility) would generate vehicle travel that would result in a net increase in total VMT within the region.

As discussed above, according to the TIS, the existing residential VMT per capita for the City of Davis and the SACOG region is 30.1 and 21.7 VMT per capita, respectively. Therefore, the residential component of the proposed project would result in a significant impact if it would generate residential VMT per capita exceeding 15 percent below either the baseline City average or regional average VMT per capita for residential uses. With respect to the non-residential component of the proposed project, a significant impact would occur if the proposed aquatic complex and the USA Pentathlon Training Facility would generate vehicle travel that would result in a net increase in total VMT within the region; according to the TIS, the total VMT of the baseline SACOG region, plus the proposed residential component, would be 62,836,606 total VMT.

### **Method of Analysis**

The analysis of this SEIR is focused generally on the changes in circumstances following the City's certification of the 2009 EIR, pursuant to CEQA Guidelines Section 15162. The analysis of this chapter is based on the 2009 EIR and the TIS prepared for the currently proposed project by Fehr & Peers.

As discussed throughout this SEIR, the environmental baseline for the majority of this SEIR is appropriately considered to be the approved Wildhorse Ranch Project, which included a 191-unit residential development comprised of 73 detached single-family residences and 78 two- and three-story single-family townhomes on 11.95 acres, as well as 40 attached affordable housing units on 1.92 acres. In addition, the Wildhorse Ranch Project included the dedication of 2.26 acres of additional agricultural buffer, 1.61 acres of interior greenbelt, and 4.4 acres of interior open space. As such, buildout of the Wildhorse Ranch Project would have potentially resulted in impacts related to transportation. However, because VMT was not addressed in the 2009 EIR, the City, as lead agency, has conservatively chosen not to use the Wildhorse Ranch Project as the environmental baseline for the VMT analysis. Rather, the VMT analysis herein considers the full VMT of the proposed project.

The methods of analysis provided in the TIS are described in further detail below.





## Project Trip Generation

Trip generation refers to the process of estimating how much vehicular traffic a project would add to the surrounding roadway system. Project trip generation estimates are prepared for a 24-hour weekday period and the anticipated peak periods of project arrival and departure trips.

The trip generation estimates for the residential component of the proposed project were derived from daily trip rates published in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11<sup>th</sup> Edition (2021). Based on the daily trip rate for ITE Land Use #210 (Single-Family Detached Housing), ITE Land Use #215 (Single-Family Attached Housing), and ITE Land Use #223 (Affordable Housing), the proposed 175 residential units are estimated to generate 1,336 daily trips. After netting out the existing on-site residences and applying reductions related to pedestrian, bicycle, and transit trip reductions, the residential component of the proposed project would generate approximately 1,250 daily trips, with 89 AM peak hour trips and 115 PM peak hour trips.

The proposed USA Pentathlon Training Facility and aquatic complex components of the proposed project are specialized land uses and are not compatible with the land use categories included in the ITE Trip Generation Manual, 11<sup>th</sup> Edition. In such instances, the ITE Trip Generation Handbook, 3<sup>rd</sup> Edition (2017) recommends that local data be used to inform project trip generation estimates. Trip generation calculations associated with the proposed USA Pentathlon Training Facility and the aquatic complex are discussed below.

### USA Pentathlon Training Facility

The modern pentathlon is a multi-sport competition comprised of five events: freestyle swimming, obstacle course, fencing, and a combined event of laser pistol shooting and cross country running. The proposed USA Pentathlon Training Facility would host pentathlon training activities for local organizations (e.g., the Davis Pentathlon Club and the Davis Fencing Club), local, regional, and national competitions, and day camps during school breaks. Additionally, the facility could be used as the national headquarters for USA Pentathlon Multisport.

To support CEQA review of the proposed project, the analysis of the TIS focuses on estimating daily and peak hour trips that would be generated by the USA Pentathlon Training Facility during a typical weekday. In the case of the USA Pentathlon Training Facility, trips generated would include trips associated with local organization training activities that would occur on a midweek day while local schools are in session. While the facility would also generate trips associated with local, regional, and national competitions and day camps, such activities would occur outside of typical weekdays during weekends and school breaks, respectively. Therefore, the trips generated by local, regional, and national competitions and day camps are not included in the analysis of the TIS.

Details regarding the specific weekday programming and users of the proposed USA Pentathlon Training Facility are not available at this time. However, the project applicant provided the following relevant information regarding the configuration of and anticipated activities at the proposed USA Pentathlon Training Facility during a typical weekday:

- Existing Davis Pentathlon Club fencing training and Davis Fencing Club training activities would relocate from an existing facility on Second Street in Davis to the proposed USA Pentathlon Training Facility. The existing training facility is currently leased by these



programs and the TIS assumes that a new tenant would occupy the existing training facility with the implementation of the project.

- The facility would have capacity for 20 fencing strips. For comparison, the existing facility used for Davis Pentathlon Club fencing training and Davis Fencing Club training activities has capacity for eight fencing strips.
- The existing training facility accommodates the following weekday training activities:
  - A small (approximately 10 athletes) youth beginning/intermediate class from 4:00 PM to 5:00 PM.
  - A large (approximately 15 to 20 athletes) mixed age beginning/intermediate class from 5:00 PM to 6:00 PM.
  - A large (approximately 25 to 35 athletes) mixed age advanced class from 6:00 PM to 9:00 PM.
- The project would enable training activities at the proposed USA Pentathlon Training Facility to expand to between 40 and 60 athletes per class.

Based on the foregoing information, the TIS anticipates that the proposed USA Pentathlon Training Facility would accommodate 150 athletes during a typical weekday, plus eight coaches to facilitate trainings. The analysis of the TIS also accounts for additional trips that would be generated by athletes and coaches if the USA Pentathlon Training Facility were to become the national headquarters for USA Pentathlon Multisport. According to the project applicant, this would entail an additional 12 athletes and three coaches who would be on-site during a typical weekday.

### Aquatic Complex

The proposed aquatic center would be utilized by local aquatic programs including DART Swimming, Davis Aquatic Masters (DAM), Davis Water Polo Club, and Davis Aquastarz.

To support CEQA review of the proposed project, the analysis of the TIS focuses on estimating daily and peak hour trips that would be generated by the aquatic complex during a typical weekday. In the case of the aquatic complex, trips generated would include trips associated with local aquatic program training activities that would occur on a midweek day while local schools are in session.

Details regarding the specific weekday programming and users of the proposed aquatic complex are not available at this time. Therefore, for the purposes of the TIS, a hypothetical weekday program for the aquatic complex was developed based on existing weekday local programming for DART Swimming and the Davis Aquatic Masters programming. This hypothetical weekday program was supplemented by trip generation and mode split observations conducted by Fehr & Peers during existing weekday DART Swimming and Davis Aquatic Masters training sessions in Spring 2022 at local pools in Davis, including afternoon/evening DART Swimming sessions at Community Pool, Manor Pool, and Arroyo Pool and morning/midday Davis Aquatic Masters sessions at Civic Center Pool. Table 4.6-2 displays the hypothetical weekday program for the proposed aquatic complex, including the time duration, age group (youth or adult), and number of swimmers during each training session. The aquatic complex trip generation estimates were also informed by the following key inputs derived from the field observations described above:

- Travel mode split for youth swimmers were estimated as follows:
  - Drive and park: 50 percent;
  - Pick-up/drop-off: 40 percent;



**Table 4.6-2  
 Aquatic Complex Weekday Programming**

Time	Age Group (# of Swimmers)
	Pool #1 (Deep)
5 AM - 6 AM	Youth (15)
6 AM - 7 AM	Youth (15)
7 AM - 8 AM	Adult (20)
8 AM - 9 AM	Adult (20)
9 AM - 10 AM	Adult (15)
10 AM - 11 AM	Adult (5)
11 AM - 12 PM	Adult (10)
12 PM - 1 PM	Adult (20)
1 PM - 2 PM	
2 PM - 3 PM	
3 PM - 4 PM	Youth (15)
4 PM - 5 PM	Youth (15)
5 PM - 6 PM	Youth (15)
6 PM - 7 PM	Youth (15)
7 PM - 8 PM	Youth (15)
8 PM - 9 PM	Adult (10)

Source: Fehr & Peers, 2024.



- Walking/Bicycling: 10 percent;
- Travel mode split for adult swimmers were estimated as follows:
  - Drive and park: 80 percent;
  - Pick-up/drop-off: 5 percent;
  - Walking/Bicycling: 15 percent;
- Average vehicle occupancy (swimmers per vehicle) for youth and adult swimmers were estimated to be 1.1 and 1.05 persons per vehicle, respectively.

In total, an estimated 205 swimmers would utilize the aquatic complex during a typical weekday. Additionally, an estimated 20 coaches/employees would facilitate training activities at the aquatic complex.

### Total Project Trip Generation

Table 4.6-3 summarizes the estimated weekday and peak hour trip generation for the Palomino Place Project based on the methods described previously. As shown in Table 4.6-3, the project would generate an estimated 2,096 net new daily trips, 155 net AM peak hour trips, and 231 net PM peak hour trips during a typical weekday.

### **Vehicle Miles Traveled Assessment**

As previously discussed, the SACOG SASCIM19 travel demand model was utilized to derive VMT estimates for the proposed project. The SASCIM19 model is a sophisticated activity-based model that predicts the travel demand and travel patterns for residents, workers, students, visitors, and commercial vehicles throughout the SACOG region. The model requires inputs such as population and employment to represent the land use and transportation network associated with each scenario. For the purposes of the analysis of the TIS, the base year SASCIM19 model was refined to include traffic analysis zone (TAZ) splits, land use inputs, and centroid connectors that align with the various land use components and access locations of the project. Proposed project land uses were incorporated by updating the parcel, household, and synthetic population inputs in the SASCIM19 model.

For the project residential component VMT analysis, the SASCIM19 model was utilized to estimate residential VMT per capita that would be generated by the project residential component. Residential VMT includes all automobile (i.e., passenger cars and light-duty trucks) vehicle-trips that are traced back to the residence of the trip-maker. Residential VMT includes all vehicle “tours” (both work/commute vehicle tours and non-work vehicle tours) that start and end at residential units. VMT from these tours are summed to the home location. VMT for each home is then summed by TAZ and divided by the total population in that TAZ to arrive at residential VMT per capita.

Project-generated residential VMT per capita was estimated using the latest SACOG-recommended methodology, which accounts for the full amount of VMT generated by trips with a trip end located outside of the SACOG region. A select zone analysis was performed for the TAZ containing the project site to determine the number of project-generated residential vehicle trips estimated by the SASCIM19 model.

For the project non-residential component VMT analysis, the SASCIM19 model was utilized to estimate the effect of the non-residential component of the proposed project on total VMT in the region. Total VMT in the region includes all VMT on all roadway links within the SACOG region.



**Table 4.6-3  
Project Vehicle Trip Generation Estimates**

Land Use	Units	ITE Code	Quantity	Daily	AM In	AM Out	AM Total	PM In	PM Out	PM Total
<b>Residential Component</b>										
<b>Net New Uses</b>										
Single-Family Detached Housing	Dwelling Units	210	82	773	15	42	57	49	28	77
Single-Family Attached Housing	Dwelling Units	215	48	346	7	16	23	15	12	27
Affordable Housing (Income Limits)	Dwelling Units	223	45	217	4	12	16	12	8	20
<i>Raw External Vehicle Trips</i>				1,336	26	70	96	76	48	124
<b>Reductions</b>										
Internal Trip Capture & External Walk, Bike, and Transit				-58	-2	-3	-5	-4	-2	-6
Existing Uses				-28	-1	-1	-2	-2	-1	-3
<i>Total Vehicle Trip Reductions</i>				-86	-3	-4	-7	-6	-3	-9
<b>Net New External Vehicle Trips</b>				<b>1,250</b>	<b>23</b>	<b>66</b>	<b>89</b>	<b>70</b>	<b>45</b>	<b>115</b>
<b>Non-Residential Component</b>										
<b>Net New Uses</b>										
USA Pentathlon Training Facility	20 fencing strips			338	15	15	30	40	38	78
Aquatic Complex	1 pool			508	18	18	36	19	19	38
<b>Net New External Vehicle Trips</b>				<b>846</b>	<b>33</b>	<b>33</b>	<b>66</b>	<b>59</b>	<b>57</b>	<b>116</b>
<b>Project Total</b>										
<b>Net New External Project Trips</b>				<b>2,096</b>	<b>56</b>	<b>99</b>	<b>155</b>	<b>129</b>	<b>102</b>	<b>231</b>
<i>Source: Fehr &amp; Peers, 2024.</i>										



Two analysis scenarios were prepared to isolate the VMT effects of the project non-residential component. The first analysis scenario included all baseline land use and transportation system inputs plus the project residential component. The second analysis scenario included all baseline land use and transportation system inputs plus the project residential and non-residential components. The difference in total VMT within the region between the two analysis scenarios represents the effect of the project non-residential component on total VMT within the region.

### **Project-Specific Impacts and Mitigation Measures**

The proposed project impacts on the transportation system are evaluated in this section based on the thresholds of significance and methodology described above. Each impact is followed by recommended mitigation to reduce the identified impacts, if needed.

#### **4.6-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system during construction activities. Based on the analysis below, and with implementation of mitigation, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were previously identified in the 2009 EIR.**

The 2009 EIR addressed potential impacts of the Wildhorse Ranch Project related to conflicts with the circulation system during construction activities under Impact 4.3-5. As discussed therein, the 2009 EIR determined that construction activities associated with the Wildhorse Ranch Project could introduce construction traffic that could create traffic impacts on the surrounding roadway network. The 2009 EIR concluded that with implementation of Mitigation Measure 4.3-5, which requires the project applicant to prepare and implement a construction traffic management plan, the impact would be reduced to a less-than-significant level.

Similar to what was anticipated in the 2009 EIR for the Wildhorse Ranch Project, construction activities associated with the proposed project would include use of construction equipment, including on-site earth-moving vehicles, bulldozers, and other heavy machinery, as well as building materials delivery, and construction worker commutes. The transport of heavy construction equipment to the site, haul truck trips, and construction worker commutes could affect the local roadway network.

As would have been the case with the Wildhorse Ranch Project, construction workers associated with the currently proposed project would typically arrive before the morning peak hour and leave before the evening peak hours of the traditional commute time periods. Deliveries of building material (lumber, concrete, asphalt, etc.) would also normally occur outside of the traditional commute time periods. In addition, any truck traffic to the site would follow designated truck routes, and project construction would likely stage any large vehicles (i.e., earth-moving equipment, cranes, etc.) on-site prior to beginning site work and remove such vehicles at project completion. However, similar to the analysis in the 2009 EIR, detailed information related to the construction routes and equipment staging, or a construction traffic management plan, is not available for the currently proposed project. As a result, construction activities could include disruptions to the transportation network near the project site.





It should be noted that although the currently proposed project would include the development of a USA Pentathlon Training Facility and pool complex, and an off-site sewer improvement, which were not anticipated for the site in the 2009 EIR, the proposed project would include the development of 16 fewer residential units than were planned as part of the Wildhorse Ranch Project. In addition, the currently proposed project would not include a substantially greater area of disturbance than what was anticipated for the Wildhorse Ranch Project and analyzed in the 2009 EIR. Therefore, construction traffic associated with buildout of the currently proposed project is not anticipated to be greater than what was anticipated in the 2009 EIR for the Wildhorse Ranch Project.

Based on the above, without proper planning of construction activities, construction traffic and potential street closures could interfere with existing roadway operations, including pedestrian, bicycle, and transit facilities, during the construction phase. As such, the currently proposed project would result in similar impacts related to a conflict with a program, plan, ordinance or policy addressing the circulation system during construction activities as the Wildhorse Ranch Project. Therefore, the currently proposed project would not result in a new significant impact or substantially more severe significant impact beyond what was previously identified in the 2009 EIR, and Mitigation Measure 4.3-5 from the 2009 EIR would remain applicable to the currently proposed project.

#### Applicable Mitigation Measure(s) from the 2009 EIR

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- 4.3-5      *Prior to any on-site construction activities, the project applicant shall prepare a Construction Traffic Management Plan subject to the review and approval by the City Engineer. The Construction Traffic Management Plan shall include all measures for temporary traffic control, temporary signage and striping, location points for ingress and egress of construction vehicles, haul routes, staging areas, and shall provide for the timing of construction activity that appropriately limits hours during which large construction equipment may be brought onto or taken off of the site.*

#### Modified Mitigation Measure(s)

*None required.*

#### New Mitigation Measure(s)

*None required.*



**4.6-2 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway, bicycle, and pedestrian facilities. Based on the analysis below, and with implementation of mitigation, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were previously identified in the 2009 EIR.**

As discussed throughout this chapter, LOS is not the applicable metric for evaluating CEQA transportation impacts of a project. The evaluation of VMT is discussed in Impact 4.6-4 of this chapter. The following discussion focuses on whether the proposed project would result in impacts to existing or planned pedestrian facilities, bicycle facilities, or transit facilities and services within the project area.

Bicycle and Pedestrian Facilities

The 2009 EIR determined that the proposed off-site connection to the existing bike undercrossing under Covell Boulevard would serve to provide adequate bicycle infrastructure for future residents of the Wildhorse Ranch Project and provide safer bicycle access to the schools and parks located south of Covell Boulevard; as such, the 2009 EIR concluded that a less-than-significant impact would occur related to bicycle facilities.

The 2009 EIR also determined that although the site plan for the project would include a network of pathways that would connect to the existing sidewalk network along the project frontage on Covell Boulevard and to the greenbelt path located east of the project site, the sidewalk design and connectivity to guest parking would need to meet Americans with Disabilities Association (ADA) standards and City of Davis standards. The 2009 EIR concluded that the minimal use of standard sidewalks may fall short of the ADA accessibility requirements, and a potentially significant impact related to pedestrian facilities could occur. However, implementation of Mitigation Measure 4.3-3, which required to the project applicant to ensure that all on-site pathways and sidewalks meet ADA accessibility requirements, the impact would be reduced to a less-than-significant level.

As discussed previously, the immediate project site vicinity includes a Class I shared-use path along the northerly and southerly sides of East Covell Boulevard, an unpaved path along the Wildhorse UATA, and sidewalks on residential streets within the Wildhorse and Slide Hill Park neighborhoods immediately adjacent to the project site. From the East Covell Boulevard/Monarch Lane intersection at the project site entrance, the nearest pedestrian crossings of East Covell Boulevard are available at a marked crosswalk on the west leg of the signalized East Covell Boulevard/Wright Boulevard intersection (approximately 900 feet to the west) and at the grade-separated bicycle and pedestrian crossing underneath East Covell Boulevard approximately 640 feet to the east.

As discussed in Chapter 3, Project Description, of this SEIR, the proposed project would include the development of the following new bicycle and pedestrian facilities:



- Path connection between the project site and Caravaggio Drive at Bonnard Street;
- Path connection between the project site and the Wildhorse UATA on the eastern project side boundary; and
- Sidewalks on both sides of roadways internal to the project site.

The currently proposed project would not include the development of new bikeway facilities on internal roadways, and would not install new bicycle or pedestrian crossings of East Covell Boulevard within the project vicinity. Moreover, according to the TIS, the proposed project would not physically disrupt existing bicycle or pedestrian facilities and would not interfere with the implementation of planned future bicycle or pedestrian facilities. Although the proposed sewer line extension through the Wildhorse UATA would disrupt use of the gravel path, such disruption would be temporary, extending only through the construction phase.

Considering the project's proposed land uses and location within the City of Davis, the project would create new bicycle and pedestrian desire lines (defined as the preferred path of travel between two points) and generate new demand for bicycle and pedestrian travel within the project site and between the project site and other local neighborhoods and activity centers. New bicycle and pedestrian travel demand would be served by the new bicycle and pedestrian facilities that would be constructed by the project, as well as by existing bicycle and pedestrian facilities elsewhere in the local active transportation system.

The proposed aquatic complex and USA Pentathlon Training Facility would be situated in the southeast corner of the project site and would generate demand for bicycle and pedestrian travel through the project site. Given the anticipated programming at the proposed facilities, it is anticipated that bicycle and pedestrian travel demand would be generated by youth athletes, adult athletes, and coaches/employees traveling to and from trainings and competitions. The project site would lack a contiguous bikeway facility between East Covell Boulevard and the aquatic complex and USA Pentathlon Training Facility uses, thus requiring bicyclists traveling to and from these uses to physically mix with motor vehicle traffic on roadways internal to the project site. Therefore, the project could increase the number and severity of bicycle-vehicle conflicts and increase the potential for collisions involving bicyclists.

Additionally, the proposed project would create new bicycle and pedestrian desire lines and generate new demand for bicycle and pedestrian crossings across East Covell Boulevard within the project vicinity. For example, residents of the Slide Hill Park neighborhood located south of East Covell Boulevard would desire to travel to uses on the project site and, given the relatively short trip distance, could choose to walk or ride a bicycle. However, the East Covell Boulevard/Monarch Lane intersection, which is situated along the bicycle and pedestrian desire line between the project site and the Slide Hill Park neighborhood, currently lacks bicycle and pedestrian crossings; the proposed project would not include the provision of such crossing facilities. Bicyclists who desire to cross East Covell Boulevard at Monarch Lane would be required to cross multiple lanes of uncontrolled vehicular traffic with a posted speed limit of 40 mph, experiencing considerable exposure to conflicting vehicular traffic. Given the lack of bicycle and pedestrian crossings at the East Covell



Boulevard/Monarch Lane intersection, as well as project-related increases to vehicular traffic within the project site vicinity, the project could increase the number and severity of bicycle-vehicle conflicts and increase the potential for collisions involving bicyclists.

Bicyclists and pedestrians who desire to access the project site to/from locations south of East Covell Boulevard could choose to use the existing crossing at the signalized East Covell Boulevard/Wright Boulevard intersection or the grade-separated bicycle and pedestrian crossing located east of the project site. However, use of these crossings would require substantial out of direction travel. For example, in the aforementioned example of residents living in the Slide Hill Park neighborhood, bicyclists and pedestrians attempting to access the project site would be required to travel at least one-quarter mile out of direction in order to access the nearest existing crossings of East Covell Boulevard. Considering the foregoing conditions, the existing and proposed East Covell Boulevard bicycle and pedestrian crossing facilities could pose a barrier to bicycle or pedestrian travel to and from the project site.

The lack of a contiguous bikeway facility between East Covell Boulevard and on-site pentathlon uses as well as the lack of existing or proposed bicycle and pedestrian crossings of East Covell Boulevard at Monarch Lane and the resulting project-related adverse effects on bicycle and pedestrian travel and safety would be inconsistent with City plans and policies that promote bicycle and pedestrian travel, including City of Davis General Plan Goals #1, #2, #3, and #4 and Policies TRANS 1.6, 2.1, 2.2, 2.5, and 4.3 and the City of Davis Beyond Platinum Bicycle Action Plan.

Based on the above, a potentially significant impact related to bicycle and pedestrian facilities could occur.

### Conclusion

Based on the above, the proposed project could conflict with adopted policies, plans, or programs supporting alternative transportation (i.e., bicycle lanes, bicycle racks, pedestrian facilities, etc.). However, implementation of Mitigation Measure 4.3-3 from the 2009 EIR, as modified in this SEIR, as well as Mitigation Measures SEIR 4.6-2(a) and (b), would reduce potential significant impacts associated with bicycle and pedestrian facilities to a less-than-significant level by reducing conflicts involving bicyclists or pedestrians.

Based on the above, without implementation of mitigation, the currently proposed project could result in new significant impacts or substantially more severe significant impacts related to a conflict with a program, plan, ordinance or policy addressing the circulation system, including roadway, bicycle, and pedestrian facilities beyond what were previously identified in the 2009 EIR.

### Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

### Modified Mitigation Measure(s)

The following mitigation measure from the 2009 EIR has been modified to clarify the timing requirement for when the mitigation must be implemented. The minor modification is shown in ~~strikethrough~~ and double-underline. Implementation of the



following mitigation measure from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

- 4.3-3 *Prior to approval of the ~~Tentative Map~~ improvement plans, the project applicant shall ensure that the pathway and sidewalk network meets ADA accessibility requirements, subject to the review and approval by the City Engineer.*

#### New Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

- SEIR 4.6-2(a) *Prior to the commencement of operations at the aquatic complex or the commencement of operations at the USA Pentathlon Training Facility (whichever occurs first), the project applicant shall construct a contiguous bikeway facility with dedicated physical space for bicyclists between East Covell Boulevard and the project non-residential uses. Potential improvement options include the following:*

- 1) *Install Class II bike lanes on the new north leg of the East Covell Boulevard/Monarch Lane intersection; or*
- 2) *Construct a Class I shared-use path between East Covell Boulevard and the project non-residential uses within the Wildhorse Urban Agriculture Transition Area along the easterly project site frontage.*

*Implementation of these improvements, or a set of improvements of equal effectiveness as determined by the City of Davis City Engineer, would reduce the potential for conflicts involving bicyclists that could otherwise be caused by the project and promote bicycle travel to and from the project site.*

- SEIR 4.6-2(b) *Prior to occupancy of the residential units at the project site, the commencement of operations at the aquatic complex, or the commencement of operations at the USA Pentathlon Training Facility (whichever occurs first), the project applicant shall install a traffic signal at the East Covell Boulevard/Monarch Lane intersection. The purpose of the traffic signal is to provide temporal separation between bicyclists, pedestrians, and conflicting vehicular movements (e.g., through the provision of pedestrian crossing phases). As part of this mitigation measure, the applicant shall also construct an eastbound left-turn pocket with a queue storage length of 105 feet and install designated bicycle and pedestrian facilities and crossings.*

*The specific intersection geometrics, lane configurations, bicycle and pedestrian accommodations, and signal phasing are subject to review and approval by the City of Davis City Engineer.*



*Note that this intersection would meet the four-hour vehicular volume signal warrant (CA MUTCD Warrant 2) and the peak hour signal warrant (CA MUTCD Warrant 3B) under Existing Plus Project conditions.<sup>5</sup>*

*Implementation of these improvements, or a set of improvements of equal effectiveness as determined by the City of Davis City Engineer, would reduce the potential for conflicts involving bicyclists or pedestrians that could otherwise be caused by the project and promote bicycle and pedestrian travel to and from the project site.*

**4.6-3 Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit. Based on the analysis below, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were previously identified in the 2009 EIR.**

The 2009 EIR addressed potential impacts related to transit facilities under Impact 4.3-4. As discussed therein, because the existing transit stops in the project vicinity would be sufficient to serve the project, and because the Wildhorse Ranch Project would not alter or conflict with any existing or planned transit route, the 2009 EIR concluded that a less-than-significant impact would occur.

With respect to the currently proposed project, as discussed previously, the project would be served by existing bus stops on East Covell Boulevard, near Wright Boulevard, and on Monarch Lane south of East Covell Boulevard. The proposed project would not include the construction of any new transit facilities, nor physically disrupt existing transit facilities. In addition, the proposed project would not interfere with implementation of planned future transit facilities.

The project would introduce new land uses that would be situated within walking distance of existing bus stops. The stops near the site are served by Unitrans Routes L, P, and Q, which serve a variety of retail, employment, medical, institutional, and recreational destinations throughout the City and on the UC Davis campus, and Yolobus Route 43, which provides commute bus service for Davis residents who work in Downtown Sacramento. According to the TIS, while the proposed project is anticipated to increase transit ridership on Unitrans, given the relatively low expected

---

<sup>5</sup> The analysis presented herein is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. It estimates future development-generated traffic compared against a sub-set of the standard traffic signal warrants recommended in the Federal Highway Administration *Manual on Uniform Traffic Control Devices* and associated State guidelines. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecast, traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, because the installation of signals can lead to certain types of collisions. The City of Davis should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization.





number of project transit riders (fewer than five new peak hour passenger boardings based on the project mode split estimates) and existing transit patronage, the project would not cause a demand above that which is provided or planned.

The proposed project would increase vehicle travel demand and cause increases to peak hour delay on roadways within the project site vicinity, including East Covell Boulevard and Mace Boulevard. Such delays could interfere with bus performance times. However, according to the TIS, Unitrans routes that operate in the project vicinity, including the P and Q lines, currently operate below Unitrans performance targets. The TIS determined that increases in vehicle travel demand and peak hour delay on roadways associated with the currently proposed project would not exacerbate currently deficient Unitrans performance with respect to its on-time performance target. In addition, as shown in Table 4.3-10 of the 2009 EIR, the Wildhorse Ranch Project was anticipated to generate 254 AM peak hour trips, 336 PM peak hour trips, and 3,320 total daily trips. As shown in Table 4.6-3 above, the currently proposed project would generate 155 AM peak hour trips, 231 PM peak hour trips, and 2,096 total daily trips. The currently proposed project would generate 99 fewer AM peak hour trips, 105 fewer PM peak hour trips, 1,224 fewer total daily trips as compared to the Wildhorse Ranch Project. Thus, buildout of the currently proposed project would result in a reduction in peak hour delays on roadways within the project site vicinity from what was anticipated in the 2009 EIR. Therefore, potential impacts to transit facilities associated with the currently proposed project would be reduced as compared to what was analyzed in the 2009 EIR.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts related to a conflict with a program, plan, ordinance or policy addressing the circulation system, including transit facilities beyond what were previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**4.6-4 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Based on the analysis below, even with implementation of mitigation, the currently proposed project could result in new significant impacts or substantially more severe significant impacts beyond what were previously identified in the 2009 EIR.**

Pursuant to SB 743, passed in 2013, local jurisdictions may not rely on vehicle LOS and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA. Because the 2009 EIR was prepared before SB



743 was passed, the 2009 EIR did not address potential impacts of the Wildhorse Ranch Project related to VMT.

As discussed above, the results of the VMT analysis using the SACOG SASCIM19 travel demand model indicate that the existing residential VMT per capita for the City of Davis and the SACOG region is 30.1 and 21.7 VMT per capita, respectively. In accordance with OPR guidance, the residential component of the proposed project would result in a significant impact if it would generate residential VMT per capita exceeding 15 percent below the baseline City and/or regional average VMT per capita for residential uses. With respect to the non-residential component of the proposed project, a significant impact would occur if the proposed aquatic complex and the USA Pentathlon Training Facility would generate vehicle travel that would result in a net increase in total VMT within the region.

Table 4.6-4 summarizes the residential VMT per capita that would be generated by the project residential component compared to baseline local and regional residential VMT per capita averages.

<b>Scenario</b>	<b>Residential VMT per Capita</b>	<b>Significance Threshold (15 percent Below Existing Average)</b>	<b>Project Residential Component Compared to Baseline Average</b>	<b>Reduction Required to Meet Significance Threshold</b>
Project Residential Component	33.0	--	--	--
Baseline City of Davis Average	30.1	25.6	+9.7%	-22.5%
Baseline SACOG Region Average	21.7	18.4	+52.6%	-44.3%

*Source: Fehr & Peers, 2024.*

As shown in Table 4.6-4, residential VMT per capita generated by the project residential component would be 9.7 percent and 52.6 percent above baseline local and regional residential VMT per capita averages, respectively. Therefore, the project residential component would generate residential VMT per capita exceeding 15 percent below baseline local and regional residential VMT per capita averages.

Table 4.6-5 summarizes the effect of the project non-residential component on total VMT within the region. As shown in Table 4.6-5, the project non-residential component would reduce total VMT within the region by 1,089 VMT. Therefore, the project non-residential component would generate vehicle travel that would not result in a net increase in total VMT within the region.

Based on the above, the currently proposed project could result in new significant impacts or substantially more severe significant impacts related to the project



conflicting or being inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) beyond what were previously identified in the 2009 EIR.

<b>Table 4.6-5 Effect of Project Non-Residential Component on Weekday Total VMT</b>		
<b>Scenario</b>	<b>Total VMT<sup>1</sup></b>	<b>Effect of Project Non-Residential Component on Weekday Total VMT</b>
Baseline SACOG Region Plus Project Residential Component	62,836,606	--
Baseline SACOG Region Plus Project Residential and Non-Residential Components	62,835,517	-1,089
<sup>1</sup> Includes all VMT on all roadway links within the SACOG region.		
<b>Source: Fehr &amp; Peers, 2024.</b>		

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

Implementation of transportation demand management (TDM) strategies can result in reductions to a project’s vehicle trip generation based on certain types of project site modifications, programming, and operational changes. The California Air Pollution Control Officers Association (CAPCOA) *Handbook for Assessing GHG Emission Reductions, Climate Vulnerabilities, and Health and Equity* (December 2021) identifies numerous TDM strategies and quantifies their potential vehicle trip reduction effects. While each strategy provides standalone VMT reduction potential, multiplicative dampening limits the VMT reduction potential in instances where multiple strategies are implemented together. The TIS identifies the following TDM strategies, including the associated VMT reduction potential, and accounts for multiplicative dampening and/or category maximums:

*SEIR 4.6-4 The project applicant shall implement the following TDM strategies to reduce the number of vehicle trips that would be generated by the project residential component, subject to review and approval by the City Engineer. The timing for each strategy is set forth below:*

- 1) Implement subsidized or discounted transit program (CAPCOA Handbook Strategy T-9) – This measure would provide subsidized or discounted, or free transit passes for residents of the project’s 45 affordable housing dwelling units. Reducing the out-of-pocket cost for choosing transit improves the competitiveness of transit against driving, increasing the**



total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT.

Prior to occupancy of the multi-family residential units, the project applicant shall provide free transit passes to residents of the project's 45 affordable housing dwelling units. According to CAPCOA, this strategy would reduce project-generated residential VMT per capita by 0.16 percent.

- 2) **Implement carshare program (CAPCOA Handbook Strategy T-21-A)** – This measure would increase carshare access in the project site by deploying conventional carshare vehicles. Examples include programs like Zipcar and GIG Car Share. Carsharing offers people convenient access to a vehicle for personal or commuting purposes, which helps encourage transportation alternatives and reduces vehicle ownership, thereby avoiding VMT.

Prior to occupancy of the first phase of the project residential component, the project applicant shall partner with a carshare service provider and ensure that carshare vehicles are available to project residents. Proof of completion of this measure shall be provided to the City of Davis.

According to CAPCOA, this strategy would have a maximum reduction potential of 0.15 percent of project VMT.

- 3) **Implement electric bikeshare program (CAPCOA Handbook Strategy T-22-B)** – This measure would establish an electric bikeshare program. Electric bikeshare programs provide users with on-demand access to electric-pedal-assist bikes for short-term rentals. This encourages mode shift from vehicles to electric bicycles, displacing VMT and reducing GHG emissions.

Prior to issuance of a building permit for the multi-family housing or USA Pentathlon Training Facility project components, whichever occurs first, the project applicant shall provide the City of Davis with evidence of an agreement with a bikeshare and scootershare system operator for the project. Currently, Spin provides bikeshare and scootershare service to the entirety of the City of Davis and the UC Davis campus. Accordingly, the project site is presumed to be incorporated into the Spin service area.

Prior to issuance of an occupancy permit for the multi-family housing or USA Pentathlon Training Facility project components, whichever occurs first, the applicant shall construct a hub for use by the bikeshare and scootershare



system operator within the multi-family housing or USA Pentathlon Training Facility.

According to CAPCOA, this strategy would reduce project-generated residential VMT per capita by 0.05 percent.

- 4) **Implement scootershare program (CAPCOA Handbook Strategy T-22-C)** – This measure would establish a scootershare program. Scootershare programs provide users with on-demand access to electric scooters for short-term rentals. This encourages a mode shift from vehicles to scooters, displacing VMT and thus reducing GHG emissions.

Prior to issuance of a building permit for the multi-family housing or USA Pentathlon Training Facility project components, whichever occurs first, the project applicant shall provide the City of Davis with evidence of an agreement with a bikeshare and scootershare system operator for the project. Currently, Spin provides bikeshare and scootershare service to the entirety of the City of Davis and the UC Davis campus. Accordingly, the project site is presumed to be incorporated into the Spin service area.

Prior to issuance of an occupancy permit for the multi-family housing or USA Pentathlon Training Facility project components, whichever occurs first, the applicant shall construct a hub for use by the bikeshare and scootershare system operator within the multi-family housing or USA Pentathlon Training Facility.

According to CAPCOA, this strategy would reduce project-generated residential VMT per capita by 0.06 percent.

- 5) **Community-based travel planning (CAPCOA Handbook Strategy T-23)** – This measure would target residences in the project area with community-based travel planning (CBTP). CBTP is a residential-based approach to outreach that provides households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing household VMT.

Prior to occupancy of the first phase of the project residential component, the project applicant shall partner with a CBTP service provider such as Yolo Commute and ensure that CBTP services are available to project residents, and renewed on an annual basis. As of early 2024, Yolo Commute annual membership dues for a housing development of 175 units are \$2,250 per year.



According to CAPCOA, this strategy would have a maximum reduction potential of 2.3 percent of project VMT.

Implementation of Mitigation Measure SEIR 4.6-4 would reduce residential VMT per capita associated with the project residential component by implementing TDM strategies to reduce external vehicle trips generated by project residents. Altogether, the TDM strategies described in Mitigation Measure 4.6-4 would reduce project-generated residential VMT per capita by 2.72 percent, resulting in a decrease from 33 to 32.1 residential VMT per capita. With Mitigation Measure 4.6-4, residential VMT per capita generated by the project residential component would be 6.6 percent and 47.9 percent above baseline local and regional residential VMT per capita averages, respectively. Therefore, with mitigation measures, project-generated residential VMT per capita would remain more than 15 percent below baseline local and regional residential VMT per capita averages, and the impact would remain *significant and unavoidable*.

**4.6-5 Result in inadequate emergency access. Based on the analysis below, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were previously identified in the 2009 EIR.**

Impacts related to emergency access are addressed under Impact 4.3-2 of the 2009 EIR. As discussed therein, the Wildhorse Ranch Project included two primary fire and police access points, both on Covell Boulevard. Two additional emergency vehicle access points were proposed at Caravaggio Place that would be solely for the use of emergency vehicles and would not be open to general traffic. Nonetheless, the 2009 EIR concluded that implementation of Mitigation Measure 4.3-2, which required, in part, that the design of internal roadways and access points be designed to meet City standards, would be required to reduce the impact to a less-than-significant level.

The currently proposed project would include one vehicular access point at the East Covell Boulevard/Monarch Lane intersection. Additionally, the project would include an emergency vehicle access point between the project site and Caravaggio Drive at Bonnard Street.

Fire access from the South Davis fire station (located two miles southeast of the project site on Mace Boulevard) would be available via westbound East Covell Boulevard. Fire access from the Downtown Davis fire station (located approximately 2.5 miles southwest of the project site) would be available via eastbound East Covell Boulevard. Medical emergency service access to/from Sutter Davis Hospital (located three miles west of the project site) would be available via eastbound East Covell Boulevard. Each of the foregoing corridors have traffic signals equipped with emergency vehicle pre-emption, providing signal priority to emergency vehicles in the event of an emergency.

The design of the on-site roadways and intersections has been reviewed by City of Davis Public Works and Fire Department staff and determined to be acceptable. As such, Mitigation Measure 4.3-2 would not be required for the currently proposed project.





Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts related to resulting in inadequate emergency access beyond what were previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

The 2009 EIR included Mitigation Measure 4.3-2, which required the provision of adequate site distance at the project access intersection, that the design of internal roadways be designed to meet City standards, and the provision of traffic control devices, if needed. As discussed above, the design of all on-site roadways and intersections has been reviewed by the City of Davis Public Works and Fire Department staff and determined to be acceptable. Thus, the potential issues related to the provision of inadequate emergency access to the project site have already been addressed, and the requirements of Mitigation Measure 4.3-2 have already been met. Therefore, Mitigation Measure 4.3-2 of the 2009 EIR would not be applicable to the proposed project.

Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**4.6-6 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Based on the analysis below, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were previously identified in the 2009 EIR.**

The 2009 EIR addressed potential impacts of the Wildhorse Ranch Project related to increasing hazards due to a geometric design feature or incompatible uses under Impact 4.3-2. As discussed therein, the 2009 EIR determined that the design of internal roadways within the Wildhorse Ranch Project would not meet the City of Davis minimum curb-to-curb standards for a standard local residential street, the streets would not be able to accommodate moving van-sized trucks, and potential hazards could occur due to inadequate site access. However, the 2009 EIR concluded that implementation of Mitigation Measure 4.3-2, which required, in part, that the design of internal roadways and access points be designed to meet City standards, would reduce impacts related to increasing hazards due to a geometric design feature or incompatible uses to a less-than-significant level.

With respect to the currently proposed project, the proposed project would include the construction of new on-site multi-modal transportation facilities and access intersections/driveways, as well as the modification of existing transportation facilities at the East Covell Boulevard/Monarch Lane intersection. All new roadway, bicycle, and pedestrian infrastructure improvements constructed as part of the project would



be subject to, and designed in accordance with, applicable City of Davis design and safety standards to avoid creating a geometric design hazard.

Peak hour traffic operations were analyzed to determine the extent to which the project would cause off-ramp queues to spill back to the I-80 mainline. To the extent possible, Caltrans strives to prevent off-ramp queues from extending to the freeway mainline in order to minimize the potential for associated adverse operational and safety effects (e.g., speed differentials between vehicle traffic on the freeway mainline and stopped/queued off-ramp vehicle traffic that could increase the potential for conflicts).

Table 4.6-6 displays the maximum freeway off-ramp queues at the I-80/Mace Boulevard/Chiles Road interchange under Existing and Existing Plus Project conditions.

<b>Table 4.6-6 Freeway Off-Ramp Queuing – Existing Plus Project Conditions</b>					
<b>Off-Ramp</b>	<b>Off-Ramp Distance<sup>1</sup></b>	<b>Maximum Queue Length<sup>2</sup></b>			
		<b>Existing Conditions</b>		<b>Existing Plus Project Conditions</b>	
		<b>AM Peak Hour</b>	<b>PM Peak Hour</b>	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>
Mace Boulevard/I-80 WB Off-Ramp	1,200 feet	200 feet	200 feet	200 feet	250 feet
Chiles Road/I-80 EB Off- Ramp	1,100 feet	125 feet	175 feet	125 feet	175 feet
Notes: 1. Measured from the intersection stop bar to the gore point of the freeway off-ramp. Does not include auxiliary lane on freeway mainline. 2. Maximum queue estimates are based on results from SimTraffic micro-simulation model. Queues are maximum per lane, rounded up to the nearest 25 feet.					
<b>Source: Fehr &amp; Peers, 2024.</b>					

According to the TIS, under Existing Plus Project conditions, all maximum queues would be accommodated within the available off-ramp storage and the project would not cause off-ramp queues to spill back to the I-80 mainline. As such, project-related changes to the transportation system would not cause conditions that warrant modification of the existing transportation system.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts related to substantially increasing hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) beyond what were previously identified in the 2009 EIR.

Applicable Mitigation Measure(s) from the 2009 EIR

*None applicable.*



Modified Mitigation Measure(s)

*None required.*

New Mitigation Measure(s)

*None required.*

**Cumulative Impacts and Mitigation Measures**

For further detail related to the cumulative setting of the proposed project, refer to Chapter 5, Statutorily Required Sections, of this SEIR. The cumulative setting for the following analysis is the City of Davis.

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Multiple projects in the cumulative setting are proposed or have been previously approved by the City along the same East Covell Boulevard/Mace Boulevard corridor as the currently proposed project. Such projects include Village Farms Davis, Shriners Property, and the DiSC 2022 projects. Buildout of the foregoing projects, in addition to the currently proposed project, would substantially increase vehicle traffic volumes along East Covell Boulevard, which could increase the potential for vehicle and pedestrian collisions. However, through the implementation of Mitigation Measures SEIR 4.6-2(a) and (b), the currently proposed project would help establish safe bicycle and pedestrian routes in the project vicinity, which would help to reduce potential cumulative impacts related to a conflict with a program, plan, ordinance, or policy, addressing the circulation system, including bicycle facilities, pedestrian facilities, transit facilities and services, and emergency vehicle access. Therefore, the proposed project would not have a cumulatively considerable incremental contribution related to conflicts with a program, plan, ordinance, or policy addressing the circulation system, and such topics are not discussed further in the cumulative analysis presented herein.

Similarly, the VMT impact analysis for buildout of the residential and non-residential components of the proposed project presented under Impact 4.6-4 would also apply to Cumulative Plus Project conditions. The VMT significance threshold compares project-generated residential VMT per capita to that of existing local and regional development. The VMT comparison is useful because the comparison provides information regarding how the project aligns with long-term environmental goals related to VMT established based on existing development levels. Use of VMT significance thresholds based on existing development levels is recommended in the OPR’s Technical Advisory. The Technical Advisory indicates that VMT efficiency metrics, such as VMT per capita, may not be appropriate for CEQA cumulative analysis because they employ a denominator. Instead, the Technical Advisory recommends that an impact finding from an efficiency-based project-specific VMT analysis (i.e., Existing Plus Project conditions) would imply an identical impact finding for a cumulative VMT analysis.<sup>6</sup> An example provided by OPR explains that a project that falls below an efficiency-based threshold that is aligned with long-term

---

<sup>6</sup> Governor’s Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA* [pg. 6]. December 2018.



environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Therefore, an analysis of VMT is not presented in this section as the conclusion would remain identical to that presented under Impact 4.6-4; as discussed therein, the impact would be significant and unavoidable.



---

---

## **4.7 OTHER EFFECTS**

---

---

## 4.7 OTHER EFFECTS

### 4.7.1 INTRODUCTION

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires that an EIR briefly describe why various environmental effects were determined not to be significant, and therefore, were not discussed in detail in the EIR. The Other Effects chapter of this Subsequent EIR (SEIR) addresses environmental impacts that were determined by the City of Davis, as lead agency, to either not to be significant with implementation of the proposed project or would not be affected by the proposed modifications to the project. The reasons for the conclusion of non-significance are provided for each issue area below, as needed. Where applicable, mitigation measures are identified to reduce a potential impact to a less-than-significant level.

### 4.7.2 AGRICULTURE AND FORESTRY RESOURCES

The impacts related to agricultural and forestry resources as a result of buildout of the proposed project, in comparison to that of the Wildhorse Ranch Project, are presented below.

#### Changes in Circumstances

Subsequent to approval of the Wildhorse Ranch Project EIR (2009 EIR), project site conditions have not significantly changed. Additional structures have not been constructed on-site, and other development has not occurred on-site. Consistent with the site description in the 2009 EIR, the majority of the project site is undeveloped and consists of grazing land; although, it should be noted that agricultural activity does not currently occur on-site. Within the central portion of the project site, the site includes a ranch home, two duplexes, a horse barn, and an equestrian training facility that is not currently in use. In the time since the 2009 EIR was certified, the CEQA Checklist Questions have changed to address potential impacts related to conflicts with existing zoning for agricultural use, or a Williamson Act contract; conflicts with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] section 12220[g]), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]); and impacts related to resulting in the loss of forest land or conversion of forest land to non-forest use. As such, substantial changes in circumstances that would affect the analysis in the 2009 EIR related to agriculture and forestry resources have occurred.

#### Changes in the Project

The currently proposed project would be developed within the footprint previously analyzed in the 2009 EIR, with the exception of the proposed off-site sewer line connection and obstacle course. Similar to the Wildhorse Ranch Project, the majority of the currently proposed project includes the development of most of the project site with residential uses. However, unlike the Wildhorse Ranch Project, the currently proposed project would also include a 1.4-acre site for the future construction of a USA Pentathlon Training Facility and a pool complex, as well as the above-mentioned off-site sewer improvement and obstacle course. In addition, the former Wildhorse Ranch Project included dedication of 2.26 acres of additional agricultural buffer, 1.61 acres of interior greenbelt, and 4.44 acres of interior open space, whereas the proposed project would include approximately 3.22 acres of interior open space and trails. Whereas the Wildhorse Ranch





Project required City approval of a General Plan Amendment to change the project site's land use designation from Agriculture to urban uses, the currently proposed project is not proposing to amend the General Plan or zoning designation of the site. The project has invoked Builder's Remedy, which is based on a provision of California's Housing Accountability Act (Government Code section 65589.5) that prevents jurisdictions without a substantially compliant housing element from denying an eligible housing project on the basis of inconsistency with the jurisdiction's general plan or zoning ordinance. Therefore, although the proposed project would result in a similar area of disturbance with respect to agriculture and forestry resources as compared to the Wildhorse Ranch Project, the project does present a potentially adverse impact that was not analyzed in the 2009 EIR related to agriculture and forest resources due to the inconsistency with the City's General Plan and zoning ordinance.

### **Impact Analysis**

The 2009 EIR evaluated the Wildhorse Ranch Project's potential to result in the loss of Prime Agricultural land as defined by the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Yolo County. The 2009 EIR determined under Impact 4.1-3 that the entirety of the project site consists of soil types, including Sycamore silt loam, drained (Sp); Sycamore silty clay loam (St); and Tyndall very fine sandy loam, drained (Tc) that are considered to be Prime Farmland soils according to the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Yolo County. In addition, the Land Capability Classification for on-site soils is I-1; pursuant to Section 40A.03.010 of the City's Municipal Code, the City's policy is to protect and conserve agricultural land, especially in areas with Class 1, 2, 3, or 4 soils. According to the Geotechnical Update prepared for the proposed project by Geocon Consultants, Inc. (Geocon) (see Appendix I of this SEIR),<sup>1</sup> soil types discovered on-site were the same as those discussed the 2009 EIR. It is noted that although on-site soils meet the definition of Prime Agricultural lands as defined by the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Yolo County, according to the California Resources Agency Farmland Mapping and Monitoring Program (FMMP), the project site is currently designated as "Other Land," which is defined as land not included in any other mapping category.<sup>2</sup> Nonetheless, because the proposed project would involve a similar area of disturbance as what was analyzed in the 2009 EIR, the proposed project would result in the conversion of an equal amount of protected agricultural land to non-agricultural use. Thus, similar to the 2009 EIR, even with the implementation of Mitigation Measure 4.1-3, which requires the project applicant to set aside agricultural land, the impact would be significant and unavoidable. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts related to the loss of Prime Agricultural land beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

The 2009 EIR determined that the project site is not under a Williamson Act contract. The project site has not been subject to a Williamson Act contract since the approval of the 2009 EIR. Thus, the proposed project would not conflict with a Williamson Act contract. However, as discussed under Impact 4.1-4 of the 2009 EIR, implementation of Mitigation Measures 4.1-4(a) through (c) were required to ensure consistency with the City's Right-to-Farm Ordinance. It is noted that Mitigation Measure 4.1-4(b) is related to operation of the previously proposed on-site orchard, which is no longer proposed, and Mitigation Measure 4.1-4(c) concerns the Wildhorse Ranch

<sup>1</sup> Geocon Consultants, Inc. *Geotechnical Update – Palomino Place (AKA Wildhorse Ranch)*. September 9, 2022.

<sup>2</sup> California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed March 2024.



Project's consistency with the planned Davis Sports Park, which is no longer proposed for development in the project vicinity; as such, Mitigation Measures 4.1-4(b) and 4.1-4(c) are not applicable to the currently proposed project. Thus, similar to the 2009 EIR, implementation of Mitigation Measure 4.1-4(a) would be required to reduce potential impacts related to conflicting with existing zoning for agricultural use to a less-than-significant level.

As described above, the current project differs from the previously analyzed Wildhorse Ranch Project because it does not seek a General Plan Amendment or Rezone. Because the project was submitted pursuant to Builder's Remedy and without any legislative entitlements, the project is not consistent with the site's General Plan land use designation (Agriculture) or the PD 3-89 zoning district. Therefore, although the proposed project would involve a similar degree of development as the Wildhorse Ranch Project, the proposed project would conflict with existing zoning for agricultural use, creating a potentially significant impact related to agriculture that was not previously addressed in the Wildhorse Ranch Project EIR. As such, the currently proposed project would result in a new potentially significant impact related to conflicting with existing zoning for agricultural use beyond what was previously identified in the 2009 EIR. Feasible mitigation does not exist to reduce the foregoing potentially significant impact to a less-than-significant level. Under Builder's Remedy, the City may not rely on inconsistency with the General Plan or zoning code as a basis for denial of the project. Furthermore, the City entered into a settlement agreement with the applicant that allows the applicant to proceed without legislative entitlements. As a result, bringing the proposed project into consistency with the project site's existing zoning is infeasible. Therefore, the impact is significant and unavoidable.

The 2009 EIR did not address the Wildhorse Ranch Project's potential to conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC section 12220[g]), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]) because analysis of such was not yet required under CEQA. Nonetheless, at the time the 2009 EIR was prepared, the project site did not contain forest land and was not zoned as forest land, timberland, or timberland zoned Timberland Production. The project site's zoning designation has not changed subsequent to the preparation of the 2009 EIR. In addition, on-site vegetation has not significantly changed since the 2009 EIR was prepared, and although some trees are present on-site, the site is not considered forest land and is not used as timberland. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts related to conflicting with existing zoning for, or cause rezoning of, forest land (as defined in PRC section 12220[g]), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]), or resulting in the loss of forest land or conversion of forest land to non-forest use, beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR with respect to the potential loss of forest land or timberland.

Similar to the Wildhorse Ranch Project, the proposed project would include the development of residential uses adjacent to existing agricultural operations to the east of the project site. However, effects of the environment on the project, such as potential impacts of agricultural operations on future residents of the project, are not a CEQA consideration. Furthermore, the agricultural land east of the project site is proposed to be developed with residential uses as part of the proposed Shriners Property Project. In addition, the proposed project would be consistent with the existing residential uses located to the north, south, and west. Thus, although the proposed project would be inconsistent with the zoning and General Plan land use designations for the site, the proposed project would not involve any 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 beyond what was analyzed in the 2009 EIR, and a less-than-significant impact would occur. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts related to involving 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 beyond what was previously identified in the 2009 EIR. Therefore, with respect to farmland conversion, the proposed project would be consistent with the conclusions of the 2009 EIR.

While the proposed project would include similar development to the Wildhorse Ranch Project, because the project was submitted pursuant to Builder's Remedy and without legislative entitlements, the proposed project would be inconsistent with the City's zoning and General Plan land use designations for the site. Due to the limitations placed on the City by State law, a potentially significant impact that cannot be mitigated would occur. Therefore, the impact is significant and unavoidable.

### **Applicable Mitigation Measure(s) from the 2009 EIR**

As discussed above, the 2009 EIR included Mitigation Measure 4.1-4(b), which is related to operation of the previously proposed on-site orchard, as well as Mitigation Measure 4.1-4(c), which concerns the Wildhorse Ranch Project's consistency with the planned Davis Sports Park. An orchard is not proposed to be developed on-site and the Davis Sports Park is no longer proposed for development in the project vicinity. Furthermore, these two considerations are related to the potential effects of surrounding or on-site operations onto future project residents, which is outside the scope of CEQA. Because the foregoing mitigation was included in the 2009 EIR to address potential impacts related to on-site or nearby uses that are no longer proposed, Mitigation Measures 4.1-4(b) and 4.1-4(c) are not required. Therefore, Mitigation Measures 4.1-4(b) and 4.1-4(c) would not be applicable to the proposed project.

### **Modified Mitigation Measure(s)**

Mitigation Measure 4.1-3 from the 2009 EIR has been modified to reflect and refer to the City's current agricultural regulations. Modifications are shown in ~~striketrough~~ and double-underline below. The proposed project would include similar development to the Wildhorse Ranch Project; however, because the project was submitted pursuant to Builder's Remedy and without legislative entitlements, the proposed project would be inconsistent with the City's zoning and General Plan land use designations for the site. Due to the limitations placed on the City by State law, a potentially significant impact that cannot be mitigated would occur, and the impact would remain *significant and unavoidable*.

- 4.1-3      *The project applicant shall comply with City of Davis Municipal Code Chapter 40A.03 (Farmland Preservation Ordinance) and shall set aside in perpetuity active agricultural acreage at a minimum ratio of 2:1 based on the total project footprint of 25.79 acres consistent with the ordinance, through granting a farmland conservation easement, a farmland deed restriction, or other farmland conservation mechanism to or for the benefit of the City and/or a qualifying entity approved by the City. The mitigation acreage shall be set aside prior to recordation of the final map(s). The location and amount of active agricultural acreage for the proposed project would be subject to the review and approval of the City Council.*



- 4.1-4(a) *Consistent with Action AG 1.1(g) of the General Plan and the Davis Right-to-Farm Ordinance, the applicant/developer shall inform and provide recorded notice to prospective buyers within 1,000 feet of agricultural land in writing and prior to purchase, as prescribed by the City's Right to Farm Ordinance, about existing and on-going agricultural activities in the immediate area in the form of a disclosure statement deed restriction to be recorded on the parcels. The notifications shall disclose that Davis and Yolo County are agricultural areas and residents of the property may be subject to inconvenience or discomfort arising from the use of agricultural chemicals, and from pursuit of agricultural operations, including, but not limited to cultivation, irrigation, plowing, spraying, aerial application, pruning, harvesting, crop protection, and agricultural burning which occasionally generate dust, smoke, noise, and odor. The language and format of ~~such notification~~ the deed restriction shall be reviewed and approved by the Community Development Director prior to recording final maps. Each ~~disclosure statement~~ deed restriction shall be acknowledged with the signature of each prospective property owner.*

### **New Mitigation Measure(s)**

*None feasible.*

### **4.7.3 CULTURAL RESOURCES**

The impacts related to cultural resources as a result of buildout of the proposed project, in comparison to that of the Wildhorse Ranch Project, are presented below.

#### **Changes in Circumstances**

As discussed above, subsequent to certification of the 2009 EIR, project site conditions have not significantly changed; the project site has not been subject to additional substantial disturbance or development. It is noted that impacts related to cultural resources were not addressed in a technical chapter of the 2009 EIR, but were addressed in the 2007 Initial Study (IS) prepared for the Wildhorse Ranch Project and included as Appendix A to the 2009 EIR. Since certification of the 2009 EIR, Appendix G of the CEQA Guidelines has been updated to include a new section for tribal cultural resources through the adoption of Assembly Bill (AB) 52 in July 2015. Substantial changes in circumstances that would affect the analysis in the 2009 EIR related to cultural resources have not occurred.

#### **Changes in the Project**

With the exception of the off-site sewer pipe improvement and obstacle course, the currently proposed project would be developed within the footprint previously analyzed in the 2009 EIR. As such, the proposed project would have a similar potential to result in impacts related to the disturbance of on-site cultural resources. Therefore, project changes that would affect the adequacy of the analysis in the 2009 EIR related to cultural resources have not occurred.

#### **Impact Analysis**

According to a cultural resources report prepared for the project site for the 2007 IS, none of the existing on-site structures, which were constructed between 1983 and 1986, are associated with historically significant persons and/or events, or have architectural significance; as such, the 2007 IS concluded that the Wildhorse Ranch Project would not cause a substantial adverse change in the significance of a historical resource. The historical significance of on-site structures has not changed since the 2009 EIR was certified. Because the on-site buildings are less than 50 years old, the structures would not be eligible for listing in the California Register of Historical



Resources. Thus, similar to the 2009 EIR, no impact would occur. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts related to causing a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

Although the cultural report prepared for the 2007 IS did not identify prehistoric or archeological sites, or human remains, within the project site, Mitigation Measures V-1 and V-2 were required to reduce the potential impact to a less-than-significant level. With the exception of the off-site sewer pipe improvement and obstacle course, the proposed project would result in the same disturbance area as the Wildhorse Ranch Project. Therefore, Mitigation Measures V-1 and V-2 would remain applicable to the proposed project; although development of the off-site sewer improvement and obstacle course were not anticipated in the 2009 EIR, implementation of the foregoing mitigation would ensure that if cultural resources are encountered, appropriate action would be taken. Thus, similar to the 2009 EIR, with implementation of mitigation, potential impacts to archeological resources and/or human remains would be less than significant. As noted previously, AB 52 was enacted in July 2015, after preparation of the 2009 EIR; because the current analysis is a SEIR, project notification to tribes is not required. Nevertheless, notification of preparation of the SEIR was provided by the City of Davis to tribes that have requested notification. The City received a response from the Yoche Dehe Wintun Nation and has followed up with them to schedule a consultation, as requested. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts related to causing a substantial adverse change in the significance of a unique archeological resource pursuant to Section 15064.5 and/or disturbing any human remains, including those interred outside of formal cemeteries, beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

### **Applicable Mitigation Measure(s) from the 2009 EIR**

Implementation of the following mitigation measures from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

- V-1 *Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, an archaeological monitor shall be retained by the applicant and approved by the City to train the construction grading crew prior to commencement of earth-grading activity in regard to the types of artifacts, rock, bone, or shell that they are likely to find, and when work shall be stopped for further evaluation. One trained crew member shall be on-site during all earth moving activities, with the assigned responsibility of “monitor.” If any earth-moving activities uncover artifacts, exotic rock, or unusual amounts of bone or shell, work shall be halted in the immediate area of the find and shall not be resumed until after the archaeologist monitor has inspected and evaluated the deposit and determined the appropriate means of curation. The appropriate mitigation measures may include as little as recording the resource with the California Archaeological Inventory database or as much as excavation, recordation, and preservation of the sites that have outstanding cultural or historic significance.*





- V-2 *Prior to the approval of tentative map(s), the tentative map(s) shall state that during construction, if bone is uncovered that may be human; the Native American Heritage Commission in Sacramento and the Yolo County Coroner shall be notified. Should human remains be found, the Coroner's office shall be immediately contacted and all work halted until final disposition by the Coroner. Should the remains be determined to be of Native American descent, the Native American Heritage Commission shall be consulted to determine the appropriate disposition of such remains.*

### **Modified Mitigation Measure(s)**

*None required.*

### **New Mitigation Measure(s)**

*None required.*

## **4.7.4 GEOLOGY AND SOILS**

The impacts related to geology and soils as a result of buildout of the proposed project, in comparison to that of the Wildhorse Ranch Project, are presented below.

### **Changes in Circumstances**

As discussed above, subsequent to certification of the 2009 EIR, project site conditions have not significantly changed; the project site has not been subject to additional substantial disturbance or development. It is noted that impacts related to geology and soils were not addressed in a technical chapter of the 2009 EIR, but were addressed in the 2007 IS prepared for the Wildhorse Ranch Project and included as Appendix A to the 2009 EIR. Substantial changes in circumstances that would affect the analysis in the 2009 EIR related to geology and soils have not occurred.

### **Changes in the Project**

The currently proposed project would be developed within the footprint of the previously analyzed 2009 EIR, with the exception of the off-site sewer pipe improvement and obstacle course. As such, the proposed project would have a similar potential to result in the impacts related to on-site geologic conditions and soils. In addition, because the Wildhorse Ranch Project included the development of 191 residential units and the proposed project would include the development of up to 175 new residential units, the proposed project would have the potential to expose a decreased number of future residents to seismic and/or geologic hazards, relative to the Wildhorse Ranch Project. Overall, project changes that would affect the analysis in the 2009 EIR related to geology and soils have not occurred.

### **Impact Analysis**

The 2007 IS evaluated potential impacts related to the Wildhorse Ranch Project directly or indirectly causing potential substantial adverse effects involving seismic-related ground failure, including liquefaction and landslides, as well as potential impacts associated with being 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, in Section VI, Geology and Soils. The 2007 IS concluded that a less-than-significant impact would occur. As discussed therein, although faults do not run through the City of Davis planning area, the City is surrounded by several faults in the San Andreas Fault system to the west and the Eastern Sierra fault system to the east. The 2007 IS concluded that with compliance





with General Plan policies and the Uniform Building Code (UBC), which are intended to protect structures from collapse during a seismic event, potential impacts related to the rupture of a known earthquake fault or strong seismic ground shaking would not occur. In addition, because of the City's generally flat topography and lack of seismic hazards, the 2007 IS concluded that impacts related to directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction and landslides, as well as being 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, would not occur.

With respect to the currently proposed project, according to the Geotechnical Update, the geological conditions of the project site have not changed since the 2009 EIR was certified. In addition, the proposed structures would be built consistent with the most recently adopted California Building Standards Code (CBSC) standards. Therefore, similar to the 2007 IS (attached as Appendix A to the 2009 EIR), impacts related to directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction and landslides, as well as being 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, would also be less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

With respect to the Wildhorse Ranch Project's potential to result in substantial soil erosion or the loss of topsoil, the 2007 IS determined that with implementation of Mitigation Measure VI-1, which requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP), consistent with the State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES) requirements, a less-than-significant impact would occur. With the exception of the off-site sewer pipe improvement and obstacle course, the proposed project would involve buildout on the same site as the Wildhorse Ranch Project. Thus, the potential for the proposed structures to result in substantial soil erosion or loss of topsoil would be similar to what was analyzed in the 2007 IS. As such, Mitigation Measure VI-1 would still apply to the proposed project. Although development of the off-site sewer pipe improvement and obstacle course were not addressed in the 2007 IS, implementation of Mitigation Measure VI-1 would ensure that impacts related to substantial soil erosion or loss of topsoil associated with the off-site improvements would be reduced to a less-than-significant level. Similar to the 2009 EIR, with implementation of mitigation, the proposed project would not result in substantial soil erosion or the loss of topsoil, and the impact would be less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

With respect to impacts related to being located on expansive soils, as defined in Table 18-1B of the UBC (1994), creating substantial direct or indirect risks to life or property, the 2007 IS concluded that with implementation of Mitigation Measure VI-2, which required the preparation of a final design-level geotechnical report and compliance with the recommendations included therein for the project design, a less than significant impact would occur. As discussed previously, Geocon has prepared a Geotechnical Update for the proposed project which includes site preparation and earthwork recommendations that add to and supersede the recommendations in



the 2007 geotechnical report prepared for the 2009 EIR. Because a final design-level geotechnical report has not yet been prepared for the proposed project, Mitigation Measure VI-2, as amended, would still be applicable to the proposed project. Similar to the 2009 EIR, with implementation of mitigation, the impact would be less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

Neither the Wildhorse Ranch Project nor the currently proposed project propose to use septic tanks or alternative wastewater disposal systems. As such, similar to the 2009 EIR, no impact would occur as a result of the proposed project related to having soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

### **Applicable Mitigation Measure(s) from the 2009 EIR**

Implementation of the following mitigation measure from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

- VI-1 *Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, the developer shall prepare a storm water pollution prevention plan (SWPPP), consistent with the State Water Resources Control Board NPDES requirements. A copy of the SWPPP shall be submitted to the City Engineer subject to review and comment.*

### **Modified Mitigation Measure(s)**

The following mitigation measure from the 2009 EIR has been modified to reflect the latest project-specific geotechnical report title. Modifications are shown in ~~striketrough~~ and double-underline below. Implementation of the following modified mitigation measure from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

- VI-2 *Prior to the approval of final map(s), a final design-level geotechnical report, with consideration of recommendations from the ~~Wildhorse Geotechnical Investigation~~ Wildhorse Geotechnical Update Investigation, shall be prepared and submitted to the Chief Building Official for review and comment. The recommendations of the final geotechnical report shall be incorporated into the project design prior to issuance of building permits for review and approval of the City Engineer and/or Chief Building Official.*

### **New Mitigation Measure(s)**

*None required.*

## **4.7.5 HAZARDS AND HAZARDOUS MATERIALS**

The impacts related to hazards and hazardous materials as a result of buildout of the proposed project, in comparison to that of the Wildhorse Ranch Project, are presented below.



### **Changes in Circumstances**

As discussed above, subsequent to certification of the 2009 EIR, project site conditions have not significantly changed; the project site has not been subject to additional substantial disturbance or development. It is noted that impacts related to hazards and hazardous materials were not addressed in a technical chapter of the 2009 EIR, but were addressed in the 2007 IS prepared for the Wildhorse Ranch Project and included as Appendix A to the 2009 EIR. Furthermore, it should be noted that since certification of the 2009 EIR, Appendix G of the CEQA Guidelines has been updated through the slight alteration of questions related to hazards and hazardous materials. In addition, Appendix G of the CEQA Guidelines have been updated to include a new section for wildfire. While the Appendix G questions related to wildfire are not included in the 2009 EIR, wildland fire hazards were still considered in the 2007 IS, and, as discussed below, the project site is not located within a designated State or local fire hazard severity zone. Thus, the new questions included in Appendix G of the CEQA Guidelines related to wildfire hazards are not applicable to the currently proposed project. Substantial changes in circumstances that would affect the analysis in the 2009 EIR related to hazards and hazardous materials have not occurred.

### **Changes in the Project**

The currently proposed project would be developed within the footprint of the previously analyzed 2009 EIR, with the exception of the off-site sewer pipe improvement and obstacle course. As such, the proposed project would have a similar potential to result in impacts related to hazards and hazardous materials. Therefore, project changes that would adversely affect the analysis in the 2009 EIR related to hazards and hazardous materials have not occurred.

### **Impact Analysis**

Due to the residential nature of the Wildhorse Ranch Project, the 2007 IS determined that buildout of the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Similar to the Wildhorse Ranch Project, the currently proposed project would mostly include the development of residential uses. Although the proposed project would also include the future construction of a USA Pentathlon Training Facility and a pool complex, such uses are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Future residents and/or employees of the Training Facility may use common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Furthermore, operation of the proposed pools, including use and storage of pool chemicals such as chlorine, would be required to comply with the provisions of California Health and Safety Code, Article 5, Swimming Pool Sanitation and Safety.<sup>3</sup> Due to the regulations governing use of such products and the amount utilized on the site, routine use of such products would not represent a substantial risk to public health or the environment. In addition, the nearest school, Fred T. Korematsu Elementary School, is located approximately 0.4-mile southeast of the project site. As such, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an

---

<sup>3</sup> State of California. *Health and Safety Code, Article 5. Swimming Pool Sanitation and Safety [116025 – 116068]*. Available at: [https://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=HSC&division=104.&title=&part=10.&chapter=5.&article=5](https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=104.&title=&part=10.&chapter=5.&article=5). Accessed April 2024.



existing or proposed school. Thus, similar to the 2009 EIR, the impact is less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

With respect to the Wildhorse Ranch Project's potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, based on a Phase 1 Environmental Site Assessment (ESA) prepared for the Wildhorse Ranch Project, the 2007 IS determined that although organochlorine pesticides (OCPs) were detected on-site due to past agricultural use, none of the OCPs were present in concentrations above the San Francisco Bay Regional Water Quality Control Board's (SFBRWQCB's) environmental screening levels (ESLs) for soil in a residential setting. However, the 2007 IS also determined that a potentially significant impact could occur if the on-site agricultural well and five on-site septic systems are not properly abandoned and/or removed; with implementation of Mitigation Measure VII-1, the impact was concluded to be less than significant.

According to the new Phase 1 Environmental Site Assessment and Limited Pesticide Assessment Report (Phase 1 ESA Report) prepared for the proposed project by Geocon (see Appendix J of this SEIR),<sup>4</sup> project site conditions have not significantly changed since certification of the 2009 EIR. According to the Phase 1 ESA Report, OCPs were detected below the applicable ESLs; although arsenic was detected at concentrations above the residential ESL, the reported arsenic concentrations are representative of naturally occurring background levels, and Geocon determined the concentrations of arsenic within on-site soils would not be an environmental concern. In addition, the agricultural well and septic systems are still present on-site. However, the Phase 1 ESA Report also addressed an environmental concern that was not mentioned in the 2007 IS. According to the Phase 1 ESA Report, the on-site stockpiled railroad ties located within the western portion of the project site are subject to treated wood waste (TWW) regulations requiring proper management, storage, off-site disposal, and/or permitted on-site reuse. Without proper handling of on-site TWW, the proposed project could result in a previously unidentified significant impact. However, with implementation of Mitigation Measure SEIR 4.7-1, impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment would be reduced to a less-than-significant level. Thus, similar to the 2009 EIR, with implementation of mitigation, the impact is less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

Although not specifically noted in the 2007 IS, according to the Phase 1 ESA Report, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In addition, the project site is not located within an airport land use plan or within two miles of a public or private airport. As such, similar to the 2009 EIR, no impact would occur related to hazards associated with the foregoing conditions. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

---

<sup>4</sup> Geocon Consultants, Inc. *Phase I Environmental Site Assessment and Limited Pesticide Assessment Report*. August 2022.



The City of Davis does not currently have an adopted emergency response plan or emergency evacuation plan, and, thus, the proposed project would not have the potential to result in impacts related to such. Impacts related to the proposed project's potential to interfere with emergency access to the site are addressed in Chapter 4.6, Transportation, of this SEIR.

The 2007 IS determined that because the project site is surrounded on three sides by residential development, and because wildlands do not exist in the project vicinity, wildfire hazards would not occur. The currently proposed project would include the development of the mostly undeveloped project site with urban uses, which would serve as an extension of the existing residential development to the north, south, and west of the project site. Such development would result in the removal of potential wildland fire fuel from the site, thus reducing the risk of wildfire on-site and in the project vicinity. In addition, because the project site is not located within or in the vicinity of a State Responsibility Area or very high fire hazard severity zone, pursuant to the CEQA Guidelines, a significant impact related to wildfire would not be anticipated to occur. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

### **Applicable Mitigation Measure(s) from the 2009 EIR**

Implementation of the following mitigation measure from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

VII-1 *Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, the on-site septic systems and agricultural well(s) shall be located and properly destroyed by a licensed contractor in compliance with Yolo County Environmental Health Department standards. Confirmation of the destruction of such facilities shall be submitted to the City Engineer.*

### **Modified Mitigation Measure(s)**

*None required.*

### **New Mitigation Measure(s)**

Implementation of the following new mitigation measure would reduce the above potential impact to a *less-than-significant* level.

SEIR 4.7-1 *Prior to initiation of ground-disturbing activities, all on-site treated wood waste shall be removed and disposed of in compliance with Health and Safety Code Section 25230. Compliance with the forgoing standard includes, but is not limited to, clearly labeling all treated wood waste, accumulating treated wood waste in a manner that is protected from run-on and runoff and is placed on a surface sufficiently impervious to prevent contact with soil and water, and transferring treated wood waste to only a treated wood waste facility or a treated wood waste approved landfill. Proof of compliance shall be submitted for review and approval by the City Engineer.*

## **4.7.6 HYDROLOGY AND WATER QUALITY**

The impacts related to hydrology and water quality as a result of buildout of the proposed project, in comparison to that of the Wildhorse Ranch Project, are presented below.





### **Changes in Circumstances**

As discussed above, subsequent to approval of the 2009 EIR, project site conditions have not significantly changed; the project site has not been subject to additional substantial disturbance or development. Substantial changes in circumstances that would affect the analysis in the 2009 EIR related to hydrology and water quality have not occurred.

### **Changes in the Project**

The currently proposed project would be developed within the footprint of the previously analyzed 2009 EIR, with the exception of the off-site sewer pipe improvement and obstacle course. As such, the proposed project would have a similar potential to result in impacts related to hydrology and water quality. Therefore, project changes that would adversely affect the analysis in the 2009 EIR related to hydrology and water quality have not occurred.

### **Impact Analysis**

The 2009 EIR concluded that impacts related to the violation of water quality standards during construction of the Wildhorse Ranch Project would be less-than-significant with mitigation. The proposed project would generally involve buildout on the same site as the Wildhorse Ranch Project, and, thus, the potential for the proposed structures to result in construction-related impacts to water quality would be similar to what was analyzed in the 2009 EIR. As such, Mitigation Measure 4.8-3, which requires the project applicant to obtain a NPDES General Permit and prepare a SWPPP, would still apply to the proposed project. The proposed off-site sewer pipe improvement, which was not addressed in the 2009 EIR, would require a crossing of the Wildhorse Golf Course drainage channel (Channel A), and would be accomplished through a jack-and-bore process. Through implementation of Mitigation Measure 4.8-3, potential impacts to the Channel A associated with the proposed off-site sewer pipe improvement would be reduced to a less-than-significant level. Therefore, with implementation of mitigation, the impact is less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

The City of Davis obtains its municipal water supply from wells located throughout the City as well as surface water. The 2009 EIR determined that although development of the Wildhorse Ranch Project could interfere with groundwater recharge, through the development of on-site detention areas, a less-than-significant impact would occur. The currently proposed project would result in the construction of the project site, the majority of which currently consists of pervious surfaces, with approximately 20.5 acres of impervious surfaces. As such, project buildout would interfere with groundwater recharge. However, according to the Tentative Map Drainage Design Memorandum (Drainage Memo) prepared for the currently proposed project by Cunningham Engineering (see Appendix K of this SEIR),<sup>5</sup> the proposed project would integrate Low Impact Development (LID) measures throughout the site to provide stormwater quality treatment, consistent with the City of Davis Storm Water Quality Control Standards. The LID measures would include the development of an on-site detention basin that would contain and treat runoff before allowing the flows to infiltrate on-site soils, allowing for groundwater recharge. Thus, the currently proposed project would not substantially decrease water supplies or interfere substantially with groundwater recharge, and impacts related to such would be less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially

<sup>5</sup> Cunningham Engineering. *Palomino Place – Tentative Map Drainage Design Memo*. March 30, 2024.





more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

With respect to impacts related to the violation of water quality standards during operation of the Wildhorse Ranch Project and/or related to substantially altering the existing drainage pattern of the site, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site, or provide substantial additional sources of polluted runoff, the 2009 EIR determined that compliance with General Plan policies and implementation of best management practices (BMPs) would ensure that impacts related to such would not occur. For example, General Plan Policy WATER 3.2 requires projects to implement BMPs and policies included in the City's Urban Water Management Plan (UWMP) and to enforce provisions to control erosion and sediment from construction sites. The currently proposed project would also be subject to the foregoing standards and requirements. In addition, as discussed above, according to the Drainage Memo, the currently proposed project would integrate LID measures, as well as volume-based BMPs, such as bioretention, infiltration features, and pervious pavement, and flow-based BMPs, such as vegetated swales and stormwater planters. The foregoing features would sufficiently detain and treat on-site flows such that project operations would not result in substantial adverse impacts to water quality. Thus, similar to the 2009 EIR, impacts related to the violation of water quality standards during project operation and/or related to substantially altering the existing drainage pattern of the site, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site, or provide substantial additional sources of polluted runoff, would be less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

With respect to impacts related to substantially altering the existing drainage pattern of the site or area, or creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or substantially increasing the rate or amount of surface runoff in a manner that would result in flooding on- or off-site, the 2009 EIR concluded that implementation of Mitigation Measure 4.8-2, which requires the project applicant to submit a design-level engineering report on the stormwater detention and conveyance system, would reduce impacts to a less-than-significant level. Consistent with the background information presented in the 2009 EIR, the Drainage Memo states that the project site currently drains from north to south, discharging to an inlet near the site's northeastern corner. The inlet drains to an existing 36-inch storm drain pipe, which outfalls into Channel A near the northeast corner of the adjacent Wildhorse residential development. The pipe was originally sized to convey the project site's 10-year peak discharge, assuming agricultural use. The pipe's design discharge is 6.2 cubic feet per second (cfs). According to the Drainage Memo, it is proposed that the existing outlet pipe continue to be used as the site's outlet conveyance to Channel A. In order to address the increase in stormwater flow attributable to the project's impervious surfaces under the 100-year 24-hour storm event, the project would incorporate approximately three acre-feet of on-site detention storage.

During the 100-year 24-hour storm event, when flow conditions prevent flows from Channel A to drain downstream into the Willow Slough Bypass, flows from the watershed spill east, ultimately ponding at the levee adjacent to the Yolo Bypass within the East Davis watershed. The Drainage Memo determined that the increase in ponded volume within the East Davis basin during peak



storm condition as a result of project buildout would be approximately 0.008 percent, which is considered to be negligible without any measurable impact to the peak water surface elevation or limits of ponding downstream. The Drainage Memo also compared the estimated timing of the developed project site's 100-year peak flows with Channel A's peak flow timing. In comparing the timing of peaks for the 100-year 10-day storm, the site's peak outflow (6.2 cfs) preceded Channel A's peak flow (over 1,000 cfs) by about six hours. By the time Channel A's peak flow was attained, the site's outflow had receded by almost 50 percent. The Drainage Memo determined that the site's post-development flow is not expected to have an effect on 100-year peak flows in Channel A. As such, the Drainage Memo concluded that the proposed project would not have an effect on 100-year peak flows in Channel A or other downstream areas. However, because a final drainage plan has not been developed for the currently proposed project, Mitigation Measure 4.8-2 would still be applicable. Therefore, similar to the 2009 EIR, with implementation of mitigation, impacts related to substantially altering the existing drainage pattern of the site or area, or creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or substantially increasing the rate or amount of surface runoff in a manner that would result in flooding on- or off-site would be less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

Because the project site is located outside of the 100-year floodplain, as identified by the Davis General Plan, both the 2009 EIR and the 2007 IS concluded that impacts related to the exposure of people and structures to flood hazards and impeding or redirecting flood flows would not occur. According to the Drainage Memo prepared for the proposed project, the project site is currently located within a Federal Emergency Management Agency (FEMA) Zone X, which is an Area of Minimal Flood Hazard. In addition, as discussed in the 2007 IS, the project site is not located in an area that would be exposed to flooding risks from tsunamis, and is not located near a closed body of water, and, thus, would not risk release pollutants due to project inundation. Thus, similar to the 2009 EIR, the impact is less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

### **Applicable Mitigation Measure(s) from the 2009 EIR**

Implementation of the following mitigation measure from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

- 4.8-3 *Prior to commencement of construction, the applicant shall obtain a NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit), which pertains to pollution from grading and project construction. Compliance with the Permit requires the project applicant to file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) and prepare a Storm Water Pollution Prevention Plan (SWPPP) prior to ground disturbance. The SWPPP would incorporate Best Management Practices (BMPs) in order to prevent, or reduce to the greatest extent feasible, adverse impacts to water quality from erosion and sedimentation. A copy of the SWPPP including BMP implementation provisions shall be submitted to the Chief Building Official.*



### **Modified Mitigation Measure(s)**

The following mitigation measure from the 2009 EIR has been modified to refine the timing trigger for this previously adopted measure. Modifications are shown in ~~strike through~~ and double-underline below. Implementation of the following modified mitigation measure from the 2009 EIR would reduce the above potential impact to a *less-than-significant* level.

- 4.8-2      *In conjunction with the submittal of ~~a tentative map~~ improvement plans, the project applicant shall submit a design-level engineering report on the stormwater detention and conveyance system to the City Engineer demonstrating that the proposed project peak flows into the existing 36-inch storm drain would not exceed 6.2 cfs. The report shall also demonstrate that peak flows from the site do not coincide with peak flows within Channel "A" and demonstrate how the system would function to adequately treat stormwater runoff prior to being discharged into Channel "A." Stormwater detention and conveyance plans shall be reviewed and approved by the City Engineer.*

### **New Mitigation Measure(s)**

*None required.*

## **4.7.7 LAND USE AND PLANNING**

The impacts related to land use and planning as a result of buildout of the proposed project, in comparison to that of the Wildhorse Ranch Project, are presented below.

### **Changes in Circumstances**

As discussed above, subsequent to certification of the 2009 EIR, project site conditions have not significantly changed. In addition, the General Plan land use designation and zoning designations of the project site have not changed subsequent to certification of the 2009 EIR. Substantial changes in circumstances that would affect the analysis in the 2009 EIR related to land use and planning have not occurred.

### **Changes in the Project**

The discretionary approvals required by the Wildhorse Ranch Project included approval of a General Plan Amendment to change the project site's land use designation from Agriculture to Residential Low Density, Residential Medium Density, Residential High Density, Neighborhood Greenbelt, Natural Habitat Area, and Urban Agricultural Transition Area, as well as a Rezone to change the site's zoning designation from Planned Development (PD 3-89) to a new PD (residential). Similar to the Wildhorse Ranch Project, the currently proposed project generally consists of residential development. The currently proposed project was submitted pursuant to the Builder's Remedy, which is based on a provision of California's Housing Accountability Act (Government Code section 65589.5) that prevents jurisdictions without a substantially compliant housing element from denying an eligible housing project on the basis of inconsistency with the jurisdiction's general plan or zoning ordinance. Furthermore, the City and applicant have entered into a settlement agreement that requires the City to process the project without legislative entitlements, in this case a General Plan Amendment or Rezone. Potential impacts related to land use and planning associated with the foregoing changes in the project are addressed below.

### **Impact Analysis**

The majority of the project site is undeveloped and consists of grazing land, and is developed with a ranch home, two duplexes, a horse barn, and an inactive equestrian training facility. The project



site is surrounded by existing residential development except to the east, which is agricultural land. The 2007 IS determined that because the Wildhorse Ranch Project would serve to extend the existing Wildhorse Subdivision, the Wildhorse Ranch Project would not physically divide an established community. Similarly, the proposed project consists of the development of a residential community comprised of up to 175 dwelling units of various types and densities. As such, rather than physically divide an established community, the proposed project would serve as an extension of the existing residential development in the project vicinity. Thus, similar to the 2009 EIR, no impact would occur. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

The 2009 EIR analyzed the Wildhorse Ranch Project's consistency with the City of Davis General Plan under Impact 4.1-1 and determined that, with approval of the General Plan Amendment proposed as part of the Wildhorse Ranch Project through the Measure J vote, the Wildhorse Ranch Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. As discussed above, although the currently proposed project would also include the development of residential and recreational land uses that would be inconsistent with the site's Agricultural land use designation and PD 3-89 zoning designation, the project has invoked Builder's Remedy and is not seeking a General Plan Amendment and Rezone. It is likely that the City's General Plan designation of Agriculture and the development restrictions in PD 3-89, which significantly limit the development of the site, were adopted for the purpose of preserving agricultural and low density residential ("horse ranch") areas of the City, and to avoid or reduce impacts related to agricultural resources and aesthetics, as well as transportation impacts related to level of service, among others. Therefore, the proposed project could cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Feasible mitigation for the foregoing potentially significant impact does not exist. Under Builder's Remedy, the City may not rely on inconsistency with the General Plan or zoning code as a basis for denial of the project. Furthermore, the City entered into a settlement agreement with the applicant that allows the applicant to proceed without legislative entitlements. As a result, bringing the proposed project into consistency with the applicable land use plans, policies, and regulations for the site or avoid a potentially significant environmental impact is infeasible. Therefore, the impact is significant and unavoidable.

The project is consistent with the City's Affordable Housing Ordinance (Davis Municipal Code Article 18.05). Based upon the proposed mix of residential units and lot sizes, the proposed project is required to provide 26 affordable units. The proposed project would include up to 45 affordable units, as the new multi-family apartment units would be deed-restricted.

Thus, while the proposed project would include the development of similar land uses as the previously analyzed Wildhorse Ranch Project, changes to the project to remove the legislative entitlements have created a potentially significant environmental impact due to conflicts with the City's land use plans, policies, and regulations that are applicable to the site and may have been adopted for the purpose of avoiding an environmental impact. Based on the above, the currently proposed project would result in a new significant impact beyond what was previously identified in the 2009 EIR. As previously discussed, the foregoing impact cannot be mitigated and would remain significant and unavoidable.



### **Applicable Mitigation Measure(s) from the 2009 EIR**

*None applicable.*

### **Modified Mitigation Measure(s)**

*None required.*

### **New Mitigation Measure(s)**

*None feasible.*

## **4.7.8 MINERAL RESOURCES**

The impacts related to mineral resources as a result of buildout of the proposed project, in comparison to that of the Wildhorse Ranch Project, are presented below.

### **Changes in Circumstances**

As discussed above, subsequent to certification of the 2009 EIR, project site conditions have not significantly changed; the project site has not been subject to additional substantial disturbance or development. It is noted that impacts related to mineral resources were not addressed in a technical chapter of the 2009 EIR, but were addressed in the 2007 IS prepared for the Wildhorse Ranch Project and included as Appendix A to the 2009 EIR. Substantial changes in circumstances that would affect the analysis in the 2009 EIR related to mineral resources have not occurred.

### **Changes in the Project**

The currently proposed project would be developed within the footprint of the previously analyzed 2009 EIR, with the exception of the off-site sewer pipe improvement and obstacle course. As such, the proposed project would have a similar potential to result in the impacts related to mineral resources. Therefore, project changes that would adversely affect the analysis in the 2009 EIR related to mineral resources have not occurred.

### **Impact Analysis**

According to the City's General Plan EIR, significant deposits of aggregate resources are not located within the City's planning area. The only mineral resource known to exist within the City is natural gas, but specific resource areas have not been identified. Based on the foregoing information, the 2007 IS concluded that the Wildhorse Ranch Project would not 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, and/or resulting 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. Because the project site conditions have not significantly changed subsequent to approval of the 2009 EIR, and because new mineral resources have not been identified within the project site, similar to the 2009 EIR, no impact would occur related to mineral resources. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

### **Applicable Mitigation Measure(s) from the 2009 EIR**

*None applicable.*





### **Modified Mitigation Measure(s)**

*None required.*

### **New Mitigation Measure(s)**

*None required.*

## **4.7.9 NOISE**

Potential airport noise is discussed below. For a discussion of the project's potential construction and operational noise effects, please refer to Chapter 4.4, Noise.

### **Changes in Circumstances**

As discussed above, subsequent to approval of the 2009 EIR, project site conditions have not significantly changed; the project site has not been subject to additional substantial disturbance or development. In addition, new airports have not been developed or proposed within the project vicinity. Substantial changes in circumstances that would affect the analysis in the 2009 EIR related to noise have not occurred.

### **Changes in the Project**

Whereas the Wildhorse Ranch Project proposed the development of 191 residential units, the currently proposed project would include the development of 175 new residential units, as well as a USA Pentathlon Training Facility. In addition, it is noted that while the Wildhorse Ranch Project proposed the demolition of all existing on-site residences, the currently proposed project would include the demolition of the two on-site duplex buildings and barn, but would retain and renovate the existing on-site ranch home.

### **Impact Analysis**

According to the City's General Plan EIR, impacts to noise-sensitive uses have not been found to exist at the UC Davis Airport, which is the only airport in the vicinity of the City of Davis. As such, the 2007 IS concluded that the project site is not 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, and no impact would occur related to the exposure of people residing or working in the project area to excessive noise levels. As discussed above, new airports have not been developed or proposed within the project vicinity since the certification of the 2009 EIR. Therefore, similar to the 2007 IS (attached as Appendix A to the 2009 EIR), no impact would occur related being 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, resulting in the exposure of people residing or working in the project area to excessive noise levels. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

### **Applicable Mitigation Measure(s) from the 2009 EIR**

*None applicable.*

### **Modified Mitigation Measure(s)**

*None required.*





## **New Mitigation Measure(s)**

*None required.*

### **4.7.10 POPULATION AND HOUSING**

The impacts related to population and housing as a result of buildout of the proposed project, in comparison to that of the Wildhorse Ranch Project, are presented below.

#### **Changes in Circumstances**

Since the release of the 2009 EIR, new population and housing growth has occurred within the City of Davis. In addition, new State law related to housing has gone into effect, such as Senate Bill (SB) 330, which became effective January 1, 2020. SB 330 establishes a statewide housing emergency to be in effect until January 1, 2025. During the housing emergency period, cities and localities in urban areas, including the City of Davis, are generally prohibited from rezoning actions or imposing new development standards that would reduce the zoned capacity for housing, or adopting new design standards that are not objective. In addition, on November 18, 2019, the Sacramento Area Council of Governments (SACOG) adopted an update to the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), which includes new growth projections and transportation strategies for the City of Davis and the surrounding region. According to the SACOG MTP/SCS, the project site is located within an established community that is forecasted to have 3,800 new residential units by 2040. Although substantial changes in circumstances have occurred since certification of the 2009 EIR, none of the foregoing changes would affect the analysis in the 2009 EIR related to population and housing.

#### **Changes in the Project**

Whereas the Wildhorse Ranch Project proposed the development of 191 residential units, the currently proposed project would include the development of up to 175 new residential units, as well as a USA Pentathlon Training Facility. As such, the proposed project would have a reduced potential to result in population growth as compared to the Wildhorse Ranch Project. In addition, it is noted that while the Wildhorse Ranch Project proposed the demolition of all existing on-site residences, the currently proposed project would include the demolition of the two on-site duplex buildings and barn, but would retain and renovate the existing on-site ranch home. Potential impacts related to population and housing associated with the foregoing changes in the project are addressed below.

#### **Impact Analysis**

Because the Wildhorse Ranch Project included the development of residential uses that would be inconsistent with the site's existing Agriculture land use designation, the population increase associated with buildout of the Wildhorse Ranch Project was not anticipated in the General Plan. As such, as discussed under Impact 4.2-2, the 2009 EIR concluded that the Wildhorse Ranch Project could induce substantial unplanned population growth in the area. However, at the time that the 2009 EIR was certified, the population of the City of Davis had already exceeded the overall City population anticipated in the General Plan without the additional contribution of residences associated with buildout of the Wildhorse Ranch Project. Given that the City's population had already exceeded what was anticipated in the General Plan, as well as the fact that the Wildhorse Ranch Project would provide affordable housing needed to meet the City's Regional Housing Needs Allocation (RHNA), the 2009 EIR concluded that impacts related to inducing unplanned population growth would be less than significant. As discussed above, because the currently proposed project would result in the development of 16 fewer residential units than the Wildhorse Ranch Project, the increase in population associated with buildout of the



currently proposed project would be reduced compared to what was anticipated in the 2009 EIR. In addition, similar to the Wildhorse Ranch Project, the currently proposed project would include the development of affordable housing. It is noted that the recently adopted General Plan Housing Element acknowledges the currently proposed project as a pending peripheral project, meaning that although the site has been anticipated for potential development with residential uses, the anticipated units are not counted towards the current RHNA cycle. As such, although the proposed project could result in unplanned population growth, the currently proposed project would contribute towards meeting the City's RHNA. Furthermore, the currently proposed project is subject to Builder's Remedy, which is based on a provision of California's Housing Accountability Act (Government Code section 65589.5) that prevents jurisdictions without a substantially compliant housing element from denying an eligible housing project on the basis of inconsistency with the jurisdiction's general plan or zoning ordinance. Thus, similar to the 2009 EIR, the impact is less than significant. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

The 2007 IS determined that although the Wildhorse Ranch Project would result in the demolition of three residential buildings, the construction of 191 units would create a net gain of residential units, and impacts related to displacing substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, would be less than significant. Although the proposed project would include the development of 16 fewer residential units as compared to the Wildhorse Ranch Project, only two of the existing on-site residences would be demolished. As such, the proposed project would also increase the number of residential units available in the City. Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe impacts beyond what was previously identified in the 2009 EIR. Therefore, the proposed project would be consistent with the conclusions of the 2009 EIR.

**Applicable Mitigation Measure(s) from the 2009 EIR**

*None applicable.*

**Modified Mitigation Measure(s)**

*None required.*

**New Mitigation Measure(s)**

*None required.*



---

---

## **5. STATUTORILY REQUIRED SECTIONS**

---

---

## 5. STATUTORILY REQUIRED SECTIONS

### 5.1 INTRODUCTION

The Statutorily Required Sections chapter of the Subsequent Environmental Impact Report (SEIR) includes discussions regarding those topics that are required to be included in an EIR, pursuant to CEQA Guidelines Section 15126.2. The chapter includes a discussion of the proposed project's potential to result in growth-inducing impacts; the cumulative setting analyzed in this SEIR; significant irreversible environmental changes; and significant and unavoidable impacts caused by the proposed project.

### 5.2 GROWTH-INDUCING IMPACTS

State CEQA Guidelines Section 15126.2(e) requires an EIR to evaluate the potential growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that could induce growth. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped.

The CEQA Guidelines are clear that while an analysis of growth-inducing effects is required, induced growth should not be assumed to necessarily be significant or adverse. This analysis examines the following potential growth-inducing impacts related to development of the proposed project and assesses whether the effects are significant and adverse (see CEQA Guidelines Section 15126.2[e]):

1. Foster population and economic growth and construction of housing.
2. Eliminate obstacles to population growth.
3. Affect service levels, facility capacity, or infrastructure demand.
4. Encourage or facilitate other activities that could significantly affect the environment.

#### **Foster Population and Economic Growth and Construction of Housing**

The proposed 175 residential units would increase the available housing within the City of Davis, which would be expected to increase population in the area. Using the 2.57 persons/household average household size for the City of Davis from the City's 2021-2029 Housing Element, the proposed 175 residential units are anticipated to generate an estimated 450 residents. Thus, the proposed project would induce population growth within the City. However, because the currently proposed project would result in the development of 16 fewer residential units than the approved Wildhorse Ranch Project, the increase in population associated with buildout of the proposed project would be reduced compared to what was anticipated for the project site by the Wildhorse Ranch Project EIR (2009 EIR). In addition, similar to the Wildhorse Ranch Project, the currently proposed project would include the development of affordable housing units. According to the City's 2021-2029 Housing Element, the current Regional Housing Needs Allocation (RHNA) for



the City totals 2,075 housing units, including 580 very low-income units, 350 low-income units, 340 moderate-income units, and 805 above moderate-income units.<sup>1</sup> Thus, the currently proposed project would contribute towards the City meeting its RHNA affordable housing requirements. In addition, the 2021-2029 Housing Element notes that the Sacramento Area Council of Governments (SACOG) projects that the City will increase population to 76,884 residents by 2036.<sup>2</sup> Currently, the U.S. Census Bureau estimates that the City has a population of 65,832 residents.<sup>3</sup> Thus, future new residents generated by the proposed project would represent only an incremental contribution to the population growth previously anticipated for the City, as conservatively assuming all future residents of the project would be new residents within the City accounts for approximately 4.1 percent of the population growth already projected to occur in Davis by SACOG. Therefore, the proposed project would not induce population growth that would be considered significant and adverse.

Future residents of the proposed project would likely patronize local business and services in the area, which could foster economic growth. However, as discussed further in the Project Description chapter of this SEIR, Objective #6 of the proposed project is to help address climate change by increasing housing opportunities for those currently commuting to and from Davis for work. Thus, a portion of the project's future residents already support local businesses. Construction of the proposed project would result in increased employment opportunities in the construction field, which could potentially result in an increase to the City's permanent population and demand for housing in the vicinity of the project site. However, short-term construction employment opportunities would likely be filled from the local employee base. Construction workers are also unlikely to relocate their households, to any significant degree, as a result of the construction-related employment opportunities associated with the proposed project. Overall, the proposed project would not be considered to result in substantial long-term employment growth in the area that would cause significant and adverse impacts.

Appendix G of CEQA Guidelines establishes that unplanned population growth would be considered a potentially significant impact. However, growth that is planned and the environmental effects of which have been analyzed in connection with a land use plan or a regional plan, should not by itself be considered an impact. As demonstrated above, the population growth resulting from the proposed project would be within the SACOG growth estimates for the City of Davis and would assist the City in meeting its RHNA affordable housing requirements. Thus, the currently proposed project would not result in a new significant impact or substantially more severe significant impact related to new substantial population and economic growth beyond what was previously identified in the 2009 EIR.

### **Eliminate Obstacles to Population Growth**

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with such services, would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

---

<sup>1</sup> City of Davis. *2021-2029 Housing Element* [page 178]. Adopted December 5, 2023.

<sup>2</sup> City of Davis. *2021-2029 Housing Element* [page 66]. Adopted December 5, 2023.

<sup>3</sup> U.S. Census Bureau. *QuickFacts: Davis city, California*. Available at: <https://www.census.gov/quickfacts/fact/table/daviscitycalifornia/LND110210>. Accessed June 2024.



As discussed in Chapter 4.5, Public Services, Utilities, and Service Systems, of this SEIR, the proposed project would include connections to the City's existing water, sanitary sewer, and storm drain systems. With respect to water service, from the existing eight-inch water line in Caravaggio Drive to the west of the project site, new eight-inch water lines would be installed and extended into the project site within the new on-site internal streets, to which each structure would connect through new laterals. With respect to sewer service, from an existing off-site, 42-inch sewer trunk main to the north of the project site, 2,270 lineal feet of new off-site, 12-inch sewer line would be extended through the edge of the existing Wildhorse Agricultural Buffer to the project site's northeastern corner. From the new 12-inch sewer line, new eight-inch sewer lines would be extended within the new on-site internal streets, to which each structure would connect through new sewer laterals. With respect to storm drainage service, stormwater runoff from new impervious surfaces within the project site would be directed to drain inlets installed along the on-site internal streets. From the drain inlets, flows would be conveyed to the stormwater basin located in the northeast portion of the project site. Following treatment in the stormwater basin, excess flows would be metered to the existing storm drain system in the Wildhorse neighborhood to the north of the project site.

All new utility infrastructure would be designed consistent with the applicable standards established by the City of Davis, including those set forth by the Public Works Department Standard Specifications and Davis Municipal Code Article 30.03. The new utility infrastructure would be sized to accommodate only the proposed project. Thus, while installation of the aforementioned improvements may be considered to eliminate obstacles to growth, such improvements are essential to support the proposed project, and the improvements would not eliminate obstacles to growth in a manner that would encourage previously unplanned growth.

### **Affect Service Levels, Facility Capacity, or Infrastructure Demand**

Increases in population that would occur as a result of a proposed project may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental impacts. As discussed in Chapter 4.5, Public Services, Utilities, and Service Systems, of this SEIR, increased demands for public services, including fire and police protection services, attributable to the proposed project would not necessitate the construction of new or expanded facilities that could cause significant environmental impacts. In addition, as detailed under Impact 4.5-6 in the Public Services, Utilities, and Service Systems chapter, the City is projected to have a surplus of water supplies in normal, single dry, and multiple dry years through 2045 under post-project conditions. Similarly, as discussed under Impact 4.5-7 of this SEIR, wastewater flows under post-project conditions would be 4.2 million gallons per day (mgd). Given that the City's Wastewater Treatment Plant (WWTP) has an existing average dry-weather flow (ADWF) capacity of 6.0 mgd, the City would have adequate capacity to serve the project's wastewater treatment demands in addition to the City's existing commitments. Furthermore, as previously discussed, the new utility infrastructure installed as part of the proposed project would be designed in compliance with applicable standards and sized to accommodate only the proposed project.

Non-recyclable wastes collected from the City are disposed of at the 770-acre Yolo County Central Landfill in the northeast portion of the Davis planning area. The Yolo County Central Landfill has a remaining capacity of 33,140,373 cubic yards (or 68 percent remaining capacity) and has a current anticipated closure date of 2124. As discussed under Impact 4.5-8 in the Public Services and Utilities chapter of this SEIR, the currently proposed project would generate a total of 1,404 pounds of waste per day (0.70 tons), which is less than the amount anticipated by the





2009 EIR for the approved Wildhorse Ranch Project. The Yolo County Central Landfill has a permitted throughput of 3,000 tons/day, and thus, would be able to accommodate the operational waste generated by the proposed project. In addition, considering that the Yolo County Central Landfill has a remaining capacity of 68 percent, the proposed project's operational waste would represent only an incremental contribution to the waste received at the landfill.

### **Encourage or Facilitate other Activities That Could Significantly Affect the Environment**

This SEIR provides a comprehensive assessment of the potential for environmental impact associated with implementation of the proposed project. Please refer to Chapters 4.1 through 4.6 of this SEIR, which comprehensively address the potential for impacts from urban development on the project site.

### **5.3 CUMULATIVE IMPACTS**

CEQA Guidelines Section 15130 requires that an EIR discuss the cumulative and long-term effects of the proposed project that would adversely affect the environment. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects" (CEQA Guidelines Section 15355[a]). "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines Section 15355[b]).

The need for cumulative impact assessment reflects the fact that, although a project may cause an "individually limited" or "individually minor" incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable" and, thus, significant, when viewed together with environmental changes anticipated from past, present, and probable future projects (CEQA Guidelines, Section 15064[h(1)], Section 15065[c], and Section 15355[b]). Accordingly, particular impacts may be less than significant on a project-specific basis but significant on a cumulative basis if their small incremental contribution, viewed against the larger backdrop, is cumulatively considerable. However, it should be noted that CEQA Guidelines Section 15064(h)(4) states, "[...] the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

Section 15130(b) of the CEQA Guidelines indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, but that the analysis should reflect the severity of the impacts and their likelihood of occurrence, and that the analysis should be focused, practical, and reasonable. To be adequate, a discussion of cumulative effects must include the following elements:

- (1) Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency's control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified EIR, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provide that such documents are reference and made available for public inspection at a specified location;



- (2) A summary of the individual projects' environmental effects, with specific reference to additional information and stating where such information is available; and
- (3) A reasonable analysis of all of the relevant projects' cumulative impacts, with an examination of reasonable, feasible options for mitigating or avoiding the project's contribution to such effects (Section 15130[b]).

For some projects, the only feasible mitigation measures will involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis (Section 15130[c]). Section 15130(a)(3) states that an EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund the project's fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

A discussion of cumulative impacts is provided within each of the technical chapters of this EIR pursuant to CEQA Guidelines Section 15130.

### **Cumulative Setting**

The lead agency should define the relevant geographic area of inquiry for each impact category (id., Section 15130[b][3]), and should then identify the universe of "past, present, and probable future projects producing related or cumulative impacts" relevant to the various categories, either through the preparation of a "list" of such projects or through the use of "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact" (id., subd. [b][1]).

The majority of the cumulative analysis in this SEIR is based upon a summary of projections contained in the City of Davis General Plan, as well as other reasonably foreseeable projects within the project region. Present and future probable local projects within the City of Davis include, but are not limited to, the following projects: Village Farms Davis; Shriners Property; Davis Innovation Sustainability Campus (DiSC) 2022; The Cannery Remainder Commercial Parcels; Sutter Davis Expansion (including adjacent Communicare Expansion); various Bretton Woods developments; The Promenade/Nishi; and Olive Drive Mixed Use.

Limited situations exist where geographic setting differs between project chapter analysis within a particular region. Examples include air quality, for which the cumulative geographic setting is the Sacramento Valley Air Basin (SVAB). Global climate change is, by nature, a cumulative impact. Greenhouse gas (GHG) emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the worldwide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate change applicable to the proposed project, the geographical context for global climate change in this SEIR is limited to the State of California.



## 5.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

As established in CEQA Guidelines Section 15126.2(d), this SEIR is required to include consideration of significant irreversible environmental changes that would be caused by the proposed project, should the project be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Buildout of the project area could involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development could generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed project could involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project could result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed project would likely result in, or contribute to, the following significant irreversible environmental changes:

- Conversion of predominantly vacant land to a fully built-out community with residential and recreational uses, thus, precluding alternative land uses in the future;
- Irreversible consumption of goods and services, such as fire, police, and school services, associated with the future population; and
- Irreversible consumption of energy and natural resources, such as water and electricity, associated with the future residential and recreational uses.

## 5.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

According to CEQA Guidelines, an EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented (CEQA Guidelines Section 15126.2[c]). Such impacts would be considered unavoidable when the determination is made that either mitigation is not feasible or only partial mitigation is feasible such that the impact is not reduced to a level that is less-than-significant. This section identifies significant impacts that could not be eliminated or reduced to a less than significant level by mitigation measures imposed by the City. The final determination of the significance of impacts and the feasibility of mitigation measures would be made by the City as part of the City's certification action. The significant and unavoidable impacts of the proposed project are summarized below.

**In a non-urbanized area, 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) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality. (Impact 4.1-2)**

The Wildhorse Ranch Project would have permanently altered the character of the site and blocked partial views towards the east, which are characterized by distinct background views of the Sierra Nevada foothills. Thus, the 2009 EIR concluded that a significant and unavoidable impact would have occurred, with feasible mitigation unavailable. However, it should be noted that the impact was related to degrading the existing visual character of the site.

The currently proposed project was submitted pursuant to a settlement agreement with the City that provides that the project will be processed without legislative entitlements, including a



General Plan amendment or zoning amendment. Therefore, the proposed project would be inconsistent with the General Plan Agricultural land use designation and PD zoning for the project site. Under Builder's Remedy, the City cannot deny the project based on inconsistency with the General Plan or zoning code. Therefore, this inconsistency cannot be fully mitigated, and the currently proposed project could result in a new significant impact or substantially more severe significant impact related to conflicts with zoning and other regulations governing scenic quality beyond what was previously identified in the 2009 EIR. Even with implementation of Mitigation Measure SEIR 4.1-2, the development of the project site with the currently proposed uses would be inconsistent with the designation and zoning, resulting in a new significant and unavoidable impact.

**Long-term changes in visual character associated with development of the proposed project in combination with future buildout of the City of Davis and present and probable future projects. (Impact 4.1-4)**

Because the proposed project was submitted pursuant to Builder's Remedy and without any legislative entitlements, the proposed project would not be consistent with the project site's designation as Agriculture in the General Plan or the PD 3-89 zoning district. As such, the proposed project is not required as part of project approval to demonstrate consistency with the related standards, including those associated with scenic quality.

As discussed above, the proposed project would conflict with applicable zoning, creating a potentially significant impact on aesthetics that was not previously addressed in 2009 EIR. The inconsistency would be partially mitigated by the implementation of Mitigation Measure SEIR 4.1-2, which would require that the project comply with conditions of approval imposed by the City on the project's Tentative Map in order to ensure visual consistency with adjacent uses to the north, south, and west of the project site.

Based on the above discussion, despite the fact that the proposed project would involve similar development as the Wildhorse Ranch Project, the proposed project's incremental contribution to the significant cumulative effect would be cumulatively considerable due to its inconsistency with the site's General Plan land use and zoning designations. Although the 2009 EIR identified a significant and unavoidable aesthetic impact, the focus of the impact was related to changes in visual character, rather than conflicts with scenic regulations. Therefore, the currently proposed project's contribution to the significant cumulative aesthetic impact is considered a new cumulatively considerable and significant and unavoidable impact.

**Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Impact 4.4-1)**

During project construction, heavy equipment would be used for grading excavation, paving, and building construction, which would increase ambient noise levels when in use. Based on the equipment noise levels in Table 4.4-10 of this SEIR, worst-case on-site project construction equipment maximum noise levels at the nearest existing residential uses located 25 feet away are expected to range from approximately 82 to 91 dB  $L_{max}$ .

Because short-term noise level increases associated with project construction could result in substantial noise level increases exceeding 5.0 dB or more above baseline ambient conditions at the nearest existing residences, a modified version of Mitigation Measure 4.5-3 from the 2009



EIR would be required, which necessitates implementation of standard construction noise best management practices (BMPs). The 2009 EIR concluded that implementation of said BMPs would reduce potential impacts related to temporary increases to ambient noise levels to a less-than-significant level. However, the 2009 EIR did not clearly articulate an ambient noise level increase threshold to determine construction noise impact significance. In contrast, based on recent CEQA case law, this SEIR uses an ambient increase construction noise threshold of 5.0 dB, and thus, implementation of mitigation must be shown to be capable of reducing ambient noise level increases attributable to construction below 5.0 dB over ambient levels. While implementation of Mitigation Measure 4.5-3 from the 2009 EIR (as modified) would ensure compliance with the Davis Municipal Code, the measure cannot conclusively be shown to reduce increases in ambient noise levels due to project construction to at or below 5.0 dB at the nearest sensitive receptors. Therefore, even with implementation of the measure, the potential impact is conservatively assumed to be a new significant and unavoidable increase in severity of a significant impact previously identified in the 2009 EIR.

**Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). (Impact 4.6-4)**

The proposed project's non-residential component would reduce total vehicle miles traveled (VMT) within the region by 1,089 VMT. Therefore, the project's non-residential component would not result in a net increase in total VMT. However, the residential VMT per capita generated by the project's residential component would be 9.7 percent and 52.6 percent above baseline local and regional residential VMT per capita averages, respectively. Thus, the project residential component would generate residential VMT per capita exceeding the applicable threshold of 15 percent below baseline local and regional residential VMT per capita averages. Mitigation Measure SEIR 4.6-4 includes transportation demand management (TDM) strategies to reduce residential VMT per capita. Altogether, the TDM strategies described in Mitigation Measure 4.6-4 would reduce project-generated residential VMT per capita by 2.72 percent, for a total residential VMT per capita of 32.1, or 6.6 percent and 47.9 percent above baseline local and regional residential VMT per capita averages, respectively. Therefore, even with mitigation measures, project-generated residential VMT per capita would remain more than 15 percent below baseline local and regional residential VMT per capita averages, and the impact would remain significant and unavoidable.

**Conflict with existing zoning for agricultural use, or a Williamson Act contract. (Section 4.7.2)**

As discussed throughout this chapter, because the currently proposed project was submitted pursuant to Builder's Remedy and without any legislative entitlements, the project is not consistent with the site's General Plan land use designation (Agriculture) or the PD 3-89 zoning district. Therefore, although the proposed project would involve a similar degree of development as the Wildhorse Ranch Project, the proposed project would conflict with existing zoning for agricultural use, creating a potentially significant impact related to agriculture that was not previously addressed in the Wildhorse Ranch Project EIR.

As previously discussed, under Builder's Remedy, the City may not rely on inconsistency with the zoning code as a basis for denial of the project. Furthermore, the City entered into a settlement agreement with the applicant that allows the applicant to proceed without legislative entitlements. Absent a zone change, feasible mitigation does not exist to reduce the foregoing significant impact to a less-than-significant level. Therefore, due to the limitations placed on the City by State law, the impact is significant and unavoidable.



**Conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (Section 4.7.7)**

While the proposed project would include the development of similar land uses as the previously analyzed Wildhorse Ranch Project, changes to the project to remove the legislative entitlements have created a potentially significant environmental impact due to conflicts with the City's land use plans, policies, and regulations that are applicable to the site and may have been adopted for the purpose of avoiding an environmental impact. Based on the above, the currently proposed project would result in a new significant impact beyond what was previously identified in the 2009 EIR. Without a General Plan Amendment or Rezone for the proposed project, the forgoing impact cannot be mitigated and would remain significant and unavoidable.





---

---

## **6. ALTERNATIVE ANALYSIS**

---

---

## 6. ALTERNATIVES ANALYSIS

### 6.1 INTRODUCTION

The Alternatives Analysis chapter of the Subsequent Environmental Impact Report (SEIR) includes consideration and discussion of a range of reasonable alternatives to the proposed project, as required per CEQA Guidelines Section 15126.6. Generally, the chapter includes discussions of the following: the purpose of an alternatives analysis, alternatives considered but dismissed, a reasonable range of project alternatives and their associated impacts in comparison to the proposed project's impacts, and the environmentally superior alternative.

### 6.2 PURPOSE OF ALTERNATIVES

The primary intent of the alternatives evaluation in an EIR, as stated in Section 15126.6(a) of the CEQA Guidelines, is to “[...] describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” In the context of Public Resources Code (PRC) Section 21061.1, “feasible” is defined as:

[...]capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Section 15126.6(f) of CEQA Guidelines states, “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.” Section 15126.6(f) of CEQA Guidelines further states:

The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

In addition, an EIR is not required to analyze alternatives when the effects of the alternative “cannot be reasonably ascertained and whose implementation is remote and speculative.”

The CEQA Guidelines provide the following guidance for discussing alternatives to a proposed project:

- An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6[a]).
- Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (PRC Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives



would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6[b]).

- The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination [...] Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison (CEQA Guidelines Section 15126.6[d]).
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6[d]).
- The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (CEQA Guidelines Section 15126.6[e][1]).
- If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

### **Project Objectives**

Based on the above, reasonable alternatives to the project must be capable of feasibly attaining most of the basic objectives of the project. The proposed project is being pursued with the following objectives:

1. Construct a housing development project within the City of Davis that includes a broad mix of housing types and levels of affordability.
2. Subdivide an underutilized 25-acre infill parcel, putting the property to a higher and better use to help address the housing crisis.
3. Provide new for-sale housing opportunities without the need to expand into City-adjacent agriculture.
4. Increase housing opportunities in Davis for low- and middle-income households.
5. Include at least 20 percent of units as affordable.
6. Help address climate change by increasing opportunities for those currently commuting to and from Davis to reduce travel by living in town in housing that is all-electric and includes solar generation on every residence.
7. Support the Davis Joint Unified School District (DJUSD) by offering a first-time homebuyer program designed to attract young families and put Davis residents into the schools.
8. Provide a location for the construction of a new pentathlon training facility that includes a pool to also be used by local community swim organizations.



9. Create a neighborhood that respects its surroundings and is compatible with the scale of the adjacent community.
10. Construct housing and public amenities at a location where valuable infrastructure already exists including, but not limited to, a roadway intersection, off-grade pedestrian crossing, nearby parks, and an abutting agricultural buffer/greenbelt system.

### **Impacts Identified in the SEIR**

In addition to attaining the majority of project objectives, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. The significance levels of impacts identified in the SEIR are presented below.

### **No New Significant Impacts or Substantial Increase in Severity of Previously Identified Significant Impacts**

In cases where an approved project has already undergone environmental review, and the environmental document has been adopted by the lead agency, the current review can be restricted to the incremental effects of the modified project, rather than having to reconsider the overall impacts of the project. The CEQA Guidelines provide guidance in this process by requiring an examination of whether, since the certification of the EIR, changes in the approved project or circumstances under which the approved project would be undertaken have occurred to such an extent that the proposal may result in a new significant impact (not previously identified in the certified EIR) or substantial increase in the severity of a previously identified significant impact. As discussed in each respective chapter of this SEIR, the proposed project would not result in changes in the Wildhorse Ranch Project or circumstances under which the Wildhorse Ranch Project would be undertaken such that a new significant impact or substantial increase in the severity of a previously identified significant impact within the certified Wildhorse Ranch Project EIR (2009 EIR) would occur related to the following topics associated with the resource area indicated. It should be noted that the analysis within this SEIR identifies the mitigation measures set forth within the 2009 EIR that remain applicable to the proposed project, and new or modified mitigation measures related to the following topics would not be required. Minor revisions to Mitigation Measures 4.5-3, 4.7-2(a) and (b), 4.8-2, 4.9-5, and 4.9-3 from the 2009 EIR, and Mitigation Measure VI-2 from the 2007 Initial Study (IS) prepared for the Wildhorse Ranch Project were made only to fix typographical errors or to remove text that does not apply to the currently proposed project.

- **Aesthetics**
  - Have a substantial adverse effect on a scenic vista.
  - Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.
  - Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
  - Creation of new sources of light or glare associated with development of the proposed project in combination with future buildout of the City of Davis and present and probable future projects.
- **Air Quality, Greenhouse Gas Emissions, and Energy**
  - Conflict with or obstruct implementation of the applicable air quality plan during project construction.



- Conflict with or obstruct implementation of the applicable air quality plan during project operation.
  - Expose sensitive receptors to substantial pollutant concentrations.
  - Result in other emissions (such as those leading to odor) adversely affecting a substantial number of people.
  - Result in the inefficient or wasteful use of energy.
  - Conflict with a State or local plan for renewable energy or energy efficiency.
  - Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
  - Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment.
  - Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.
  - Result in a cumulatively considerable inefficient or wasteful use of energy or conflict with a State or local plan for renewable energy or energy efficiency.
- **Biological Resources**
    - Have a substantial adverse effect on any riparian habitat or other Sensitive Natural Community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.
    - 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.
    - 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.
    - Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
    - Cumulative loss of habitat for special-status species.
- **Noise**
    - Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
    - Generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future buildout of the City of Davis.
- **Public Services, Utilities, and Service Systems**
    - Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services.
    - Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain



acceptable service ratios, response times, or other performance objectives for police protection services.

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for schools.
  - Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for parks or other government services.
  - 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.
  - Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.
  - 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.
  - Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
  - Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
  - 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.
  - Conflict with federal, State, and local management and reduction statutes and regulations related to solid waste.
  - Development of the proposed project, in combination with future buildout in the City of Davis, would increase demand on fire and police protection services.
  - Development of the proposed project, in combination with future buildout in the City of Davis, would increase demand on utilities and service systems.
- **Transportation**
    - Conflict with a program, plan, ordinance, or policy addressing the circulation system during construction activities.
    - Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit.
    - Result in inadequate emergency access.
    - Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
  - **Other Effects**
    - *Agriculture and Forestry Resources*
      - 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.





- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]).
- Result in the loss of forest land or conversion of forest land to non-forest use.
- 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.
- *Cultural Resources*
  - Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
  - Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
  - Disturb any human remains, including those interred outside of dedicated cemeteries.
- *Geology and Soils*
  - 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 based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
    - ii. Strong seismic ground shaking.
    - iii. Seismic-related ground failure, including liquefaction.
    - iv. Landslides.
  - Result in substantial soil erosion or the loss of topsoil.
  - 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.
  - Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
  - 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.
  - Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- *Hazards and Hazardous Materials*
  - Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
  - Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
  - 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.
  - 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 or excessive noise for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
  - Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires.
- *Hydrology and Water Quality*
    - Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
    - Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
    - Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
      - i. Result in substantial erosion or siltation on- or off-site;
      - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
      - 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
      - iv. Impede or redirect flood flows.
    - In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
    - Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.
  - *Land Use and Planning*
    - Physically divide an established community.
  - *Mineral Resources*
    - 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.
    - 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.
  - *Population and Housing*
    - Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through projects in an undeveloped area or extension of major infrastructure).
    - Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

As stated above, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. Because the proposed project would not result in any new significant impacts or a substantial increase in severity of previously identified significant impacts related to the resource areas listed above, a comparison of impacts associated with the aforementioned resource areas as a result of project alternatives versus the proposed project is not provided in this chapter. Rather, this chapter focuses on those resource areas and specific impacts listed below that have been identified for the proposed project in this SEIR as requiring new or modified mitigation to reduce



the new or more severe significant impacts to less than significant, or have been found to remain significant and unavoidable.

### **No New Significant Impacts or Substantial Increase in Severity of Previously Identified Significant Impacts with Implementation of New or Modified Mitigation**

Environmental impacts (including cumulative impacts) of the proposed project that have been identified as requiring new or modified mitigation measures to ensure that a new significant impact or a substantial increase in severity of a previously identified significant impact, as compared to the 2009 EIR, would not occur, and the level of significance is ultimately less than significant, include the following:

- **Biological Resources.** The SEIR determined that, unlike the conclusions in the 2009 EIR, the proposed project could result in a new significant impact or substantially more severe significant impact related to the project having a substantial adverse effect, either directly or through habitat modifications, on a special-status plant species, monarch butterfly, valley elderberry longhorn beetle (VELB), Crotch's bumble bee, northwestern pond turtle, giant garter snake, tricolored blackbird, burrowing owl, Swainson's hawk, white-tailed kite, nesting birds and raptors protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), roosting bats, and American badger. However, implementation of new Mitigation Measures SEIR 4.3-1, SEIR 4.3-2, SEIR 4.3-3, SEIR 4.3-4, SEIR 4.3-5, SEIR 4.3-6, SEIR 4.3-7, and modified versions of Mitigation Measures 4.6-2, 4.6-5, 4.6-6, 4.6-3, 4.6-4, and 4.6-1(a), (c), and (d) would reduce potential significant impacts associated with special-status plant species and the aforementioned special-status wildlife species to a less-than-significant level by requiring special-status plant surveys, preconstruction surveys, and, if detected, avoidance or relocation of protected species identified in areas that could be affected by project construction.

The 2009 EIR was certified prior to the adoption of the Yolo Habitat Conservation Plan and Natural Community Conservation Plan (Yolo HCP/NCCP). As such, potential impacts to special-status plant and wildlife species that would have resulted from the Wildhorse Ranch Project required direct consultation with U.S. Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW), and impacts were not evaluated for consistency with the Yolo HCP/NCCP. The proposed project is a Covered Activity under the Yolo HCP/NCCP, and therefore, the proposed project would be required to comply with the applicable Yolo HCP/NCCP Avoidance and Minimization Measures (AMMs). Thus, the SEIR determined that, unlike the conclusions in the 2009 EIR, without compliance with the Yolo HCP/NCCP, the proposed project could result in a new significant impact or substantially more severe significant impact related to conflicts with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan

Lastly, the SEIR determined that, unlike the conclusions in the 2009 EIR, the proposed project could result in a new significant impact or substantially more severe significant impact related to conflicts with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. New Mitigation Measures SEIR 4.3-3, SEIR 4.3-17(a) through (g) would ensure that the proposed project complies



with all applicable AMMs set forth by the Yolo HCP/NCCP, which would reduce potential impacts to a less-than-significant level.

- **Noise.** The SEIR determined that, unlike the conclusion in the 2009 EIR, the pool complex and obstacle course associated with the proposed project could result in the generation of a substantial permanent increase in ambient noise levels in the vicinity of the project due to the public address (PA) system, which could be in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. However, implementation of new Mitigation Measure SEIR 4.4-2, would reduce potential significant impacts associated with pool complex and obstacle course PA system noise to a less-than-significant level by requiring an acoustical noise study with recommendations for reducing PA system noise levels projected to exceed the City's applicable noise standards.
- **Public Services and Utilities.** Similar to the conclusions in the 2009 EIR, the SEIR determined that the proposed project could require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. However, unlike the 2009 EIR, the SEIR concluded the proposed project would require a future design-level water report to further refine the proposed water line sizes throughout the project site in order to meet domestic and fire flow demands. New Mitigation Measure SEIR 4.5-5 would ensure that the potential impact is less than significant by requiring the project applicant to submit the design-level water report in conjunction with improvement plans. The SEIR concluded that the proposed project would not require or result in the relocation or construction of new or expanded stormwater drainage, electric power, natural gas, or telecommunications facilities that would require new or modified mitigation measures beyond what were included in the 2009 EIR in order to prevent significant environmental effects from occurring. In addition, although the SEIR includes modifications to Mitigation Measure 4.9-3 from the 2009 EIR to address the potential impact related to wastewater conveyance infrastructure, such modifications are minor and serve to revise text that does not apply to the currently proposed project.
- **Transportation.** The SEIR determined that, unlike the conclusion in the 2009 EIR, the proposed project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway, bicycle, and pedestrian facilities. However, implementation of Mitigation Measure 4.3-3 from the 2009 EIR, as well as new Mitigation Measures SEIR 4.6-2(a) and (b), would reduce potential significant impacts associated with bicycle and pedestrian facilities to a less-than-significant level by reducing conflicts involving bicyclists or pedestrians.
- **Other Effects: Hazards and Hazardous Materials.** The SEIR determined that, unlike the conclusion in the 2009 EIR, the proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. However, implementation of Mitigation Measure SEIR 4.7-1 would reduce potential significant impacts associated with on-site treated wood waste (TWW) to a less-than-significant level by requiring all on-site TWW to be removed and disposed of in compliance with California Health and Safety Code Section 25230.



## New Significant and Unavoidable Impacts

The SEIR determined that the proposed project would result in a new significant impact or substantial increase in the severity of a previously identified significant impact, as compared to the 2009 EIR, related to the following impacts. Even with implementation of all feasible mitigation measures, as set forth in this SEIR, the impacts would remain significant and unavoidable.

**Aesthetics.** The SEIR determined that, unlike the 2009 EIR, even with implementation of mitigation, the proposed project would conflict with applicable zoning and other regulations governing scenic quality. As noted above, the proposed project was submitted pursuant to a settlement agreement with the City that provides that the project will be processed without legislative entitlements, including a General Plan amendment or zoning amendment. Because the proposed project was submitted pursuant to Builder's Remedy and without any legislative entitlements, the project is not consistent with the site's General Plan land use designation. As the City cannot disapprove the project on the grounds of inconsistency with the site's zoning or General Plan designation, the inconsistency cannot be fully mitigated. The inconsistency can be partially mitigated by the implementation of new Mitigation Measure SEIR 4.1-2, which would require that the project comply with conditions of approval imposed by the City on the project's Tentative Map in order to ensure visual consistency with adjacent uses to the north, south, and west of the project site. Even with the imposition of new Mitigation Measure SEIR 4.1-2, the development of the project site with the currently proposed uses would be inconsistent with the designation of the site in the General Plan as Agricultural and its PD 3-89 zoning, and the potential impact would remain significant and unavoidable. For similar reasons, the project's incremental contribution to the significant cumulative aesthetic impact would also be cumulatively considerable and significant and unavoidable.

- **Noise.** The SEIR determined that, unlike the 2009 EIR, even with implementation of mitigation, the proposed project could result in a significant and unavoidable impact related to generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The SEIR includes a modified version of Mitigation Measure 4.5-3 from the 2009 EIR, which requires noise-reduction measures to be incorporated within the construction documents. However, certainty that the measures would reduce construction-related noise levels to both a state of compliance with Davis Municipal Code requirements and to levels which do not substantially exceed baseline ambient conditions cannot be determined, and the impact is conservatively concluded to remain significant and unavoidable.
- **Transportation.** The SEIR determined that, unlike the 2009 EIR, even with implementation of mitigation, the proposed project would result in a significant and unavoidable impact related to conflicts or inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b). The SEIR includes a new mitigation measure, Mitigation Measure SEIR 4.6-4, which requires implementation of transportation demand management (TDM) strategies to reduce per capita residential vehicle miles travelled (VMT). However, even with implementation of the new mitigation measure, the project's VMT per capita would exceed the applicable thresholds of significance. Therefore, impacts would remain significant and unavoidable.





- **Other Effects: Agriculture and Forestry Resources.** The SEIR determined that, unlike the 2009 EIR, the proposed project would result in a significant and unavoidable impact related to conflicts with existing zoning for agricultural use. Because the proposed project was submitted pursuant to Builder's Remedy and without any legislative entitlements, the project is not consistent with the site's General Plan land use designation (Agriculture) or the PD 3-89 zoning district. As such, the currently proposed project would result in a new potentially significant impact related to conflicting with existing zoning for agricultural use beyond what was previously identified in the 2009 EIR. The SEIR includes a modified version of Mitigation Measures 4.1-3 and 4.1-4(a) from the 2009 EIR, which require mitigation of agricultural land and a deed restriction disclosure to prospective buyers about adjacent agricultural activities consistent with the City's Farmland Preservation Ordinance and Right-to-Farm Ordinance, respectively. However, feasible mitigation does not exist to reduce the foregoing potentially significant impact to a less-than-significant level. Because the proposed project was submitted pursuant to Builder's Remedy and without any legislative entitlements, the proposed project would be inconsistent with the City's zoning and General Plan land use designations for the site. Due to the limitations placed on the City by State law, mitigation to ensure the project's consistency with the site's zoning is infeasible. Therefore, the impact is significant and unavoidable.
- **Other Effects: Land Use and Planning.** The SEIR determined that, unlike the 2009 EIR, the proposed project would result in a significant and unavoidable impact related to conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. As discussed above, because the proposed project was submitted pursuant to Builder's Remedy and without any legislative entitlements, the project is not consistent with the site's General Plan land use designation (Agriculture) or the PD 3-89 zoning district. As such, the proposed project could cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Feasible mitigation does not exist to reduce the foregoing potentially significant impact to a less-than-significant level. As the applicant is submitting the project without legislative entitlements and invoking Builder's Remedy, bringing the project into consistency with the zoning of the site is infeasible. Therefore, the impact is significant and unavoidable.

### 6.3 SELECTION OF ALTERNATIVES

The requirement that an EIR evaluate alternatives to the proposed project or alternatives to the location of the proposed project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained, while reducing the magnitude of, or avoiding, one or more of the significant environmental impacts of the proposed project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the CEQA Guidelines require the EIR to "set forth only those alternatives necessary to permit a reasoned choice." As stated in Section 15126.6(a), an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. The CEQA Guidelines provide a definition for "a range of reasonable alternatives" and, thus, limit the number and type of alternatives that may need to be evaluated in a given EIR. According to the CEQA Guidelines Section 15126.6(f):

The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only





the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

First and foremost, alternatives in an EIR must be feasible. In the context of CEQA Guidelines Section 21061.1, “feasible” is defined as:

...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Finally, an EIR is not required to analyze alternatives when the effects of the alternative “cannot be reasonably ascertained and whose implementation is remote and speculative.”

### **Alternatives Considered But Dismissed From Further Analysis**

Consistent with CEQA, primary consideration was given to alternatives that could reduce significant project impacts, while still meeting most of the basic project objectives.

As stated in Guidelines Section 15126.6(c), among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:

- (i) failure to meet most of the basic project objectives,
- (ii) infeasibility, or
- (iii) inability to avoid significant environmental impacts.

Regarding item (ii), infeasibility, among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establish a fixed limit on the scope of reasonable alternatives.

The off-site alternative was considered but dismissed from detailed analysis in this SEIR. The reason(s) for dismissal, within the context of the three above-outlined permissible reasons, are provided below.

### **Off-Site Alternative**

An Off-Site Alternative would involve construction of the proposed project on an alternative site. However, the project site is located within an area that has been previously approved by the Davis City Council for 191 residential units as part of the Wildhorse Ranch Project, which was subject to prior environmental review but did not proceed after failing to gain approval by Davis voters. Therefore, it is reasonable to conclude that the project site is generally a suitable location for the proposed project. In addition, as noted previously, the purpose of an alternatives analysis is to develop alternatives to the proposed project that avoid or substantially lessen at least one of the significant environmental effects identified as a result of the project, while still meeting most, if not all, of the basic project objectives. While there are other sites where the project could be accommodated, such as the Signature Site, located inside the Mace Curve, these sites would not be anticipated to avoid or substantially lessen the proposed project’s significant impacts. The Signature Site is also designated Agriculture and unlike the Palomino Place project site, is located outside of the City limits.



CEQA Guidelines Section 15126.6(b) provides that only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the SEIR. The significant and unavoidable impact related to noise is associated with construction, which would still be expected to occur under an Off-Site Alternative that is located adjacent to existing residences. The significant and unavoidable impact related to transportation identified for the proposed project in this SEIR is related to VMT. An Off-Site Alternative would have the same type and intensity of uses as the proposed project. Given that commute characteristics and access to public transit services at any off-site location within the City would likely be similar to the project vicinity, development of an Off-Site Alternative would be expected to result in similar, if not greater, VMT per capita as compared to the proposed project. Thus, an Off-Site Alternative would not avoid the significant and unavoidable impacts identified by this SEIR related to noise and transportation.

Development of the proposed project at an off-site location would not be capable of meeting Objective #2, to subdivide an underutilized 25-acre infill parcel, putting the property to a higher and better use to help address the housing crisis; or Objective #3, to provide new for-sale housing opportunities without the need to expand into City-adjacent agriculture. Therefore, a feasible off-site location that would meet all of the project objectives does not exist.

Finally, the project applicant does not own or control an alternative location that would be adequate to construct the proposed project. The project site is located in an area served by existing regional infrastructure and arterial roadways, and is located adjacent to existing urban development in the City of Davis. Overall, a feasible off-site location that would meet the requirements of CEQA, as well as meet the basic objectives of the proposed project, does not exist. Therefore, an Off-Site Alternative was dismissed from detailed analysis within this SEIR.

### **Alternatives Considered in this EIR**

The following alternatives are considered and evaluated in this section:

- No Project (No Build) Alternative;
- Increased Density Alternative;
- Reduced Density Alternative; and
- No Pentathlon Facility Alternative.

Each of the project alternatives is described in detail below, with a corresponding analysis of each alternative's impacts in comparison to the proposed project. As discussed above, reasonable alternatives to the project must be capable of avoiding or substantially lessening a new significant impact or substantial increase in severity of a significant impact, as identified by this SEIR. Therefore, this chapter focuses on the resource areas and specific impacts listed above that have been identified in this SEIR for the proposed project as requiring new or modified mitigation to reduce significant impacts to less than significant, or have been found to remain significant and unavoidable. While an effort has been made to include quantitative data for certain analytical topics, where possible, qualitative comparisons of the various alternatives to the project are primarily provided. Such an approach to the analysis is appropriate as evidenced by CEQA Guidelines Section 15126.6(d), which states that the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.



The analysis evaluates impacts that would occur with the alternatives relative to the significant impacts identified for the proposed project. When comparing the potential impacts resulting from implementation of the foregoing alternatives, the following terminology is used:

- “Fewer” = Less than Proposed Project;
- “Similar” = Similar to Proposed Project; and
- “Greater” = Greater than Proposed Project.

When the term “fewer” is used, the reader should not necessarily equate this to elimination of significant impacts identified for the proposed project. For example, in many cases, an alternative would reduce the relative intensity of a significant impact identified for the proposed project, but the impact would still be expected to remain significant under the alternative, thereby requiring mitigation. In other cases, the use of the term “fewer” may mean the actual elimination of an impact identified for the proposed project altogether. Similarly, use of the term “greater” does not necessarily imply that an alternative would require additional mitigation beyond what has been required for the proposed project. To the extent possible, this analysis will distinguish between the two implications of the comparative words “fewer” and “greater”.

Please see Table 6-2 for a comparison of the environmental impacts resulting from the considered alternatives and the proposed project.

### **No Project (No Build) Alternative**

CEQA requires the evaluation of the comparative impacts of the “No Project” alternative (CEQA Guidelines Section 15126.6[e]). Analysis of the no project alternative shall:

“... discuss [...] existing conditions [...] as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.” (*Id.*, subd. [e][2]) “If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the ‘no project’ alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in the property’s existing state versus environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this ‘no project’ consequence should be discussed. In certain instances, the no project alternative means ‘no build,’ wherein the existing environmental setting is maintained. However, where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project’s non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.” (*Id.*, subd. [e][3][B]).

The City has decided to evaluate a No Project (No Build) Alternative, which assumes that the current conditions of the project site would remain, and the site would not be developed. As described in this SEIR, the majority of the project site is undeveloped and consists of ruderal grasses that were previously used as pasture/grazing land. Within the central portion of the project site, the site includes a ranch home, two duplexes, a horse barn, and an equestrian training facility that is not currently in use. A paved driveway extends into the site from East Covell Boulevard and bisects the majority of the site in a north-to-south direction. Trees are located adjacent to the driveway, on-site structures, and project site boundaries. The No Project (No Build) Alternative would not meet any of the project objectives.



### Aesthetics

The No Project (No Build) Alternative would result in the continuation of the existing conditions of the project site. As such, the Alternative would remain consistent with the project site's current land use and zoning designations. Therefore, the Alternative would not conflict with applicable zoning and other regulations governing scenic quality. As such, new Mitigation Measure SEIR 4.1-2 required for the proposed project would not be required under the Alternative, and significant impacts identified for the proposed project related to aesthetics would not occur under the No Project (No Build) Alternative.

### Biological Resources

Under the No Project (No Build) Alternative, construction activities, including ground disturbance, would not occur on the project site. As such, the Alternative would not have the potential to impact special-status plants, monarch butterfly, VELB, Crotch's bumble bee, northwestern pond turtle, giant garter snake, tricolored blackbird, burrowing owl, Swainson's hawk, white-tailed kite, roosting bats, American badger, and migratory nesting birds and raptors. In addition, the No Project (No Build) Alternative would not result in a substantial adverse effect on riparian habitat, other Sensitive Natural Communities, or federally or State-protected aquatic resources. The Alternative would not include removal of trees and, thus, would not conflict with local policies and/or ordinances that protect biological resources, such as a tree preservation policy or ordinance. The Alternative would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. Furthermore, the Alternative would not result in the cumulative loss of habitat for special-status species. As such, none of the new or modified mitigation measures related to biological resources required for the proposed project would be required under the Alternative. Overall, the impacts identified for the proposed project related to biological resources would not occur under the No Project (No Build) Alternative.

### Noise

The No Project (No Build) Alternative would result in the continuation of the existing conditions of the project site. Because the No Project (No Build) Alternative would not involve development of the pool complex or obstacle course, the Alternative would not result in the generation of a substantial permanent increase in ambient noise levels, and new Mitigation Measure SEIR 4.4-2 would not be required. Additionally, the Alternative would not introduce any new development on-site and construction would not occur, new temporary noise sources would not be generated on-site. Therefore, the modified version of Mitigation Measure 4.5-3, which requires noise-reduction measures to be incorporated within the construction documents, would not be required under the Alternative, and impacts related to noise would not occur under the No Project (No Build) Alternative.

### Public Services and Utilities

The No Project (No Build) Alternative would not involve any development of the project site, and would therefore not result in any additional water demand. Thus, the No Project (No Build) Alternative would not require a future design-level water report to further refine the proposed water line sizes throughout the project site in order to meet domestic and fire flow demands, and new Mitigation Measure SEIR 4.5-5 would not be required. Overall, the impacts identified for the proposed project related to public services and utilities would not occur under the No Project (No Build) Alternative.



### Transportation

Because the No Project (No Build) Alternative would not involve any development of the project site, construction and operational activities would not occur under the Alternative. Thus, the No Project (No Build) Alternative would not conflict with a program, plan, ordinance or policy addressing the circulation system, including roadway, bicycle, and pedestrian facilities, and new Mitigation Measures SEIR 4.6-2(a) and (b), related to development of a bikeway facility and modification of the East Covell Boulevard/Monarch Lane intersection, would not be required. Similarly, the Alternative would not have the potential to increase vehicle trips and, thus, would not contribute to an increase in VMT, and new Mitigation Measure SEIR 4.6-4 would not be required. Overall, the impacts identified for the proposed project related to transportation would not occur under the No Project (No Build) Alternative.

### Other Effects: Hazards and Hazardous Materials

Under the No Project (No Build) Alternative, construction activities, including ground disturbance, would not occur on the project site. However, on-site TWW would be left in its current state and location, and therefore, a risk of creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions would remain. New Mitigation Measure SEIR 4.7-1, which requires all on-site TWW to be removed and disposed of in compliance with Health and Safety Code Section 25230, would not be implemented under the Alternative, and impacts related to hazards and hazardous materials would be greater under the No Project (No Build) Alternative.

### Other Effects: Agriculture and Forestry Resources

The No Project (No Build) Alternative would result in the continuation of the existing conditions of the project site. As such, the Alternative would remain consistent with the project site's current land use and zoning designations related to agriculture. Therefore, the Alternative would not have the potential to conflict with zoning for agricultural use. As such, the significant and unavoidable impact identified for the proposed project related to agricultural resources would not occur under the No Project (No Build) Alternative.

### Other Effects: Land Use and Planning

The No Project (No Build) Alternative would result in the continuation of the existing conditions of the project site. As such, the Alternative would remain consistent with the project site's current land use and zoning designation. Therefore, the Alternative would not conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. As such, the significant and unavoidable impact identified for the proposed project related to land use and planning would not occur under the No Project (No Build) Alternative.

### **Increased Density Alternative**

Under the Increased Density Alternative, a total of 260 residential units would be developed on the project site. The 260-unit count was selected for the Alternative in order to reduce per capita VMT below both City and regional average VMT thresholds. The 260 total residential units would be comprised of 50 single-family residences, 158 townhomes, and 52 affordable multi-family units, as compared to the currently proposed 175 units, which include 19 cottage units, 29 half-plex townhomes, 82 single-family residences, and up to 45 multi-family apartments. The 52 affordable multi-family units would be located in the southern portion of the project site to provide ease of access to East Covell Boulevard. The 158 medium-high-density townhomes would be located primarily in the western portion of the project site to allow for more efficient lotting patterns.





The Alternative would also include a Multi-Modal Transit Center in the southwestern corner of the project site along East Covell Boulevard (see Figure 6-1).

The proposed development area of the project site would not change under the Increased Density Alternative, and all other site improvements required under the proposed project would still be developed under the Increased Density Alternative, including an internal roadway network and on- and off-site utility improvements. The Increased Density Alternative would involve the same type and amount of recreational uses, as the USA Pentathlon Training Facility, pool complex, and obstacle course would still be developed under the Alternative. The Alternative would include similar open space area as compared to the currently proposed project, including a 1.09-acre open space area north of the USA Pentathlon Training Facility, and the 0.85-acre, 20-foot-wide tree easement along the western boundary of the project site.

The tree easement open space area would be maintained by the Homeowners Association (HOA) associated with the proposed project.

Similar to the proposed project, the Increased Density Alternative would invoke Builder's Remedy, which is a provision of California's Housing Accountability Act that prevents jurisdictions without a substantially compliant housing element from denying eligible housing projects on the basis of inconsistency with the jurisdiction's general plan or zoning ordinance. Therefore, similar to the proposed project, the Increased Density Alternative would not include a General Plan Amendment or Rezone. The Alternative would still require the approval of a Vesting Tentative Subdivision Map, Site Plan and Architectural Review for the Pentathlon Facility, and Affordable Housing Plan. Furthermore, because the Increased Density Alternative would generally result in similar development as the proposed project, nine of the ten project objectives would be met by the Alternative. The Alternative would not meet Objective #9, to create a neighborhood that respects its surroundings and is compatible with the scale of the adjacent community, because the Alternative would result in greater inconsistencies with the General Plan.

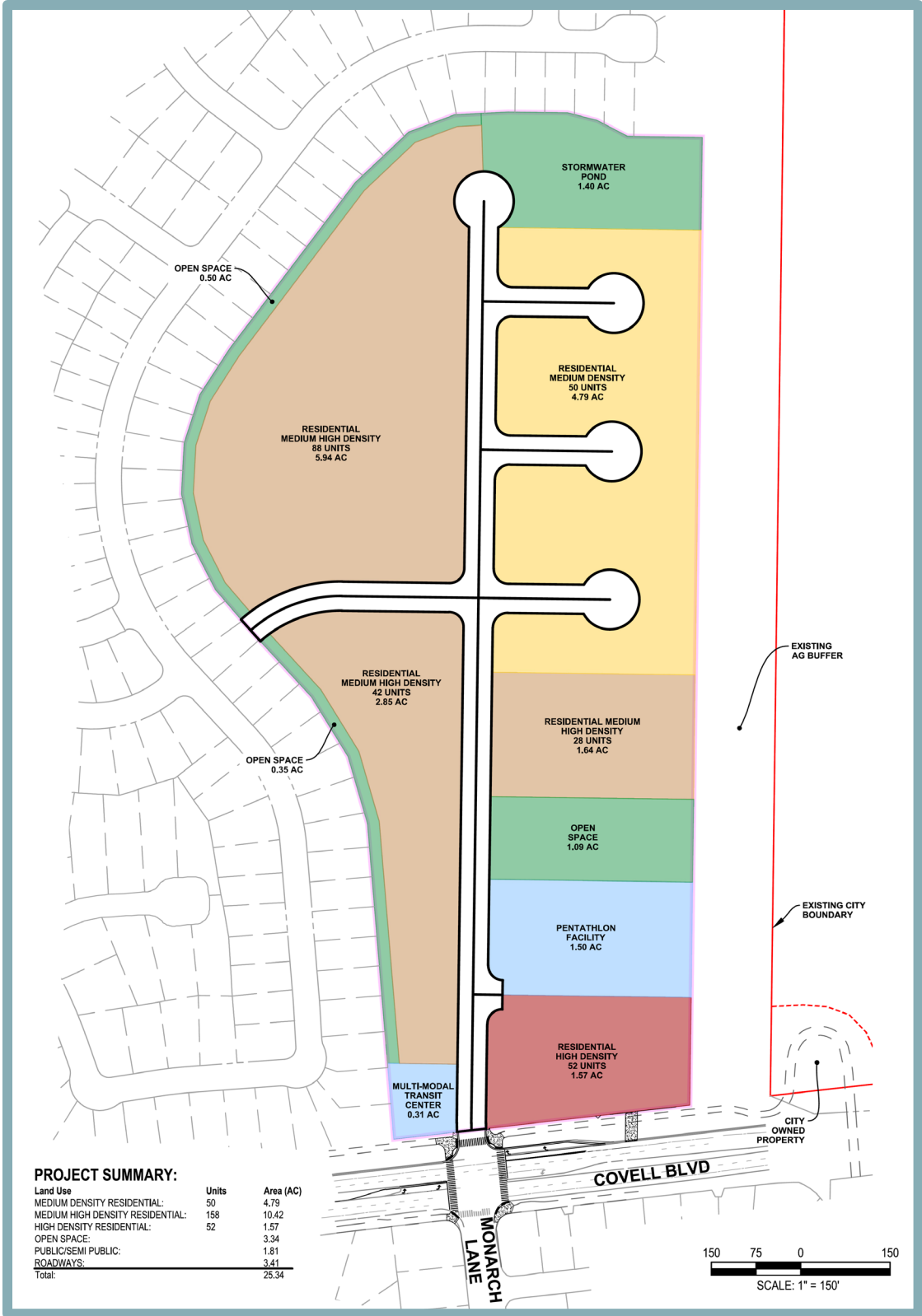
### **Aesthetics**

Similar to the proposed project, the Increased Density Alternative would include development of residential and recreational uses and would be submitted pursuant to Builder's Remedy. Therefore, the Alternative would still be inconsistent with the project site's General Plan land use designation as Agricultural and the Planned Development (PD) 3-89 zoning district. Under Builder's Remedy, the City cannot deny the project based on inconsistency with the General Plan or zoning code. Therefore, the inconsistency cannot be fully mitigated. The Alternative would still be subject to new Mitigation Measure SEIR 4.1-2, which would require that the project comply with conditions of approval imposed by the City on the project's Tentative Map in order to ensure visual consistency with adjacent uses to the north, south, and west of the project site. Similar to the proposed project, the development of the project site with the proposed uses under the Increased Density Alternative would be inconsistent with the designation of the site in the General Plan as Agricultural and its PD 3-89 zoning, resulting in a significant and unavoidable impact. Overall impacts to aesthetics would be greater under the Increased Density Alternative given the increased intensity of development and greater inconsistency with the General Plan designation and zoning regulations, as compared to the proposed project.





**Figure 6-1  
 Increased Density Alternative Site Plan**



### Biological Resources

Similar to the proposed project, the Increased Density Alternative would include ground-disturbing activities on the project site and along the off-site sewer line alignment, and would have the same development footprint as the proposed project. Thus, the Alternative would have similar potential to impact special-status plants, monarch butterfly, VELB, Crotch's bumble bee, northwestern pond turtle, giant garter snake, tricolored blackbird, burrowing owl, Swainson's hawk, white-tailed kite, roosting bats, American badger, and migratory nesting birds and raptors. In addition, the Alternative could result in a substantial adverse effect on riparian habitat, other Sensitive Natural Communities, or federally or State-protected wetlands through direct removal, filling, hydrological interruption, or other means. As such, new Mitigation Measures SEIR 4.3-1 through SEIR 4.3-6 and modified versions of Mitigation Measures 4.6-1 through 4.6-5 from the 2009 EIR, which require species-specific preconstruction surveys, additional protective measures for identified species, and compliance with the Yolo HCP/NCCP, would still be required under the Alternative. Similarly, new Mitigation Measures SEIR 4.3-17(a) through (g), which require the project applicant to comply with general AMMs established by the Yolo HCP/NCCP, would still be required under the Alternative. Therefore, overall impacts to biological resources would be similar under the Increased Density Alternative as compared to the proposed project.

### Noise

Similar to the proposed project, the Increased Density Alternative would include noise-generating construction activities on the project site. Thus, the Alternative would have the potential to result in a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The modified version of Mitigation Measure 4.5-3 from the 2009 EIR, which requires noise-reduction measures to be incorporated within the construction documents, would still be required under the Alternative. Like the proposed project, the Increased Density Alternative could be constructed at once and would not have to be phased, but it should be noted that due to the construction of additional residential units as compared to the proposed project, construction noise levels may occur over a longer period of time. Despite this, construction noise levels would not be anticipated to further exceed thresholds of significance as compared to the proposed project. Therefore, overall impacts related to construction noise would be similar under the Increased Density Alternative, and the significant and unavoidable impact associated with increased noise levels generated during project construction would remain.

### Public Services and Utilities

The Increased Density Alternative would involve similar uses as the proposed project, and would occur within the same development footprint. Thus, the Alternative would still require a future design-level water report to further refine the proposed water line sizes throughout the project site in order to meet domestic and fire flow demands, and Mitigation Measure 4.5-5 would still be required. However, the Increased Density Alternative is not anticipated to exceed thresholds of significance as compared to the proposed project. Overall impacts related to public services and utilities would be similar under the Increased Density Alternative as compared to the proposed project.

### Transportation

The Increased Density Alternative would involve similar uses at a greater density as compared to the proposed project, and would occur within the same development footprint. Like the proposed project, the Alternative would create new bicycle and pedestrian desire lines (defined as the preferred path of travel between two points) and generate new demand for bicycle and pedestrian



travel within the project site and between the project site and other local neighborhoods and activity centers. The lack of a contiguous bikeway facility between East Covell Boulevard and on-site pentathlon and multi-family uses under the Alternative, as well as the lack of existing or proposed bicycle and pedestrian crossings of East Covell Boulevard at Monarch Lane could result in adverse effects on bicycle and pedestrian travel and safety. Thus, the Alternative would be inconsistent with City plans and policies that promote bicycle and pedestrian travel, including City of Davis General Plan Goals #1, #2, #3, and #4, Policies TRANS 1.6, 2.1, 2.2, 2.5, and 4.3, and the City of Davis Beyond Platinum Bicycle Action Plan. Because the Increased Density Alternative would include 85 more units than the proposed project, the potential for vehicle and bicycle conflicts would be greater as compared to the proposed project. In order to address this, Mitigation Measure SEIR 4.6-2(a), which requires the applicant to construct a contiguous bikeway facility with dedicated physical space for bicyclists between East Covell Boulevard and the project's non-residential uses, would still be required and could be enhanced to ensure a connection to the multi-family parcel with sufficient physical space to accommodate the additional bicyclists generated under the Alternative. Similarly, new Mitigation Measure SEIR 4.6-2(b), which requires the applicant to modify the East Covell Boulevard/Monarch Lane intersection, would be required to ensure that the Alternative does not conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway, bicycle, and pedestrian facilities.

While the Increased Density Alternative would include the same recreational uses as the proposed project, the Alternative would incorporate additional residential units at an increased density, which is a California Air Pollution Control Officers Association (CAPCOA) VMT-reduction strategy and, thus, would result in a reduction in VMT as compared to the proposed project. As discussed in Chapter 4.6, Transportation, of this SEIR, the threshold of significance for the residential component of the proposed project is residential VMT per capita 15 percent below the baseline City and/or regional average VMT per capita for residential uses. According to Fehr & Peers, 260 residential units is required in order to reduce per capita VMT to at least 15 percent below both the City of Davis and Sacramento Area Council of Governments (SACOG) region existing average per capita VMT. The Alternative would result in a per capita VMT of 17.9, which is approximately 17.5 percent less than the existing SACOG regional per capita VMT of 21.7 and approximately 31.6 percent less than the existing City of Davis per capita VMT of 30.1. Thus, the Alternative would not result in a residential VMT per resident that would exceed the applicable threshold, and new Mitigation Measure SEIR 4.6-4 would not be required under the Alternative. Overall, impacts related to transportation under the Increased Density Alternative would be fewer than the proposed project and the significant and unavoidable impact associated with project-generated VMT would be avoided.

### Other Effects: Hazards and Hazardous Materials

Similar to the proposed project, the Increased Density Alternative would include ground-disturbing activities and new development on the project site and installation of the off-site sewer line extension. The on-site stockpiled railroad ties located within the western portion of the project site are subject to TWW regulations, requiring proper management, storage, off-site disposal, and/or permitted on-site re-use. Thus, without proper handling of the on-site TWW, the Alternative would have the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. New Mitigation Measure SEIR 4.7-1, which requires all on-site TWW to be removed and disposed of in compliance with California Health and Safety Code Section 25230, would still be required under the Alternative. Therefore, overall impacts related to



hazards and hazardous materials would be similar under the Increased Density Alternative as compared to the proposed project.

### Other Effects: Agriculture and Forestry Resources

The Increased Density Alternative would include development of similar uses as the proposed project and would be submitted pursuant to Builder's Remedy. Therefore, similar to the proposed project, the Increased Density Alternative would be inconsistent with the site's General Plan land use designation (Agriculture) and the PD 3-89 zoning district. As such, the Alternative would result in conflicts with existing zoning for agricultural use. Modified Mitigation Measures 4.1-3 and 4.1-4(a) from the 2009 EIR, which require agricultural land mitigation and a right-to-farm disclosure consistent with the City's ordinances, would still be required under the Alternative. However, because the City cannot disapprove the project based on inconsistency with zoning or General Plan, mitigation to require a Rezone or General Plan Amendment is infeasible. Therefore, similar to the proposed project, feasible mitigation does not exist and the impact of the Alternative with respect to agricultural resources would remain significant and unavoidable. Overall impacts related to agricultural resources would be similar under the Increased Density Alternative as compared to the proposed project.

### Other Effects: Land Use and Planning

The Increased Density Alternative would include development of similar uses as the proposed project and would be submitted pursuant to Builder's Remedy, but under the Alternative, the intensity of uses would be greater and the resultant conflicts with adopted plans and policies (e.g., related to transportation safety) could be greater. Similar to the proposed project, the Increased Density Alternative would be inconsistent with the site's General Plan land use designation (Agriculture) and the PD 3-89 zoning district. As such, the Alternative would conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Because the City cannot disapprove the project based on inconsistency with the General Plan or zoning under Builder's Remedy, bringing the project into consistency with the zoning of the site is infeasible. Therefore, similar to the proposed project, feasible mitigation does not exist and the impact would remain significant and unavoidable. Overall impacts related to land use and planning would be greater under the Increased Density Alternative as compared to the proposed project.

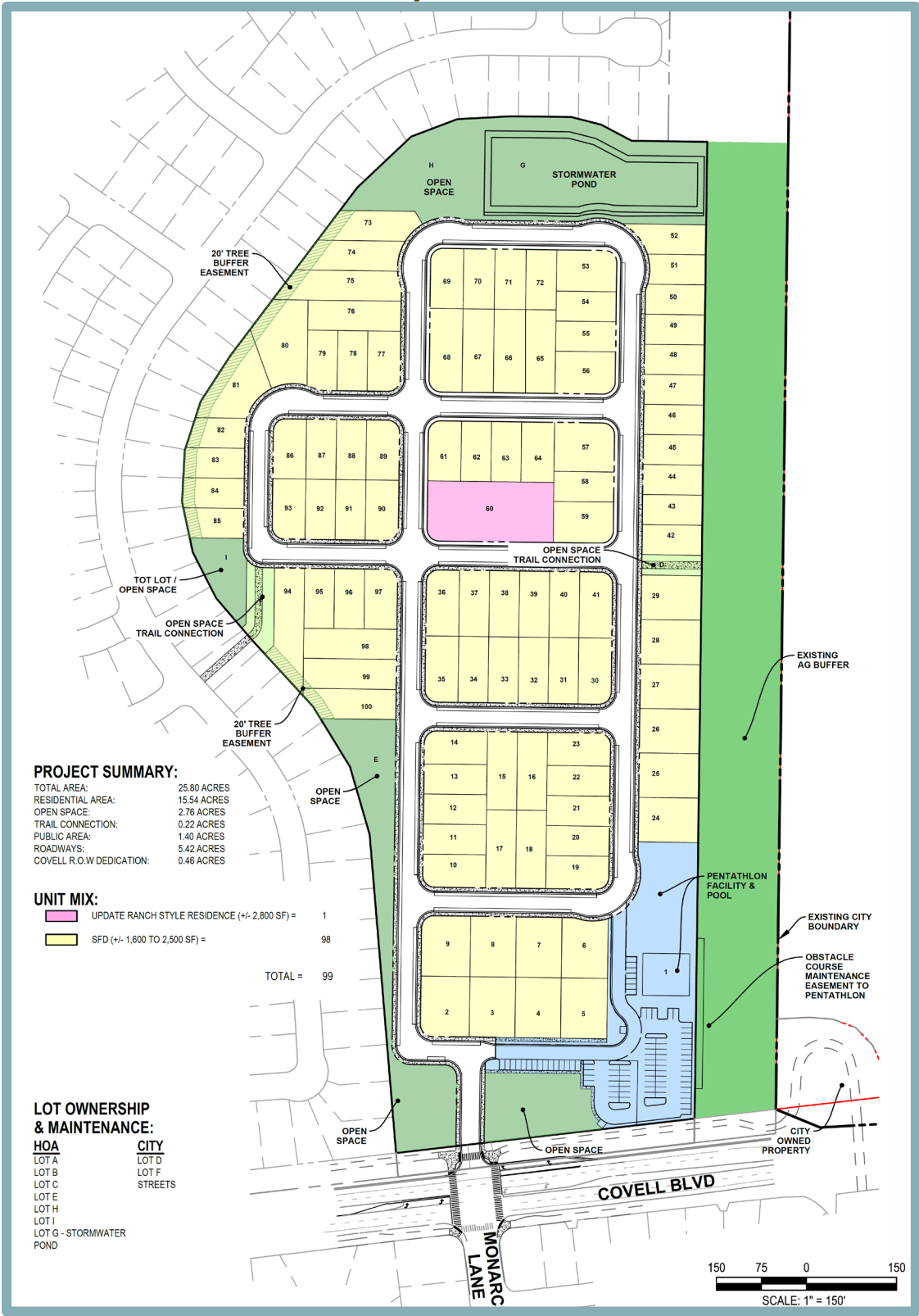
### **Reduced Density Alternative**

The Reduced Density Alternative would include the development of 98 single-family detached residential units, ranging from 1,600 to 2,500 square feet (sf), in addition to the single existing ranch home, for a total residential area of 15.54 acres (see Figure 6-2). A total of 98 residential units was selected for the Alternative in order to result in a density of four to five dwelling units per acre (du/ac), similar to the density of the adjacent Wildhorse neighborhood. The Alternative would not include the development of any multi-family residential units.

The proposed development area of the project site would not change under the Reduced Density Alternative, and the Alternative would still include the USA Pentathlon Training Facility, pool complex, and obstacle course. All other site improvements required under the proposed project would still be developed under the Alternative, including an internal roadway network and on-site and off-site utility improvements. The Reduced Density Alternative would also include the same type and amount of open space areas as the proposed project. Similar to the proposed project, the 20-foot tree buffer in the northwestern portion of the project site would remain as part of the Alternative.



**Figure 6-2  
 Reduced Density Alternative Site Plan**





Similar to the proposed project, the Reduced Density Alternative would invoke Builder's Remedy. Therefore, the Reduced Density Alternative would not submit an application for a General Plan Amendment or Rezone. Additionally, in order to comply with Builder's Remedy affordable housing requirements, the Alternative would still be required to include 20 percent of the single-family units as deed restricted, affordable units. Thus, the Alternative would still require approval of an Affordable Housing Plan. The Alternative would also still require the approval of a Vesting Tentative Subdivision Map and Site Plan and Architectural Review for the USA Pentathlon Facility.

Because the Alternative would include the development of only single-family residences, Objective #1, to construct a housing development project within the City of Davis that includes a broad mix of housing types and levels of affordability, would not be met. Objective #2 and Objective #6 would be partially met; however, developing the project site with low-density residential uses would not maximize the potential of the project site in helping to address the housing crisis or climate change. The remaining project objectives would be met by the Reduced Density Alternative. Arguably, the Alternative would better meet Objective #9 by creating a neighborhood that respects its surroundings and is compatible with the scale of the adjacent community, which is currently comprised primarily of single-family homes.

### Aesthetics

Similar to the proposed project, the Reduced Density Alternative would include development of residential and recreational uses and would be submitted pursuant to Builder's Remedy. Therefore, the Alternative would still be inconsistent with the project site's General Plan land use designation as Agricultural and the PD 3-89 zoning district. As is the case with the proposed project, the Alternative would not submit for legislative entitlements, such as a General Plan Amendment or Rezone. Therefore, the inconsistency with the site's General Plan land use designation and zoning cannot be fully mitigated.

The Alternative would still be subject to new Mitigation Measure SEIR 4.1-2, which would require that the project comply with conditions of approval imposed by the City on the project's Tentative Map in order to ensure visual consistency with adjacent uses to the north, south, and west of the project site. Similar to the proposed project, the development of the project site with the proposed uses under the Reduced Density Alternative would be inconsistent with the designation of the site in the General Plan as Agricultural and its PD 3-89 zoning, resulting in a significant and unavoidable impact. Notwithstanding, the Reduced Density Alternative would reduce aesthetic effects by eliminating the three- to four-story multi-family apartment building located adjacent to the north of East Covell Boulevard.

Overall impacts to aesthetics would be similar under the Reduced Density Alternative as compared to the proposed project.

### Biological Resources

Similar to the proposed project, the Reduced Density Alternative would include ground-disturbing activities on the project site and along the off-site sewer line alignment, and would have the same development footprint as the proposed project. Thus, the Alternative would have a similar level of potential to impact special-status plants, monarch butterfly, VELB, northwestern pond turtle, giant garter snake, tricolored blackbird, burrowing owl, Swainson's hawk, white-tailed kite, roosting bats, American badger, and migratory nesting birds and raptors. In addition, the Alternative could





result in a substantial adverse effect on riparian habitat, other Sensitive Natural Communities, or federally or State-protected wetlands.

As such, new Mitigation Measures SEIR 4.3-1 through SEIR 4.3-6, and modified versions of Mitigation Measures 4.6-1 through 4.6-5 from the 2009 EIR, which require species-specific preconstruction surveys, additional protective measures for identified species, and compliance with the Yolo HCP/NCCP, would still be required under the Alternative. Similarly, new Mitigation Measures SEIR 4.3-17(a) through (g), which require the project applicant to comply with general AMMs established by the Yolo HCP/NCCP, would still be required under the Alternative. Therefore, overall impacts to biological resources would be similar under the Reduced Density Alternative as compared to the proposed project.

### Noise

Similar to the proposed project, the Reduced Density Alternative would include noise-generating construction activities on the project site. Thus, the Alternative would have the potential to result in a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of applicable standards. The modified version of Mitigation Measure 4.5-3 from the 2009 EIR, which requires noise-reduction measures to be incorporated within the construction documents, would still be required under the Alternative. Due to the reduction in residential units, the duration of increased noise levels due to project construction would be reduced. Therefore, overall impacts related to noise would be fewer under the Reduced Density Alternative as compared to the proposed project. Nonetheless, the significant and unavoidable impact associated with increased noise levels generated during project construction would remain.

### Public Services and Utilities

The Reduced Density Alternative would involve similar uses as the proposed project, and would occur within the same development footprint. Thus, the Alternative would still require a future design-level water report to further refine the proposed water line sizes throughout the project site in order to meet domestic and fire flow demands, and Mitigation Measure 4.5-5 would still be required. Overall, the impacts identified for the proposed project related to public services and utilities would be similar under the Reduced Density Alternative.

### Transportation

The Reduced Density Alternative would involve similar uses as the proposed project and would occur within the same development footprint. Considering the similar land uses to the proposed project and location within the City of Davis, the Alternative would generate new demand for bicycle and pedestrian travel within the project site and between the project site and other local neighborhoods and activity centers. Because the Alternative would result in substantially fewer residential units than the proposed project, new demand for bicycle and pedestrian facilities would be lower relative to the demand anticipated to be generated by the proposed project, and the potential for vehicle and bicycle conflicts would be reduced as compared to the proposed project. Nonetheless, new Mitigation Measure SEIR 4.6-2(a), which requires the applicant to construct a contiguous bikeway facility with dedicated physical space for bicyclists between East Covell Boulevard and the project's non-residential uses, would still be required. Similarly, new Mitigation Measure SEIR 4.6-2(b), which requires the applicant to modify the East Covell Boulevard/Monarch Lane intersection, would be required to ensure that the Alternative does not conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway, bicycle, and pedestrian facilities.



While the Alternative would include the same recreational uses as the proposed project, the Reduced Density Alternative would include development of 98 single-family residential units. As previously discussed, increasing residential density is a CAPCOA VMT-reduction strategy. Thus, the reduction in residential density under the Alternative to four to five du/ac would result in an increase in VMT from what would be generated by the proposed project. Because the Alternative would still result in a per capita residential VMT that would exceed the applicable threshold of 15 percent below the baseline City and/or regional average VMT per capita for residential uses, new Mitigation Measure SEIR 4.6-4 would still be required under the Alternative. Mitigation Measure SEIR 4.6-4 requires the implementation of TDM strategies to reduce the number of vehicle trips that would be generated by the project residential component, which would reduce per capita VMT. However, the TDM strategies would not be sufficient to reduce the project's VMT per capita below the applicable City threshold. Therefore, the significant and unavoidable impact related to transportation would still occur under the Alternative. Additionally, because the Reduced Density Alternative would result in an increase in VMT as compared to the proposed project, impacts related to transportation under the Reduced Density Alternative would be greater than the proposed project.

#### Other Effects: Hazards and Hazardous Materials

Similar to the proposed project, the Reduced Density Alternative would include ground-disturbing activities and new development on the project site and installation of the off-site sewer line extension. The on-site stockpiled railroad ties located within the western portion of the project site are subject to TWW regulations requiring proper management, storage, off-site disposal, and/or permitted on-site reuse. Thus, without proper handling of the on-site TWW, the Alternative would have the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. New Mitigation Measure SEIR 4.7-1, which requires all on-site TWW to be removed and disposed of in compliance with California Health and Safety Code Section 25230, would still be required under the Alternative. Therefore, overall impacts related to hazards and hazardous materials would be similar under the Reduced Density Alternative as compared to the proposed project.

#### Other Effects: Agriculture and Forestry Resources

The Reduced Density Alternative would include development of similar uses as the proposed project and would be submitted pursuant to Builder's Remedy. Therefore, similar to the proposed project, the Reduced Density Alternative would be inconsistent with the site's General Plan land use designation (Agriculture) and the PD 3-89 zoning district. As such, the Alternative would result in conflicts with existing zoning for agricultural use. Modified Mitigation Measures 4.1-3 and 4.1-4(a) from the 2009 EIR, which require agricultural land mitigation and a right-to-farm disclosure consistent with the City's ordinances, would still be required under this Alternative. However, because the Alternative, through invoking Builder's Remedy, would proceed without submitting for legislative entitlements such as a General Plan Amendment or Rezone, bringing the project into consistency with the zoning of the site would be infeasible. Therefore, similar to the proposed project, feasible mitigation does not exist and the impact would remain significant and unavoidable. Overall impacts related to agricultural resources would be similar under the Reduced Density Alternative as compared to the proposed project.

#### Other Effects: Land Use and Planning

The Reduced Density Alternative would include development of similar uses as the proposed project and would be submitted pursuant to Builder's Remedy. Therefore, similar to the proposed



project, the Reduced Density Alternative would be inconsistent with the site’s General Plan land use designation (Agriculture) and the PD 3-89 zoning district. As such, the Alternative would conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Because the Alternative, through invoking Builder’s Remedy, would proceed without submitting for legislative entitlements such as a General Plan Amendment or Rezone, bringing the project into consistency with the zoning of the site is infeasible. Therefore, similar to the proposed project, feasible mitigation does not exist and the impact would remain significant and unavoidable. Overall impacts related to land use and planning would be similar or slightly reduced under the Reduced Density Alternative as compared to the proposed project.

### No Pentathlon Facility Alternative

The No Pentathlon Facility Alternative would eliminate the USA Pentathlon Training Facility, pool complex, and obstacle course, and would instead develop the space with a mix of townhomes and multi-family residential units (see Figure 6-3). Similar to the proposed project, the Alternative would include development of 19 cottage units, up to 45 multi-family apartment units, and 31 medium-sized single-family residences. However, the Alternative would include 50 large-sized single-family residences, a reduction of one unit as compared to the proposed project. The Alternative would also include 39 townhome units, an increase of 10 units as compared to the proposed project. Table 6-1 below includes a summary of the unit count under the Alternative as compared to the proposed project.

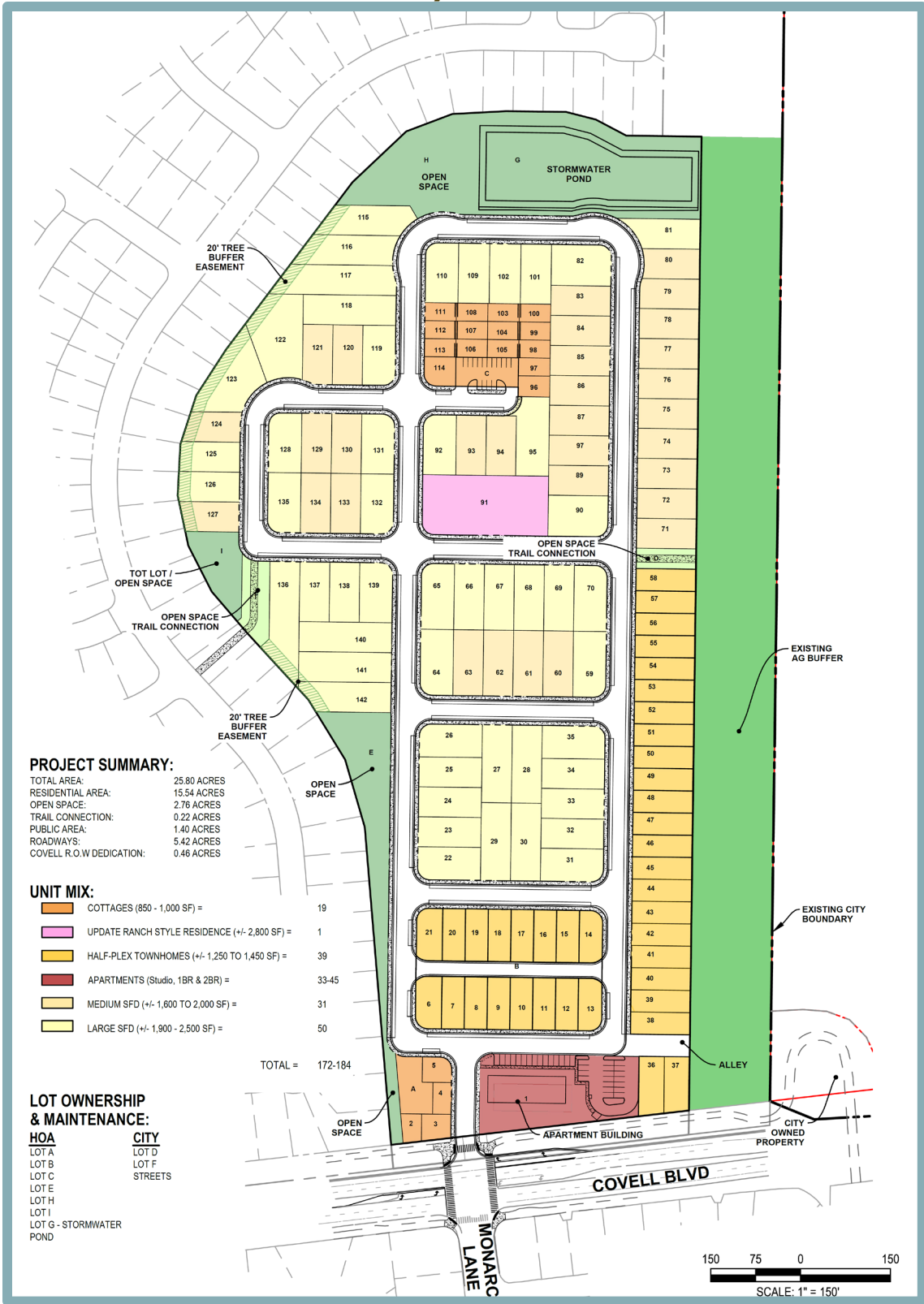
<b>Table 6-1</b>		
<b>No Pentathlon Facility Alternative vs. Proposed Project</b>		
<b>Unit Type</b>	<b>Number of Units</b>	
	<b>No Pentathlon Facility Alternative</b>	<b>Proposed Project</b>
Cottages	19	19
Half-Plex Townhomes	39	29
Multi-Family Apartments	33-45	45*
Single-Family Residences – Medium	31	31
Single-Family Residences – Large	50	51
Existing Ranch Home	1	1
<b>Total</b>	<b>172-184</b>	<b>175*</b>
* The number of multi-family units could be up to 45 units at the City Council’s discretion. For purposes of this SEIR, the project will be analyzed as such.		

Overall, the Alternative would develop a maximum of up to 184 units, while the proposed project would include a maximum of up to 175 units. All other site improvements required under the proposed project would still be developed under the No Pentathlon Facility Alternative, including an internal roadway network and on- and off-site utility improvements. The No Pentathlon Facility would also include the same type and amount of open space.

Similar to the proposed project, the No Pentathlon Facility Alternative would invoke Builder’s Remedy. Therefore, the No Pentathlon Facility Alternative would not include a General Plan Amendment or Rezone. The Alternative would still require the approval of a Vesting Tentative Subdivision Map and Affordable Housing Plan.



**Figure 6-3  
 No Pentathlon Facility Alternative Site Plan**



Although the No Pentathlon Facility Alternative would generally result in similar residential development as the proposed project, because the Alternative would not include the development of the USA Pentathlon Training Facility, pool complex, or obstacle course, Objective #8, to provide a location for the construction of a new pentathlon training facility that includes a pool to also be used by local community swim organizations, would not be met. All other project objectives would be met by the Alternative.

### Aesthetics

Similar to the proposed project, the No Pentathlon Facility Alternative would include development of residential uses and would be submitted pursuant to Builder's Remedy. Therefore, the Alternative would still be inconsistent with the project site's General Plan land use designation as Agricultural and the PD 3-89 zoning district. Under Builder's Remedy, the City cannot deny the project based on inconsistency with the General Plan or zoning code. Therefore, the inconsistency cannot be fully mitigated. The Alternative would still be subject to new Mitigation Measure SEIR 4.1-2, which would require that the project comply with conditions of approval imposed by the City on the project's Tentative Map in order to ensure visual consistency with adjacent uses to the north, south, and west of the project site. Similar to the proposed project, the development of the project site with the proposed uses under the No Pentathlon Facility Alternative would be inconsistent with the designation of the site in the General Plan as Agricultural and its PD 3-89 zoning, resulting in a significant and unavoidable impact. Therefore, overall impacts to aesthetics would be similar under the No Pentathlon Facility Alternative as compared to the proposed project.

### Biological Resources

Similar to the proposed project, the No Pentathlon Facility Alternative would include ground-disturbing activities on the project site and along the off-site sewer line alignment, and would have the same development footprint as the proposed project. Thus, the Alternative would have a similar level of potential to impact special-status plants, monarch butterfly, VELB, northwestern pond turtle, giant garter snake, tricolored blackbird, burrowing owl, Swainson's hawk, white-tailed kite, roosting bats, American badger, and migratory nesting birds and raptors. In addition, the Alternative could result in a substantial adverse effect on riparian habitat, other Sensitive Natural Communities, or federally or State-protected wetlands. As such, new Mitigation Measures SEIR 4.3-1 through SEIR 4.3-6, and modified versions of Mitigation Measures 4.6-1 through 4.6-5 from the 2009 EIR, which require species-specific preconstruction surveys, additional protective measures for identified species, and compliance with the Yolo HCP/NCCP, would still be required under the Alternative. Similarly, new Mitigation Measures SEIR 4.3-17(a) through (g), which require the project applicant to comply with general AMMs established by the Yolo HCP/NCCP, would still be required under the Alternative. Therefore, overall impacts to biological resources would be similar under the No Pentathlon Facility Alternative as compared to the proposed project.

### Noise

Both the No Pentathlon Facility Alternative and the proposed project would result in a similar level of overall construction. Therefore, similar to the proposed project, the Alternative would include noise-generating construction activities on the project site, and the Alternative would have the potential to result in a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of applicable standards. The modified version of Mitigation Measure 4.5-3 from the 2009 EIR, which requires noise-reduction measures to be incorporated within the construction documents, would still be required under the Alternative. Therefore, overall impacts related to





noise would be similar under the No Pentathlon Facility Alternative as compared to the proposed project, and the significant and unavoidable impact associated with increased noise levels generated during project construction would remain. It should be noted that while not identified as a new or substantially increased significant impact, the Alternative would reduce operational noise because the USA Pentathlon Training Facility, pool complex, and obstacle course would be eliminated.

### Public Services and Utilities

The No Pentathlon Facility Alternative would involve similar residential uses as the proposed project, and would occur within the same development footprint. Thus, the Alternative would still require a future design-level water report to further refine the proposed water line sizes throughout the project site in order to meet domestic and fire flow demands, and Mitigation Measure 4.5-5 would still be required. It should be noted that while not identified as a new or substantially increased significant impact, the Alternative would not include recreational uses because the USA Pentathlon Training Facility, pool complex, and obstacle course would be eliminated. However, similar to the proposed project, the Alternative would still be required to comply with the parkland provision in-lieu fees established by Davis Municipal Code Section 36.08.040, and the Alternative would still be subject to Mitigation Measure 4.9-8. Overall, the impacts identified for the proposed project related to public services and utilities would be similar under the No Pentathlon Facility Alternative.

### Transportation

The No Pentathlon Facility Alternative would involve similar uses as the proposed project, and would occur within the same development footprint. Considering the similar land uses to the proposed project and location within the City of Davis, the Alternative would also generate new demand for bicycle and pedestrian travel within the project site and between the project site and other local neighborhoods and activity centers. As such, new Mitigation Measure SEIR 4.6-2(b), which requires the applicant to modify the East Covell Boulevard/Monarch Lane intersection, would be required to ensure that the Alternative would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway, bicycle, and pedestrian facilities. Because the Alternative would not include development of the USA Pentathlon Training Facility, pool complex, or obstacle course, such uses would not generate demand for bicycle and pedestrian travel through the project site. Therefore, the Alternative would not require a contiguous bikeway facility between East Covell Boulevard and the community-serving recreational uses and new Mitigation Measure SEIR 4.6-2(a) would not be required.

Compared to the proposed project, changes to land uses included in the Alternative would result in a reduction of vehicle travel demand to and from the project site. Daily vehicle trip generation for the Alternative would be approximately 37 percent less than the proposed project. Additionally, total annual project-generated VMT for the Alternative would be approximately 15 percent less than the proposed project.

The Alternative would include an overall increase in nine residential units and an expanded residential development footprint as compared to the proposed project. Residential density for the Alternative would be 11.8 dwelling units per acre, greater than the residential density of 11.5 dwelling units per acre for the proposed project. Thus, the Alternative would result in a slight decrease in residential VMT per capita as compared to the proposed project due to increased density. However, as discussed above, the required residential density in order to reduce per capita residential VMT to below the applicable threshold of 15 percent below the baseline City





and/or regional average VMT per capita for residential uses was determined to be 17.1 dwelling units per acre. Because the Alternative would include development of a maximum of 184 residential units with a density of 11.8 dwelling units per acre, new Mitigation Measure SEIR 4.6-4 would still be required under the Alternative. Similar to the proposed project, even with implementation of new Mitigation Measure SEIR 4.6-4, the per capita residential VMT could still exceed the applicable threshold. Therefore, the significant and unavoidable impact related to transportation would still occur under the No Pentathlon Alternative.

It should be noted that the proposed project's non-residential component (i.e., the USA Pentathlon Training Facility, pool complex, and obstacle course) would reduce total VMT within the region by 1,089 VMT. Thus, while the Alternative would result in lower residential per capita VMT, the elimination of the USA Pentathlon Training Facility, pool complex, and obstacle course under the Alternative would contribute to an associated increase in regional VMT.

Because the No Pentathlon Facility Alternative would not require new Mitigation Measure SEIR 4.6-2(a), impacts related to transportation under the Alternative would be fewer as compared to the proposed project. However, the significant and unavoidable impact related to VMT would still occur under the Alternative.

#### Other Effects: Hazards and Hazardous Materials

Similar to the proposed project, the No Pentathlon Facility Alternative would include ground-disturbing activities and new development on the project site and installation of the off-site sewer line extension. The on-site stockpiled railroad ties located within the western portion of the project site are subject to TWW regulations. Thus, new Mitigation Measure SEIR 4.7-1, which requires all on-site TWW to be removed and disposed of in compliance with California Health and Safety Code Section 25230, would still be required under the Alternative. Therefore, overall impacts related to hazards and hazardous materials would be similar under the No Pentathlon Facility Alternative as compared to the proposed project.

#### Other Effects: Agriculture and Forestry Resources

The No Pentathlon Facility Alternative would include development of similar residential uses as the proposed project and would be submitted pursuant to Builder's Remedy. Therefore, similar to the proposed project, the No Pentathlon Facility Alternative would be inconsistent with the site's General Plan land use designation (Agriculture) or the PD 3-89 zoning district. As such, the Alternative would result in conflicts with existing zoning for agricultural use. Modified Mitigation Measures 4.1-3 and 4.1-4(a) from the 2009 EIR, which require agricultural land mitigation and a right-to-farm disclosure consistent with the City's ordinances, would still be required under this Alternative. However, because the Alternative, through invoking Builder's Remedy, would proceed without submitting for legislative entitlements such as a General Plan Amendment or Rezone, bringing the project into consistency with the zoning of the site is infeasible. Therefore, similar to the proposed project, feasible mitigation does not exist and the impact would remain significant and unavoidable. Overall impacts related to agricultural resources would be similar under the No Pentathlon Facility Alternative as compared to the proposed project.

#### Other Effects: Land Use and Planning

The No Pentathlon Facility Alternative would include development of similar uses as the proposed project and would be submitted pursuant to Builder's Remedy. Therefore, similar to the proposed project, the No Pentathlon Facility Alternative would be inconsistent with the site's General Plan land use designation (Agriculture) or the PD 3-89 zoning district. As such, the Alternative would



conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Because the Alternative, through invoking Builder's Remedy, would proceed without submitting for legislative entitlements such as a General Plan Amendment or Rezone, bringing the project into consistency with the zoning of the site is infeasible. Therefore, similar to the proposed project feasible mitigation does not exist and the impact would remain significant and unavoidable. Overall, impacts related to land use and planning would be similar under the No Pentathlon Facility Alternative as compared to the proposed project.

#### **6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. The environmentally superior alternative is generally the alternative that would be expected to generate the least number of significant impacts. However, the lead agency may consider certain issue areas as a higher priority than others. For the purposes of this SEIR, reduction of impacts related to VMT are considered a high priority due to the potential consequences of climate change for the City of Davis. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the City. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." In this case, the No Project (No Build) Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, none of the impacts resulting from the proposed project would occur under the Alternative, as shown in Table 6-2 below. In addition, the No Project (No Build) Alternative would result in fewer impacts than the proposed project related to seven resources areas where new or more severe significant impacts were identified for the proposed project. In addition, the significant and unavoidable impacts identified for the proposed project would not occur under the No Project (No Build) Alternative. However, the No Project (No Build) Alternative would not meet any of the project objectives, and thus, an environmentally superior alternative among the other alternatives must be identified pursuant to CEQA.

Apart from the No Project (No Build) Alternative, the Increased Density Alternative would meet the majority of the project objectives. In addition, as discussed above and shown in Table 6-2, the Increased Density Alternative would result in fewer impacts than the proposed project related to transportation; specifically, the significant and unavoidable project impact associated with transportation would not occur under the Increased Density Alternative. The Alternative would result in similar impacts as the proposed project related to biological resources, noise, hazards and hazardous materials, public services and utilities, and agricultural resources, whereas greater impacts could occur in the areas of aesthetics and land use and planning. Overall, this alternative is the only alternative that eliminates the proposed project's significant and unavoidable VMT impact. Thus, the Increased Density Alternative is considered the environmentally superior alternative.



**Table 6-2  
Comparison of Environmental Impacts for Project Alternatives**

Resource Area	Proposed Project	No Project (No Build) Alternative	Increased Density Alternative	Reduced Density Alternative	No Pentathlon Facility Alternative
Aesthetics	Significant and Unavoidable	None	Greater*	Similar*	Similar*
Biological Resources	Less-Than-Significant with Mitigation	None	Similar	Similar	Similar
Noise	Significant and Unavoidable	None	Similar*	Fewer*	Similar*
Public Services and Utilities	Less-Than-Significant with Mitigation	None	Similar	Similar	Similar
Transportation	Less-Than-Significant with Mitigation and Significant and Unavoidable	None	Fewer	Greater*	Fewer*
Other Effects: Hazards and Hazardous Materials	Less-Than-Significant with Mitigation	Greater	Similar	Similar	Similar
Other Effects: Agriculture and Forestry Resources	Significant and Unavoidable	None	Similar*	Similar*	Similar*
Other Effects: Land Use and Planning	Significant and Unavoidable	None	Greater*	Similar*	Similar*
<b>Total Greater:</b>		<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>Total Fewer:</b>		<b>7</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Total Similar:</b>		<b>0</b>	<b>5</b>	<b>6</b>	<b>7</b>
Note: No Impact = "None;" Greater than the Proposed Project = "Greater," Less than Proposed Project = "Fewer;" and Similar to Proposed Project = "Similar"					
* Significant and Unavoidable impact(s) determined for the proposed project would still be expected to occur under the Alternative.					



---

---

## **7. REFERENCES**

---

---

## 7. REFERENCES

1. Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment, Palomino Place Project, Davis, California*. July 26, 2024.
2. Brown and Caldwell. *Water Supply Assessment for City of Davis: Village Farms Davis, Shriners, Palomino Place, and DiSC 2022*. April 3, 2024.
3. California Air Resources Board. *2022 Scoping Plan Documents*. Available at: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>. Accessed March 2024.
4. California Air Resources Board. *Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation*. August 29, 2023.
5. California Air Resources Board. *Frequently Asked Questions, Regulation for In-Use Off-Road Diesel-Fueled Fleets (Off-Road Regulation)*. August 2014.
6. California Air Resources Board. *Inhalable Particulate Matter and Health (PM2.5 and PM10)*. Available at: <https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health>. Accessed March 2024.
7. California Air Resources Board. *Overview: Diesel Exhaust & Health*. Available at: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. Accessed March 2024.
8. California Air Resources Board. *Reducing Toxic Air Pollutants in California's Communities*. February 6, 2002.
9. California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed March 2024.
10. California Department of Conservation, Division of Mines and Geology. *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos*. August 2000.
11. California Department of Education. *DataQuest*. Available at: <https://dq.cde.ca.gov/dataquest/>. Accessed May 2024.
12. California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details Yolo County Central Landfill (57-AA-0001)*. Available at: <https://www2.calrecycle.ca.gov/SolidWaste/Site/Details/689>. Accessed April 2024.
13. California Department of Transportation. *California State Scenic Highway System Map*. Available at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed March 2024.
14. California Department of Water Resources. *California's Snowpack is Now One of the Largest Ever, Bringing Drought Relief, Flooding Concerns*. Available at: <https://water.ca.gov/News/News-Releases/2023/April-23/Snow-Survey-April-2023>. Accessed March 2024.



15. California Department of Water Resources. *California's Snowpack Shows Huge Gains from Recent Storms*. Available at: <https://water.ca.gov/News/News-Releases/2023/March-23/March-2023-Snow-Survey>. Accessed March 2024.
16. California Department of Water Resources. *DWR Conducts May 1 Snow Survey to Continue to Collect Data on Spring Runoff*. Available at: <https://water.ca.gov/News/News-Releases/2023/May-2023/May-2023-Snow-Survey>. Accessed March 2024.
17. California Department of Water Resources. *Second Snow Survey Reflects Boost from Atmospheric Rivers*. Available at: <https://water.ca.gov/News/News-Releases/2023/Feb-23/Second-Snow-Survey-Reflects-Boost-from-Atmospheric-Rivers>. Accessed March 2024.
18. California Energy Commission. *About the California Energy Commission*. Available at: <http://www.energy.ca.gov/about>. Accessed March 2024.
19. California Energy Commission. *Electricity Consumption by County*. Available at: <http://ecdms.energy.ca.gov/elecbycounty.aspx>. Accessed March 2024.
20. California Energy Commission. *Energy Commission Adopts Updated Building Standards to Improve Efficiency, Reduce Emissions From Homes and Businesses*. Available at: <https://www.energy.ca.gov/news/2021-08/energy-commission-adopts-updated-building-standards-improve-efficiency-reduce-0>. Accessed March 2024.
21. California Public Utilities Commission. *California Public Utilities Commission*. Available at: <https://www.cpuc.ca.gov/about-cpuc>. Accessed March 2024.
22. Central Valley Regional Water Quality Control Board. *Order R5-2018-0086, NPDES No. CA0079049, Waste Discharge Requirements for the City of Davis Wastewater Treatment Plant, Yolo County*. Adopted December 2018.
23. City of Davis. *2020 Urban Water Management Plan*. June 15, 2021.
24. City of Davis. *2021-2029 Housing Element*. Adopted December 5, 2023.
25. City of Davis. *About DFD*. Available at: <https://www.cityofdavis.org/city-hall/fire-department/about-dfd>. Accessed April 2024.
26. City of Davis. Administration. Available at: <https://www.cityofdavis.org/city-hall/police-department/administration>. Accessed April 2024.
27. City of Davis. *Beyond Platinum Bicycle Action Plan*. February 2014.
28. City of Davis. *Budget in Brief: FY 2021-2022 Adopted Budget*. 2021.
29. City of Davis. *City Budget & Financial Reporting*. Available at: <https://www.cityofdavis.org/city-hall/finance/city-budget>. Accessed April 2024.
30. City of Davis. *City of Davis General Plan*. Adopted May 2001, Amended January 2007.
31. City of Davis. *City Water Infrastructure*. Available at: <https://www.cityofdavis.org/city-hall/public-works-utilities-and-operations/water/city-water-infrastructure>. Accessed April 2024.
32. City of Davis. *Climate Action and Adaptation Plan*. April 18, 2023.
33. City of Davis. *Davis Citywide Sign Design Guidelines*. November 18, 2008.
34. City of Davis. *Final Program EIR for the City of Davis General Plan Update and Final Project EIR for Establishment of a New Junior High School*. Certified May 2001.





35. City of Davis. *Parks and Recreation Facilities Master Plan Update*. Adopted 2012.
36. City of Davis. *Stations*. Available at: <https://www.cityofdavis.org/city-hall/fire-department/about-dfd/stations>. Accessed May 2024.
37. City of Davis. *Wastewater*. Available at: <https://www.cityofdavis.org/city-hall/public-works-utilities-and-operations/wastewater>. Accessed April 2024.
38. City of Davis. *Wildhorse Ranch Project Final Environmental Impact Report*. Certified July 2009.
39. Cunningham Engineering. *Palomino Place – Tentative Map Drainage Design Memo*. March 30, 2024.
40. Cunningham Engineering. *Sewer Study*. Revised April 19, 2024.
41. Cunningham Engineering. *Water Study*. Revised April 30, 2024.
42. Davis Joint Unified School District. *Facilities Master Plan*. Available at: <https://www.djUSD.net/cms/one.aspx?portalId=117173&pageId=3165267>. Accessed June 2024.
43. Davis Joint Unified School District. *Measure N – Parcel Tax Renewal 2024*. Available at: [https://www.djUSD.net/about/parcel\\_tax](https://www.djUSD.net/about/parcel_tax). Accessed April 2024.
44. Fehr & Peers. *Palomino Place Transportation Impact Study*. July 2024.
45. Geocon Consultants, Inc. *Geotechnical Update – Palomino Place (AKA Wildhorse Ranch)*. September 9, 2022.
46. Geocon Consultants, Inc. *Phase I Environmental Site Assessment and Limited Pesticide Assessment Report*. August 2022.
47. Governor’s Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018.
48. Gryczko, Stan, Director of Public Works, City of Davis. Personal communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. May 3, 2024.
49. Health Effects Institute. *Understanding the Health Effects of Ambient Ultrafine Particles*. January 2013.
50. Intergovernmental Panel on Climate Change. *Climate Change 2021: The Physical Science Basis Summary for Policymakers*. Available at: [https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_SPM.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf). Accessed March 2024.
51. Madrone Ecological Consulting. *Biological Resources Assessment, Palomino Place, Yolo County, California*. June 13, 2024.
52. Magellan Advisors, LLC. *Final Yolo Broadband Strategic Plan*. March 26, 2015.
53. National Highway Traffic Safety Administration. *In Removing Major Roadblock to State Action on Emissions Standards, U.S. Department of Transportation Advances Biden-Harris Administration’s Climate and Jobs Goals*. Available at: <https://www.nhtsa.gov/press-releases/cafe-preemption-final-rule>. Accessed March 2024.
54. Pacific Gas & Electric Co. *Interactive PSPS Planning Map*. Available at: [https://vizmap.ss.pge.com/?\\_ga=2.94997403.624386528.1664230975-1068345172.1664230975](https://vizmap.ss.pge.com/?_ga=2.94997403.624386528.1664230975-1068345172.1664230975). Accessed March 2024.



55. Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. November 21, 2017.
56. Sacramento Metropolitan Air Quality Management District. *CEQA Guide*. April 2020.
57. Sandholdt, Patrick, Fire Marshal, City of Davis Fire Department. Personal Communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. March 12, 2024.
58. Sandholdt, Patrick, Fire Marshal, Davis Fire Department. Personal communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. April 10, 2024.
59. South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.
60. State of California. *Health and Safety Code, Article 5. Swimming Pool Sanitation and Safety [116025 – 116068]*. Available at: [https://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=HSC&division=104.&title=&part=10.&chapter=5.&article=5](https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=104.&title=&part=10.&chapter=5.&article=5). Accessed April 2024.
61. U.S. Census Bureau. *QuickFacts: Davis city, California*. Available at: <https://www.census.gov/quickfacts/fact/table/daviscitycalifornia/LND110210>. Accessed June 2024.
62. U.S. Department of Energy. *State of California Energy Sector Risk Profile*. March 2021.
63. U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Available at: [https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep\\_fuel/html/fuel\\_use\\_pa.html&sid=US&sid=CA](https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA). Accessed March 2024.
64. U.S. Environmental Protection Agency. *California Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document*. June 3, 2018.
65. U.S. Environmental Protection Agency. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*. 2009.
66. U.S. Environmental Protection Agency. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed March 2024.
67. U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>. Accessed March 2024.
68. Weather Spark. *Climate and Average Weather Year Round in Davis*. Available at: <https://weatherspark.com/y/1120/Average-Weather-in-Davis-California-United-States-Year-Round>. Accessed April 2024.
69. West Yost. *Technical Memorandum: Collection System Impacts of Proposed Village Farms Development*. April 23, 2024.
70. Yolo County Department of Community Services. *Yolo County Regional Greenhouse Gas Emissions Inventory Update for the Cities of Davis, Winters and Woodland – Draft Technical Memorandum*. April 30, 2020.



71. Yolo Habitat Conservancy. *Yolo Habitat Conservation Plan/Natural Community Conservation Plan*. April 2018.
72. Yolo Subbasin Groundwater Agency. *Yolo Subbasin Groundwater Agency 2022 Groundwater Sustainability Plan Yolo County, CA*. Approved January 24, 2022.
73. Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.



---

---

## **8. EIR AUTHORS AND PERSONS CONSULTED**

---

---

## 8. EIR AUTHORS AND PERSONS CONSULTED

### **Raney Planning & Management, Inc.**

C. Timothy Raney, AICP	President
Cindy Gnos, AICP	Senior Vice President
Nick Pappani	Vice President
Rod Stinson	Vice President/Air Quality Specialist
Angela DaRosa	Division Manager/Air Quality Specialist
Jesse Fahrney	Senior Associate/Air Quality Technician
Joe Baucum	Senior Associate
Elijah Bloom	Associate
Taylor Hautt	Associate
Elizabeth Carr	Associate

### **City of Davis**

Sherri Metzker	Community Development Director
Dara Dungworth	Principal Planner
Eric Lee	Senior Planner
Stan Gryczko	Public Works Utilities and Operations Director
Patrick Sandholdt	Fire Marshal

### **Bollard Acoustical Consultants, Inc.**

Paul Bollard	President
--------------	-----------

### **Cunningham Engineering**

Brian Foster	Engineer
--------------	----------

### **Geocon Consultants, Inc.**

Jermy J. Zorne, PE, GE	Senior Engineer
------------------------	-----------------

### **Madrone Ecological Consulting**

Ben Watson	Principal
Daria Snider	Biologist

### **Fehr & Peers**

Greg Behrens, AICP	Senior Associate, Sacramento Operations Manager
--------------------	---

