INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR THE

DAVIS 3808 FARADAY AVENUE PROJECT

DECEMBER 2022

Prepared for:

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

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 949-3231

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A Land Use Planning, Design, and Environmental Firm

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INITIAL STUDY

PROJECT TITLE
Davis 3808 Faraday Avenue Project

LEAD AGENCY NAME AND ADDRESS
City of Davis
23 Russell Blvd., Suite 2
Davis, CA 95616

CONTACT PERSON AND PHONE NUMBER
Eric Lee, Senior Planner
City of Davis
Community Development Department
(530) 757-5610

PROJECT SPONSOR'S NAME AND ADDRESS
Buzz Oates Construction, Inc.
c/o Logan James
555 Capitol Mall, Suite 900
Sacramento, CA 95814
(916) 379-3865

PURPOSE OF THE INITIAL STUDY
An Initial Study (IS) is a preliminary analysis, which is prepared to determine the relative environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine if a project will have a significant adverse effect on the environment, thereby triggering the need to prepare an Environmental Impact Report (EIR). It also functions as an evidentiary document containing information, which supports conclusions that the project will not have a significant environmental impact or that the impacts can be mitigated to a "Less Than Significant" or "No Impact" level. If there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, the lead agency shall prepare a Negative Declaration (ND). If the IS identifies potentially significant effects, but: (1) revisions in the project plans or proposals would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment, then a Mitigated Negative Declaration (MND) shall be prepared.

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the proposed Davis 3808 Faraday Avenue Project (project) may have a significant effect upon the environment. Based upon the findings and mitigation

measures contained within this report, a Mitigated Negative Declaration (MND) will be prepared.

BACKGROUND

The City of Davis General Plan was adopted in May 2001 and has been amended through 2016. An Environmental Impact Report (EIR) prepared for the General Plan Update addressed the potential impacts associated with full build-out of the General Plan. The Davis General Plan EIR was certified by the Davis City Council in May 2000. The General Plan Update Land Use Map designates the project site as Business Park. Business Park has a Maximum Floor Area Ratio of 50 percent. In accordance with Section 15150 of the CEQA Guidelines (Section 21083.3 of the Public Resources Code), this Initial Study tiers from the previously EIR (SCH# 1999072014) prepared for the Davis General Plan Update.

PROJECT LOCATION AND SETTING

PROJECT LOCATION

The project site consists of approximately 7.81 acres, located at the northeastern corner of 2nd Street and Faraday Avenue in East Davis Mace. The project site is bounded by Faraday Avenue to the north and west, vacant land to the east, and 2nd Street and Interstate 80 to the south. The project site can be identified by its Assessor's Parcel Number (APN) 071-411-009. The project's location is shown in Figure 1.

EXISTING SITE USES

The project site is currently vacant, undeveloped land. The project site contains a 17-foot Public Utility and Sign Easement along the northern and eastern boundary of the project site and 10-foot and 15-foot Public Utility Easements along the southern boundary of the project site. Figure 2 displays aerial views of the project site and surrounding area.

SURROUNDING LAND USES

The Davis General Plan designates lands adjacent to the project site as Business Park to the north, east, and west, and Undesignated to the south of the project site along Interstate 80. The existing General Plan Land Use Designation and Zoning Designation for the site, and the surrounding area, are shown on Figure 3 and Figure 4, respectively.

Current uses near the project site include the DMG MORI Manufacturing business across Faraday Avenue to the west, an underutilized warehouse/office building directly to the north, and a Target-anchored shopping center (Second Street Crossing) further east beyond the adjacent vacant land.

GENERAL PLAN DESIGNATIONS

The project site is currently designated Business Park by the City of Davis General Plan Land Use Map. The Business Park designation is intended to provide locations for administrative, professional, government and medical offices and non-polluting science, technology, light manufacturing and ancillary warehouse facilities in pleasant, pedestrian-oriented mixed-use environments featuring freeway and airport access. The maximum Floor Area Ratio is 50 percent.

ZONING DESIGNATIONS

The project site is currently zoned Planned Light Industrial/Business Park (PD 4-88). As stated in Article 40.22 of the City's Municipal Code, the P-D zone allows for any use or combination of uses shown on the approved preliminary development plan which are so arranged and designed to provide a development which is in conformity with the general plan and which is consistent with the requirements of this article.

PROJECT DESCRIPTION

The proposed site plan includes one single-story concrete tilt-up building, totaling approximately 107,612 square feet of manufacturing space on 7.81 acres. The back of the building, along the building's northern side, would contain 2-4 dock doors and 2-5 grade level overhead doors to accommodate the proposed biotech/advanced manufacturing tenant base. The proposed site plan layout is shown in Figures 5a and 5b.

The project anticipates consistency with both the designated General Plan land use and zoning district, as the project is being designed to accommodate a life science, biotech, or advanced manufacturing tenant. Ownership of the project site is currently in negotiation with a local Davis tenant who is expanding facility needs within the City of Davis. The applicant of the proposed project has designed a site plan (Option A) that would accommodate the expansion needs of the project owner (see Figure 5a). If negotiations fall through with the prospective tenant, project ownership still desires to build a substantially similar site plan and facility (Option B) on a speculative basis (see Figure 5b). The project applicant is seeking approval of both site plans within the entitlement effort to provide flexibility for future construction.

Development of the project would require abandonment/vacation of a portion of right-of-way (ROW) of Faraday Avenue, both the currently existing cul-de-sac and the planned future extension to the east. As a part of this abandonment/vacation of the ROW, the project proposes to pull back and reconstruct the existing Faraday Avenue cul-de-sac west of its current location and incorporate a portion of the abandoned ROW into the proposed site plan. This would result in an increase of the project site to approximately 8.83 acres. There are existing public utilities within the ROW, which would remain in place, and would be covered with dedication of a Public Utility

Easement(s). A reciprocal access easement/agreement would be recorded on both the project parcel, and the parcel directly north, and secondary access to that business would be maintained. Upon project development, there will be no access to parcels east of the project parcel via Faraday Avenue.

The City of Davis owns a strip of land to the southeast of the project parcel in fee title, which was originally planned to loop Faraday Avenue back out onto 2nd Street It is planned to extend that parcel owned by the City north, by dedicating additional ROW for future road construction, which would facilitate access to all remaining parcels east of the project parcel. As a condition of the Development Agreement associated with the Second Street Crossing development to the east (which is anchored by Target), the Second Street Crossing proponent is responsible for constructing that portion of roadway, which would provide access to the back of the Target store, as well as each of the remaining vacant parcels east of the project parcel.[1]

The project site is prominently located and is highly visible from Interstate 80. As such, the proposed main building façade to the south would be oriented toward the interstate, and a large portion of the southwest corner of the site would be designated for enhanced landscape design. The back of the building to the north would include a large paved yard area, up to approximately 50,000 square feet, and dock positions and grade-level overhead doors to accommodate larger truck deliveries necessitated by the proposed biotech/advanced manufacturing tenant base. If one of the proposed tenants in current negotiation with ownership occupies the facility, they would require an approximately 7,500 square foot testing pool and an associated bridge crane. The entirety of the back of the facility would be screened from public view from the primary elevation on 2nd Street and Interstate 80 by both the building itself, and the surrounding landscape features. The west portion of the site is planned for employee gathering and amenity spaces and would be well shaded and surrounded by landscape features. Finally, the east portion of the site is planned for auto parking and a drive aisle to access the back of the facility.

There are three proposed access points to the project site, one off 2nd Street and the other two off Faraday Avenue. The southerly access point from Faraday Avenue would be dedicated for passenger vehicles, while the northerly Faraday Avenue driveway and driveway on 2nd Street would accommodate both passenger vehicles and larger trucks. The project site would provide 161 automobile parking spaces, which is above the minimum requirements of 143 parking spaces, and would provide both short-term and long-term bicycle parking consistent with the minimum requirements of 15 bicycle parking stations. Twenty-four of the automobile parking

[1] Buzz Oates. Project Narrative - 3808 Faraday Ave. Proposed Life Science/Bio-Tech/Advanced Manufacturing Facility. October 7, 2022.

spaces are proposed to be Electric Vehicle Charging Stations. Pedestrian and bicycle access to the site would be provided via an existing sidewalk along Faraday Avenue, with walkways proposed to connect the sidewalk to the proposed building. The site layout is designed to be easily and safely navigated by vehicles, bicycles and pedestrians with parking spaces distributed for access to the building and the public ROW. The project also provides a designated drop-off and pick-up parking space at the main building entry to promote ridesharing and the reduction of vehicle miles traveled.

The proposed project would involve the construction of the necessary infrastructure to serve the proposed development and would include plans to connect to existing City infrastructure to provide water, sewer, and storm drainage to the site. The project intends to incorporate Low Impact Development (LID) measures to provide stormwater quality treatment, and to slow increased stormwater runoff quantity resulting from the increase in on-site impervious surfaces. These measures would include bio-retention basins and stormwater planters interspersed within the landscaping throughout the project site and would include a network of private storm drain lines ultimately discharging to existing City storm drain facilities. These LID measures would be designed in accordance with the City of Davis requirements. The project would include the onsite installation of 4-inch and 8-inch water lines; 4-inch and 6-inch sanitary sewer lines; and 8-inch, 10-inch, and 12-inch storm drain lines. Those new onsite utility lines would connect to existing infrastructure in Faraday Avenue and 2nd Street. Storm drainage would be diverted to the proposed onsite bioretention areas before being discharged to the City's storm drainage system. Various storm drainage supporting structures would be located throughout the project site directing storm water flows into the bioretention areas and storm drain inlets.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The City of Davis is the Lead Agency for the proposed project, pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15050.

This document will be used by the City of Davis to take the following actions:

- Adoption of the Mitigated Negative Declaration (MND) and adoption of the Mitigation Monitoring and Reporting Program (MMRP).

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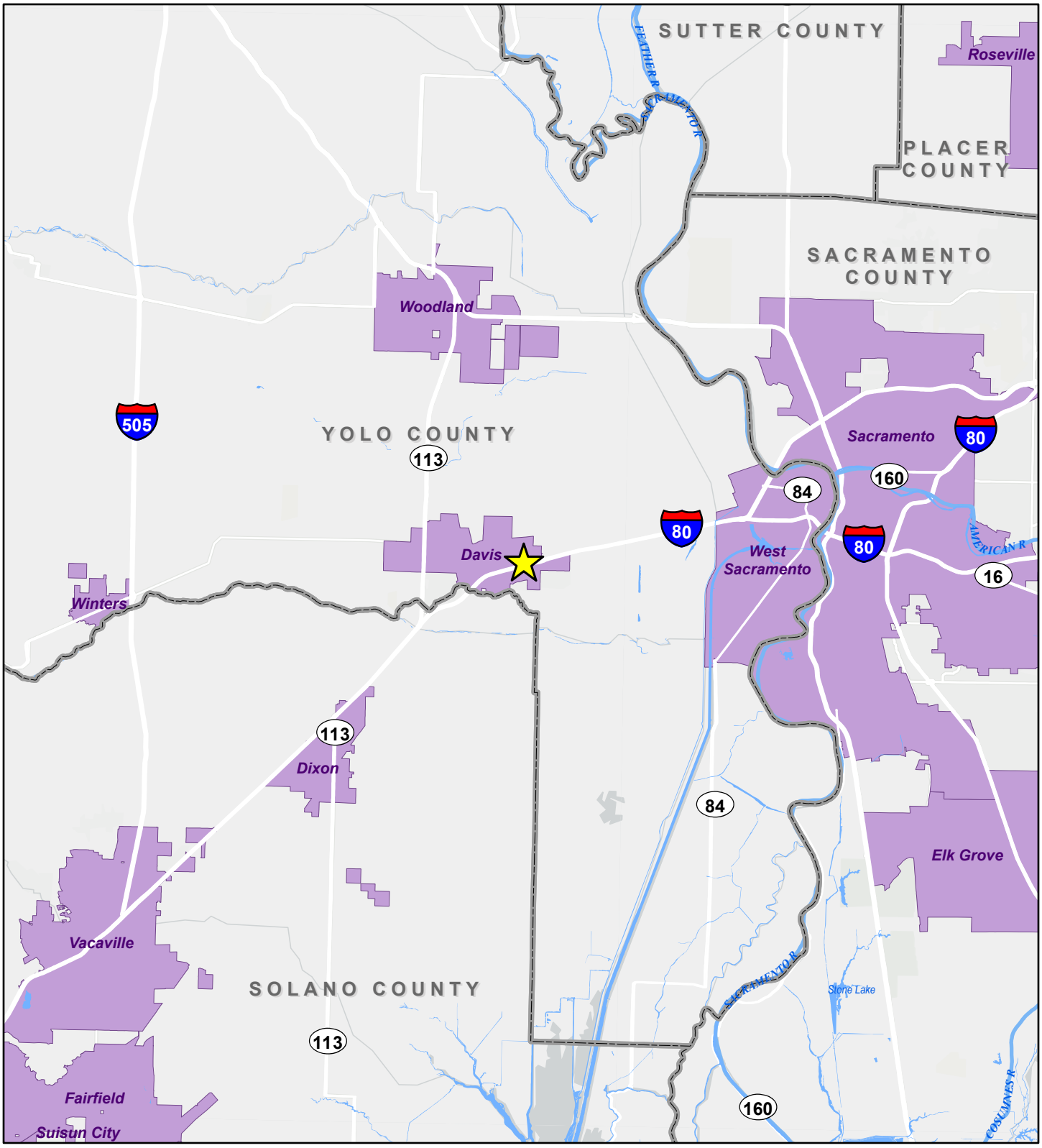

Legend

- Project Location
- County Boundary
- Incorporated Area

3808 FARADAY AVENUE
CITY OF DAVIS, CALIFORNIA

Figure 1. Project Vicinity Location Map

0 2½ 5
Miles

Sources: California State Geoportal. Map date: October 12, 2022.

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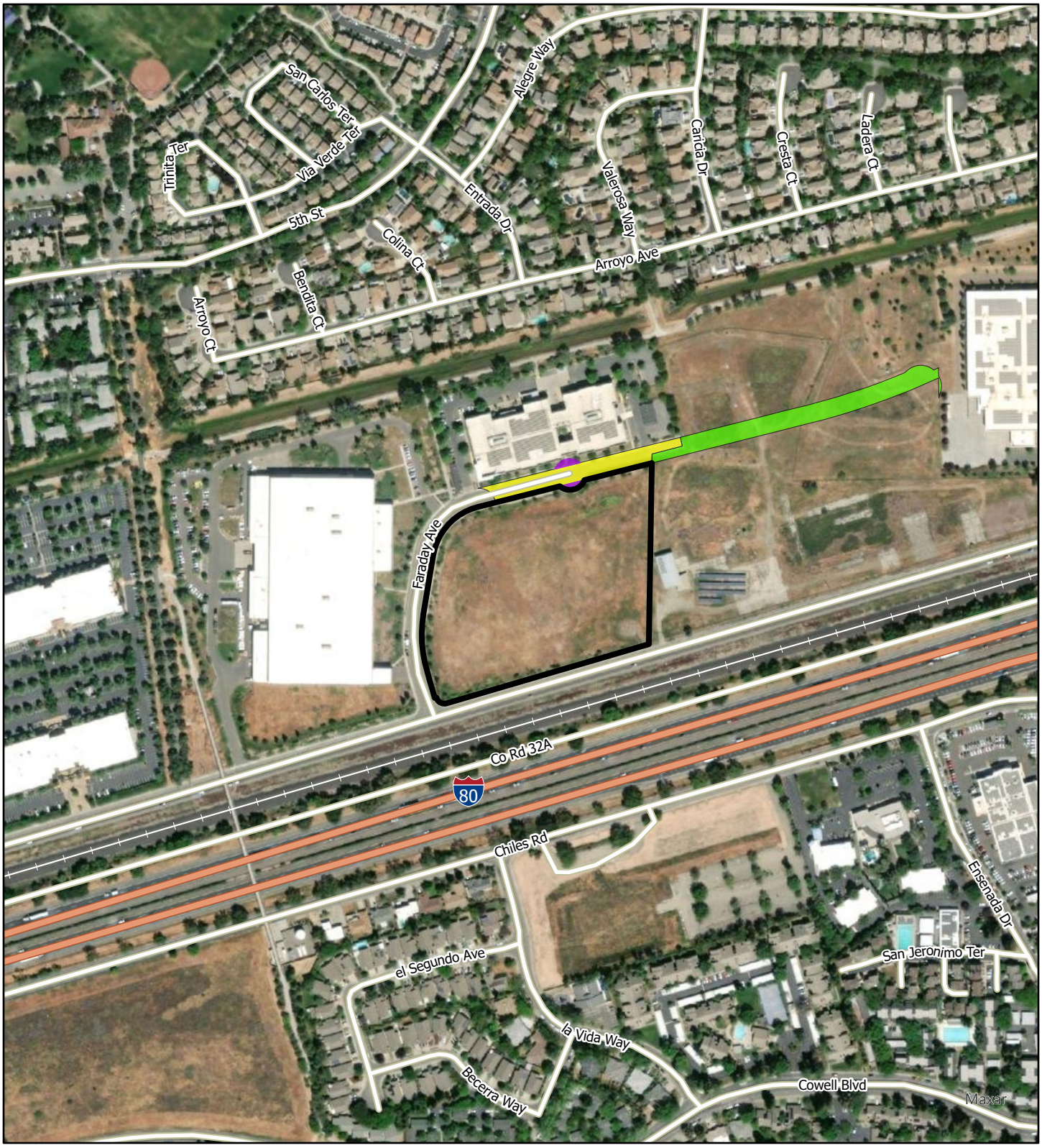

Legend

- Project Boundary
- ROW to be Abandoned
- ROW to be Abandoned with PUE to Remain
- ROW to be Abandoned, New Reciprocal Access

3808 FARADAY AVENUE
CITY OF DAVIS, CALIFORNIA

Figure 2. Aerial View of Project

0 100 200 400
Feet

Sources: Yolo County GIS; ArcGIS Online World Imagery Map Service image date 4/22/2021; Cunningham Engineering. Map date: November 3, 2022.

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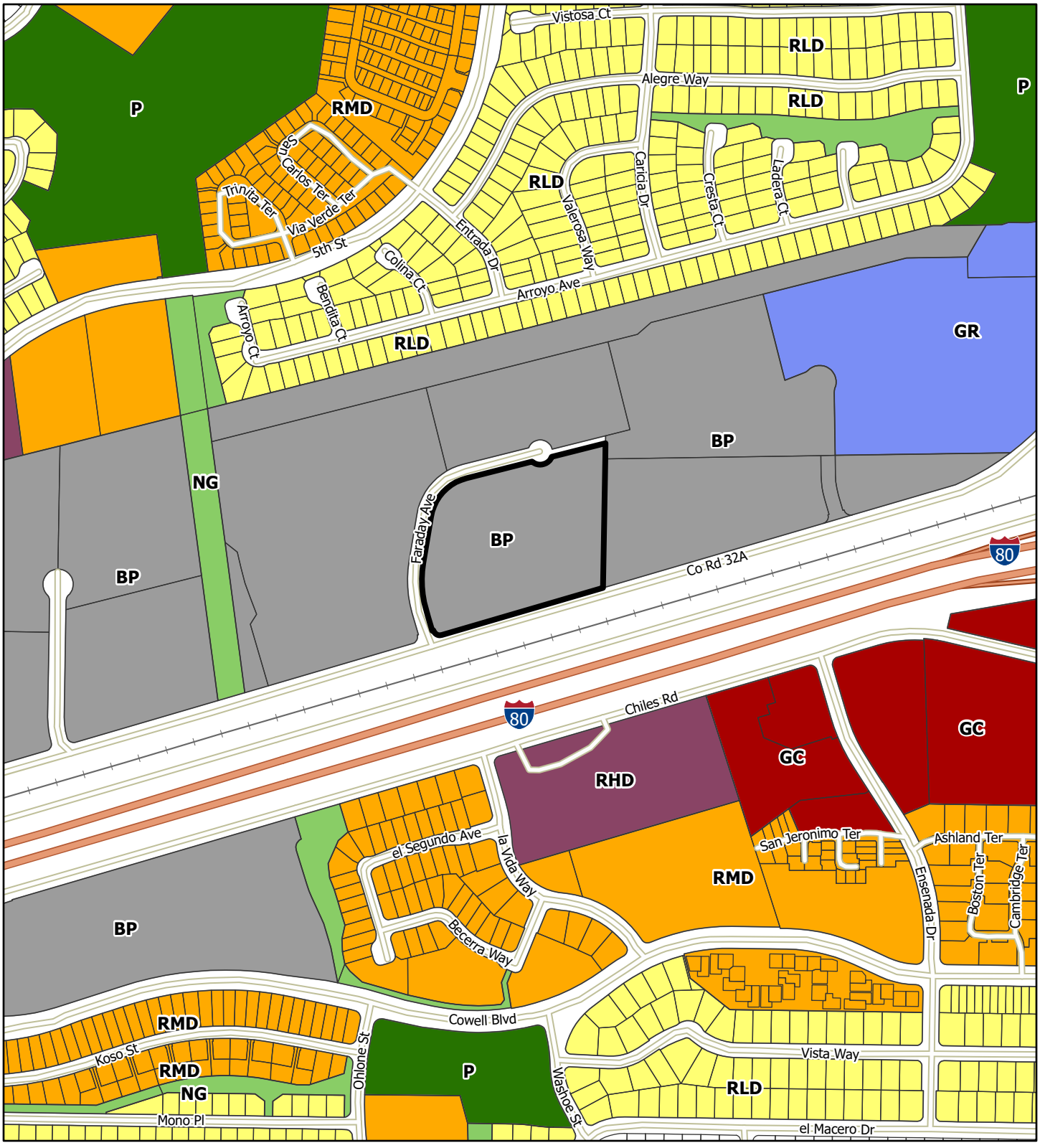

Legend

- Project Boundary
- Parcel Boundary
- BP: Business Park
- GC: General Commercial
- GR: General Retail
- NG: Neighborhood Greenbelt
- P: Park
- RHD: Residential High Density
- RLD: Residential Low Density
- RMD: Residential Medium Density

3808 FARADAY AVENUE
CITY OF DAVIS, CALIFORNIA

Figure 3. Existing General Plan Land Use Map

0 100 200 400
Feet

Sources: Yolo County GIS; City of Davis Zoning Inquiry App, 10-12-2022. Map date: October 28, 2022.

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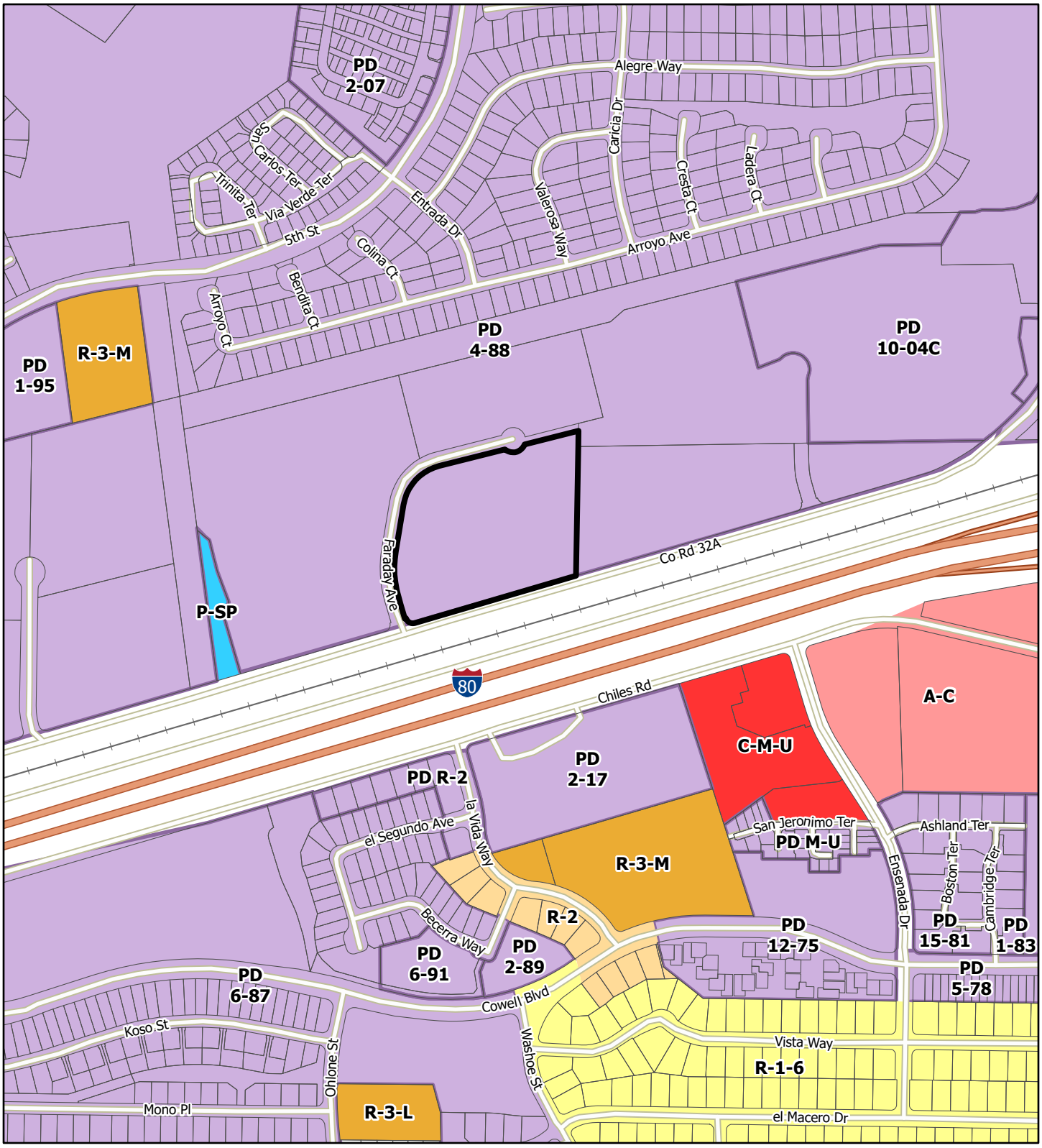


Legend

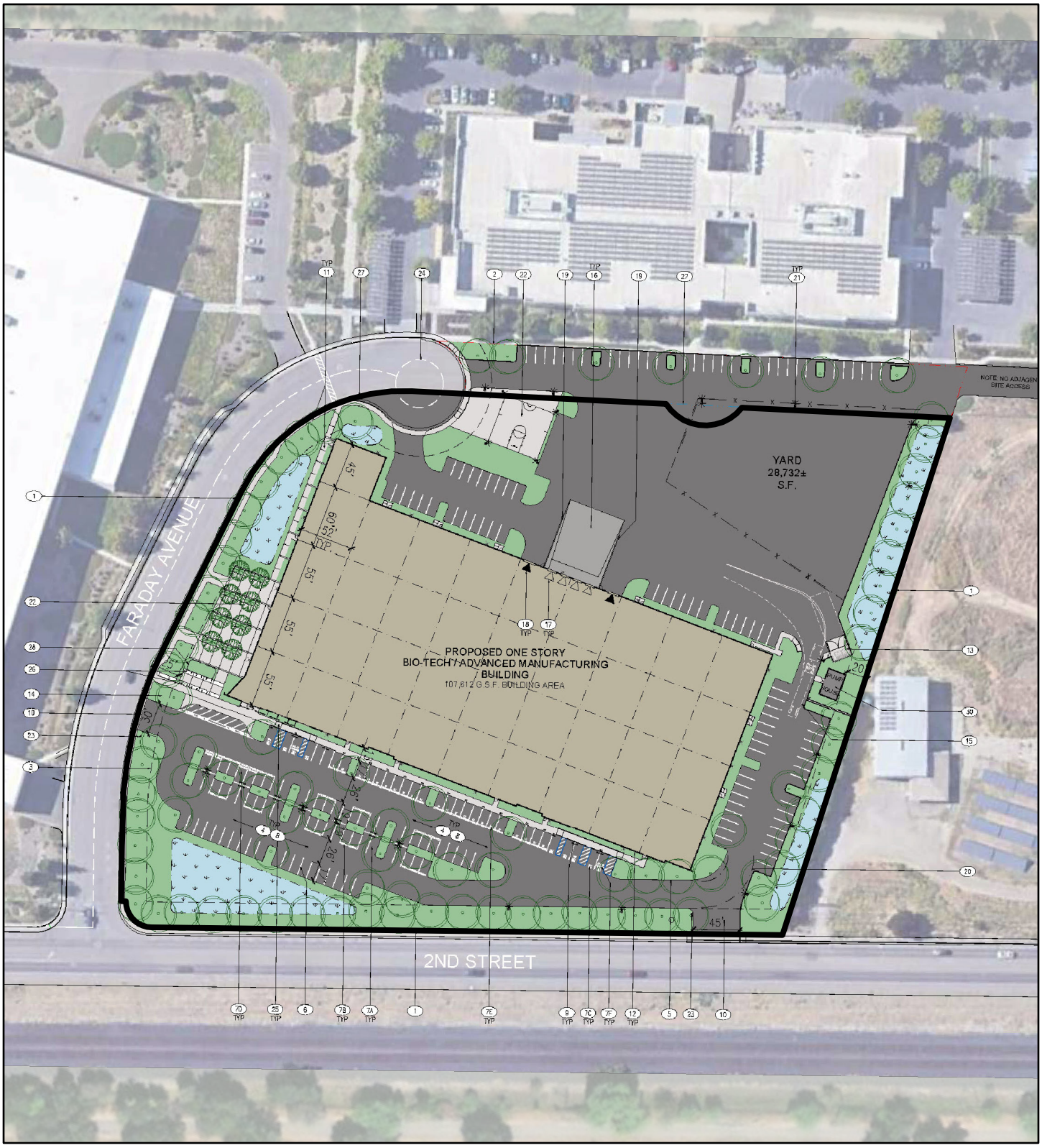
- Project Boundary
- Parcel Boundary
- P-SP: Public-Semipublic
- R-1-6: Residential One Family
- R-2: Residential One/Two Family
- R-3: Garden Apartment
- PD: Planned Development
- A-C: Auto Center
- C-M-U: Commercial Mixed Use

3808 FARADAY AVENUE
CITY OF DAVIS, CALIFORNIA

Figure 4. Existing Zoning Map

0 100 200 400
Feet

Sources: Yolo County GIS; City of Davis Zoning Inquiry App, 10-12-2022. Map date: October 28, 2022.



Legend

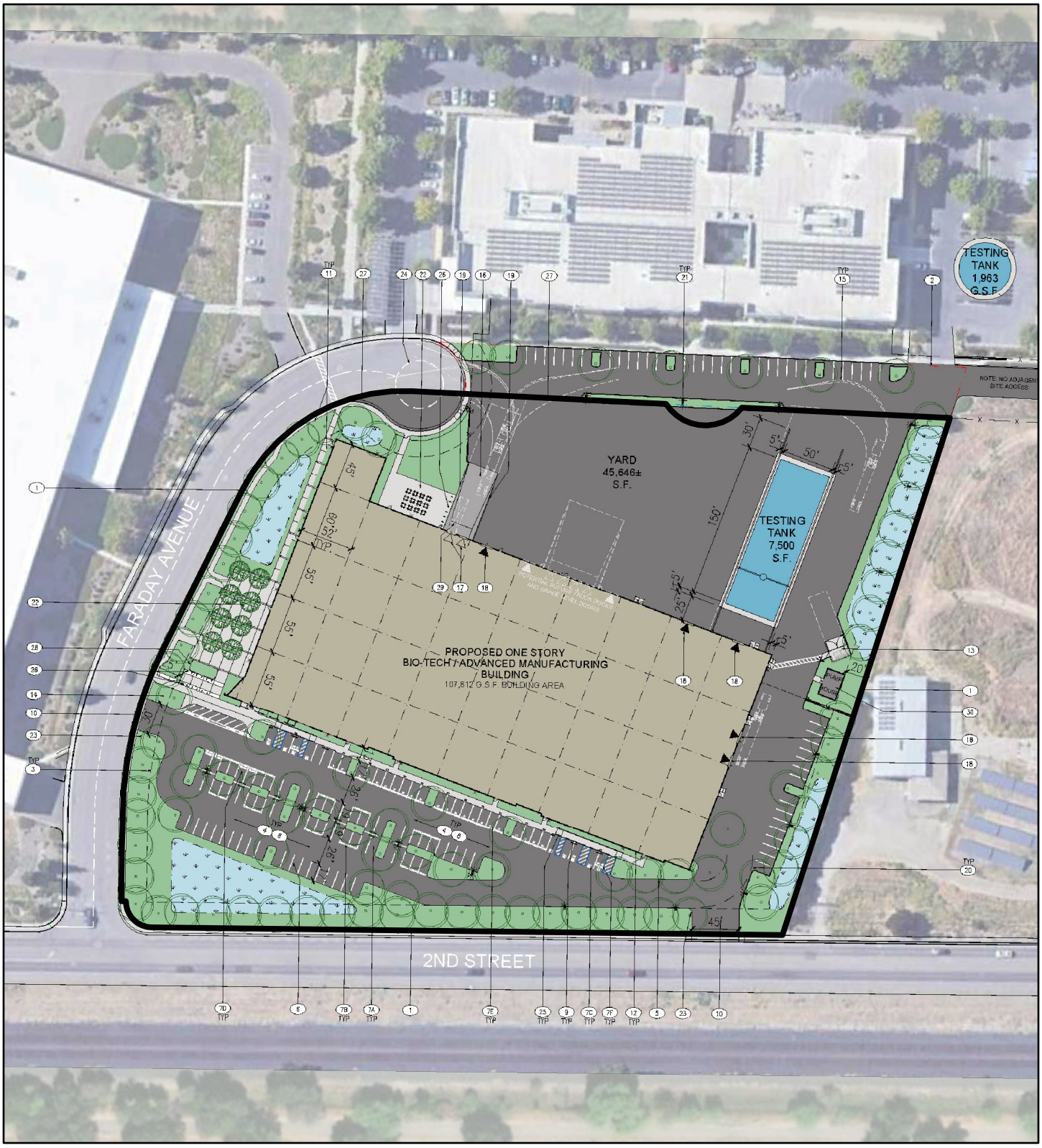
Project Boundary

3808 FARADAY AVENUE
CITY OF DAVIS, CALIFORNIA

Figure 5a. Site Plan Option A

0 50 100
Feet

Sources: RMW Architecture, 7-15-2022.
Map date: October 11, 2022.



Legend

Project Boundary

3808 FARADAY AVENUE
CITY OF DAVIS, CALIFORNIA

Figure 5b. Site Plan Option B

0 50 100
Feet

Sources: RMW Architecture, 7-15-2022.
Map date: October 11, 2022.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

X	Aesthetics		Agriculture and Forest Resources	X	Air Quality
X	Biological Resources	X	Cultural Resources	X	Geology/Soils
	Greenhouse Gasses		Hazards and Hazardous Materials		Hydrology/Water Quality
	Land Use/Planning		Mineral Resources		Noise
	Population/Housing		Public Services		Recreation
X	Transportation/Traffic		Utilities/Service Systems	X	Mandatory Findings of Significance
X	Tribal Cultural Resources				

DETERMINATION:

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Eric Lee, Senior Planner — December 15, 2022

Signature — Date

EVALUATION INSTRUCTIONS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-than-significant impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures

which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9) The explanation of each issue should identify:
    a) The significance criteria or threshold, if any, used to evaluate each question; and
    b) The mitigation measure identified, if any, to reduce the impact to less than significance

EVALUATION OF ENVIRONMENTAL IMPACTS:

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level.
- Less-than-Significant Impact. A less-than-significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.

- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the environmental topic areas.

I. AESTHETICS -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. A scenic vista is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency. Federal and State agencies have not designated any such locations within the City of Davis for viewing and sightseeing. Similarly, the City of Davis, according to the City of Davis General Plan Program EIR, has determined that the Planning Area of the General Plan has no officially designated scenic highways, corridors, vistas, or viewing areas.[2]Additionally, there are no other identified scenic resources nearby that

[2] California Department of Transportation. California State Scenic Highways. 2022. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways

would be affected by development of the proposed project, including trees, rocks, outcroppings, or historic buildings.

The proposed project would not remove trees, rock outcroppings, or historic buildings within a state scenic highway, and the project site is not designated as a scenic vista. Therefore, this is considered a **less-than-significant** impact.

Response c): Less than Significant. While the project site is currently vacant, it is located within an urbanized area. The development of the site would change the existing visual setting from vacant land to a business park setting consisting of a manufacturing facility. The proposed development would be considered compatible with other business park uses designated for the immediate vicinity of the project site. In addition, the proposed project would consistent with the Business Park land use designation identified in the City's General Plan and General Plan Land Use Map. Implementation of the proposed project would alter the visual appearance on the project site through the removal of a limited number of trees and subsequent development of the site. The proposed project is identified for urban land uses in the Davis General Plan. As such, implementation of the proposed project would not create new impacts over and above those identified in the General Plan Final EIR nor significantly change previously identified impacts.

In addition, the architecture and layout of the proposed building was designed to complement and enhance the surrounding urban landscape. The building facades would utilize a variety of architectural features and materials to provide visual interest, avoid monotonous building lines, and include a variety of colors and materials to enhance the visual appearance of the structures, and landscaping along the site boundary would provide a visual break. Article 40.31, Site Plan and Architectural Approval, of the Davis Municipal Code outlines the site plan and architectural approval process for new development within the community. The project is subject to the City's design review process which evaluates the project's site planning and building design to ensure an aesthetically compatible project for the site and surroundings. The final site design and architectural application would be subject to review and approval by the Director of Community Development and Sustainability, Planning Commission, or City Council. While implementation of the proposed project would represent an intensification of urban land uses on the project site, the final site design would be compatible with all applicable City standards and regulations, and would undergo design review by the City in order to ensure that the final design meets all City standards and does not degrade or diminish the visual environment of the site.

The proposed urban components of the project would be consistent with the City of Davis General Plan, and would adhere to the design requirements of the planned development zoning district. As a result, development of the project site would result

in a **less-than-significant** impact with respect to substantially degrading the existing visual character or quality of the site and its surroundings.

Response d): Less than Significant. The project site is void of structures and permanent light sources. As a result, no light or glare is currently emitted from the project site. The change from a vacant property to a manufacturing development would generate new permanent sources of light and glare. The proposed project would include onsite security lighting affixed to the proposed building, as well as freestanding light poles in the parking areas. The project site is adjacent to manufacturing uses to the north and west, vacant land to the east, and 2nd Street and Interstate 80 to the south. The structures located in the immediate vicinity of the site are not considered to be sensitive receptors, which could be adversely affected by additional sources of light and glare. Although the project would not include reflective building materials, the building may have windows such that glare could be cast onto traffic along 2nd Street. Landscaping along the edges of the project site would shield daytime glare and nighttime lighting, but street and safety lighting may be visible from surrounding locations.

The City of Davis maintains specific requirements related to the creation of new sources of light and glare. The project would be required to comply with the uniformly applicable development policies established in the City's Outdoor Lighting Control policies within Article 8.17 of the City of Davis Municipal Code (DMC). Consistency with the City's Municipal Code would be ensured via standard conditions of approval and during building permit plan process. DMC Section 8.17.030 includes general requirements for outdoor lighting. For example, the Municipal Code requires all outdoor lighting to be fully shielded and the direction of lighting be considered to avoid light trespass and glare onto surrounding properties and roadways. The project site is surrounded by other manufacturing properties and there are no sensitive adjacent land uses. Thus, the project would not have the potential to result in any substantial impacts related to degradation of the visual character of the site and would have a **less-than-significant** impact relative to light and glare.

II. AGRICULTURE AND FOREST RESOURCES: WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), or timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production as defined by Government Code section 51104(g)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a): No Impact. The project site is currently designated for urban uses in the Davis General Plan, and there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the project site.[3] The project site is not currently used for agricultural operations, and has not been used for agricultural operations in the past several decades, and there are no agricultural operations or agriculturally zoned lands in the vicinity of the project site. Since the proposed project only includes development of the 7.81-acre project site within an urban area of the city designated for urban uses, the project has no potential to convert any off-site Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Therefore, the proposed project would have **no impact** on agricultural land.

[3] California Department of Conservation. California Important Farmland Finder. 2022. Available at https://maps.conservation.ca.gov/DLRP/CIFF/

Response b): No Impact. The project site is not under Williamson Act contract, nor is the site zoned for agricultural use. The current land use designation for the project site Business Park. Therefore, the project would have no impact with respect to conflicting with agricultural zoning or Williamson Act contracts**.** There would be **no impact.**

Responses c) and d): No Impact. The project site is not considered forest land (as defined in Public Resources Code section 12220[g]) or timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project would have no impact with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning. Therefore, there would be **no impact**.

Response e): Less than Significant. The proposed project would not be anticipated to promote off-site development of existing agricultural land because the proposed infrastructure is sized to serve only the project area. As stated previously, the project site is also surrounded by urban development on all sides, with the exception of the vacant parcel to the east which is designated for Business Park uses. Overall, the proposed project and urban land uses identified for the surrounding area are consistent with the General Plan land use diagram. The project site is consistent with the type and intensity of land uses anticipated by the General Plan. Finally, the project site is not considered to be forest land. Therefore, the proposed project would result in a **less-than-significant** impact to the existing environment that could individually or cumulatively result in loss of farmland to non-agricultural uses or conversion of forest land to non-forest uses.

III. AIR QUALITY -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

EXISTING SETTING

The project site is located within the boundaries of the Yolo Solano Air Quality Management District (YSAQMD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the Sacramento Valley Air Basin (SVAB) and has jurisdiction over most air quality matters within its borders.

RESPONSES TO CHECKLIST QUESTIONS

Response a) and b): Less than Significant with Mitigation. Yolo County is in attainment for all State and federal ambient air quality standards (AAQS), with the exception of ozone, PM_{10}, and $PM_{2.5}$. At the federal level, the area is designated as severe nonattainment for the 8-hour ozone standard, nonattainment for the 24-hour $PM_{2.5}$ standard, and attainment or unclassified for all other criteria pollutants. At the State level, the area is designated as a serious nonattainment area for the 1-hour ozone standard, nonattainment for the 8-hour ozone standard, nonattainment for the PM_{10} and $PM_{2.5}$ 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 U.S. Environmental Protect Agency (USEPA) officially determined that the Sacramento Federal Nonattainment Area (SFNA), which includes all of 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 national ambient air quality standard (NAAQS). The determination became effective November 19, 2012.[4]

Due to the nonattainment designations of the area, YSAQMD has developed plans to attain the State and federal standards for ozone and particulate matter. The plans include the 2013 Ozone Attainment Plan, the $PM_{2.5}$ Implementation/Maintenance Plan, and the 2012 Triennial Assessment and Plan Update. 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 applicable air quality plans. Thus, by exceeding the YSAQMD's mass emission thresholds for operational or construction emissions of ROG, NOX, or PM_{10}, a project would be considered to conflict with or obstruct implementation of the YSAQMD's air quality planning efforts. The YSAQMD mass emission thresholds for operational and construction emissions are shown in Table 1 below.

Table 1: YSAQMD Thresholds of Significance

Pollutant	Construction Threshold	Operational Threshold
ROG	10 tons/yr	10 tons/year
NOx	10 tons/yr	10 tons/year
PM_{10}	80 lbs/day	80 lbs/day

Source: YSAQMD, Handbook for Assessing and Mitigating Air Quality Impacts. July 11, 2007.

The YSAQMD has also established operational screening criteria to assess whether a proposed project is of a scale sufficient to exceed the above operational thresholds of significance. Projects that fall considerably under the screening criteria sizes may be safely assumed to not exceed the operational thresholds and not require further analysis. The screening size provided for the closest comparable land use is 65,000 square feet for a general office building. Considering the project proposes a new 107,612 square-foot manufacturing space which is substantially above the building square footage of the comparable land uses, it can be assumed that the proposed project would exceed the YSAQMD's operational thresholds of significance and is therefore subject to further analysis as detailed below.

To assess the proposed project's potential impacts related to construction and operational emissions of the pollutants presented in Table 1 above, the proposed project's operational emissions were estimated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental

[4] U.S. Environmental Protection Agency. Air Actions in the Sacramento Metro Area. October 3, 2012. Available at: http://www.epa.gov/region9/air/actions/sacto/index.html. Accessed October 11, 2022.

professionals to quantify air quality emissions, including GHG emissions, from land use projects.

CalEEMod software contains a number of built-in land use types that can be used. For this analysis, the Manufacturing land use applies and was utilized. The manufacturing land use type are those where the primary activity is the conversion of raw materials or parts into finished products. It generally also has office, warehouse, and R&D functions at the site. For modeling purposes, the project's parking area was added as a separate use. Where project-specific information was available, such information was applied in the model, but otherwise the analysis relied on defaults. Conservative assumptions were used. For example, the modeling is unmitigated. Thus, the emissions presented in this Initial Study would be considered conservative. The proposed project's estimated emissions associated with construction and operations are presented and discussed in further detail below. A discussion of the proposed project's contribution to cumulative air quality conditions is also provided below. The CalEEMod results are included in Appendix D of this Initial Study.

Construction Emissions

The proposed project's estimated construction-related emissions are presented in Table 2. As shown in the table, the proposed project's construction emissions of ROG, NOX, and PM_{10} would be below the applicable YSAQMD thresholds of significance.

Table 2: Maximum Project Construction-Related Emissions

Pollutant	Project Emissions	YSAQMD Threshold of Significance	Exceed Threshold?
ROG	0.46 tons/yr	10 tons/yr	No
NOx	1.38 tons/yr	10 tons/yr	No
PM_{10}	1.74 lbs/day	80 lbs/day	No

Sources: De Novo Planning Group, 2022; YSAQMD, Handbook for Assessing and Mitigating Air Quality Impacts, July 11, 2007.

Proposed Project Construction Emissions

Because the proposed project is located within the nonattainment area for State ozone and PM standards, the project would be subject to any requirements set forth in the 2019 Triennial Assessment and Plan Update[5] or YSAQMD's efforts related to reducing PM emissions, as enforced by YSAQMD through rules and regulations.

Additionally, the YSAQMD's Handbook for Assessing and Mitigating Air Quality Impacts provides a non-comprehensive list of feasible construction-related dust

[5] Yolo-Solano Air Quality Management District, 2007. Handbook for Assessing and Mitigating Air Quality Impacts. Adopted July 11, 2007. Page 27, Table 5.

mitigation measures along with their effectiveness at reducing PM_{10} emissions, as shown in Table 3.

Table 3: YSAQMD-Recommended Construction Dust Mitigation Measures

Mitigation Measure	Source Category	Effectiveness	References
Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.	Fugitive emissions from active, unpaved construction areas	50%	U.S. EPA, "AP-42, Vol. I", Pg. 11.2.4-1.
Haul trucks shall maintain at least 2 feet of freeboard.	Spills from haul trucks	90%	Monterey Bay Unified APCD
Cover all trucks hauling dirt, sand, or loose materials.	Spills from haul trucks	90%	Monterey Bay Unified APCD
Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area.	Wind erosion from inactive areas	Up to 80%	U.S. EPA, "AP-42, Vol. I." Pg. 11.2.4-1.
Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).	Wind erosion from inactive areas	Up to 80%	South Coast AQMD, "SIP for PM_{10} in the Coachella Valley" 1990. Pg. 5-15
Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.	Wind erosion from inactive areas	4% (15% for mature trees)	South Coast AQMD, "SIP for PM10 in the Coachella Valley" 1990. Pg. 5-15
Plant vegetative ground cover in disturbed areas as soon as possible.	Wind erosion from inactive areas	5%-99% (based on planting plan)	South Coast AQMD, "SIP for PM10 in the Coachella Valley" 1990. Pg. 5-15
Cover inactive storage piles.	Wind erosion from storage piles	Up to 90%	U.S. EPA "AP-42, Vol. I." Pg. 11.2.3-4)
Sweep streets if visible soil material is carried out from the construction site.	On-road entrained PM_{10}	14%	U.S. EPA Report Number EPA-600/R-95-171
Treat accesses to a distance of 100 feet from the paved road with a 6 to 12 inch layer of wood chips or mulch.	Mud/dirt carryout on-road entrained PM10	27%-33%	U.S. EPA Report Number EPA-600/R95-171
Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel.	Mud/dirt carryout on-road entrained PM_{10}	42%-52% (assumed 42%)	U.S. EPA Report Number EPA-600/R-95-171

Source: Yolo-Solano Air Quality Management District, 2007. Handbook for Assessing and Mitigating Air Quality Impacts. Adopted July 11, 2007. Page 27, Table 5.

However, since the proposed project construction-related emissions would be below the applicable YSAQMD thresholds of significance, as shown in Table 2, the proposed project is not required to implement mitigation for proposed project construction activities. Implementation of these measures during construction would be considered a Best Management Practice, and contractors would be encouraged to implement them during construction. Further, the project contractor would be required to comply with all established City of Davis construction Best Management Practices.

Therefore, the proposed project's construction-related emissions would not result in a significant contribution to the region's nonattainment status of ozone or PM and would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.

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 rules and regulations are not readily applicable in CalEEMod and are, therefore, not included in the project-specific modeling. Because compliance with the rules and regulations would likely result in some additional reduction in emissions, construction emissions from the project would likely be slightly reduced from what is presented in Table 2 due to compliance with the rules and regulations. In addition, the City requires, as a standard condition of approval, that project construction comply with standard measures to minimize dust and ozone precursors during construction activities. Compliance with the aforementioned rules and regulations related to construction would help to minimize criteria pollutant emissions generated during construction activities.

Operational Emissions

The proposed project's CalEEMod estimated operational-related emissions are presented in Table 5. As shown in the table, the increase in operational emissions of ROG, NOX, and PM_{10} would be below the applicable YSAQMD thresholds of significance. Therefore, the proposed project's operational-related emissions would not result in a significant contribution to the region's nonattainment status of ozone or PM and would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.

Table 4: Maximum Unmitigated Project Operation-Related Emissions

Pollutant	Project Emissions	YSAQMD Threshold of Significance	Exceed Threshold?
ROG	0.74 tons/yr	10 tons/year	No
NOx	0.51 tons/yr	10 tons/year	No
PM_{10}	2.98 lbs/day	80 lbs/day	No

Sources: De Novo Planning Group, 2022; YSAQMD, Handbook for Assessing and Mitigating Air Quality Impacts, July 11, 2007.

Air Quality Attainment Plans

Each of the attainment plans currently in effect for the SVAB are discussed in further detail below. The plans include the *2017 Sacramento Regional 2008 8-hour Ozone Attainment and Further Reasonable Progress Plan,* the *$PM_{2.5}$ Implementation/Maintenance Plan*, and the *2012 Triennial Assessment and Plan Update*. 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 applicable air quality plans.

2017 Sacramento Regional 2008 8-hour Ozone Attainment and Further Reasonable Progress Plan

The most recent attainment plan for the ozone NAAQS is the 2017 Sacramento Regional 2008 8-hour Ozone Attainment and Further Reasonable Progress Plan (2017 Ozone Attainment Plan), which demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the federal NAAQS. Because the proposed project is located within the nonattainment area for ozone, the project would be subject to the requirements set forth in the 2017 Ozone Attainment Plan, as enforced by YSAQMD through rules and regulations.

$PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area

The Sacramento Federal $PM_{2.5}$ Nonattainment Area attained the federal $PM_{2.5}$ health standards on December 31, 2011. The $PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area ($PM_{2.5}$ Implementation/Maintenance Plan) was prepared to show that the region has met the requirements and requests that the USEPA re-designate the area to attainment. The USEPA issued a final rule for Determination of Attainment for the Sacramento Nonattainment Area effective August 14, 2013. The $PM_{2.5}$ Implementation/Maintenance Plan would be adopted by the air districts within the nonattainment area, as well as the California Air Resources Board (CARB), as a revision to the State Implementation Plan (SIP). Contents of the $PM_{2.5}$

Implementation/Maintenance Plan include demonstration that the NAAQS was met and that all requirements have been met for a re-designation to attainment, specification of actions to be taken if the standards are violated in the future, and establishment of regional motor vehicle emission budgets. Because the proposed project is located within the nonattainment area for $PM_{2.5}$, the project would be subject to the requirements set forth in the $PM_{2.5}$ Implementation/Maintenance Plan, as enforced by YSAQMD through rules and regulations.

2012 Triennial Assessment and Plan Update

In addition to the federal attainment plans discussed above for meeting NAAQS, the California Clean Air Act (CCAA) requires air districts to endeavor to achieve and maintain the California ambient air quality standards (CAAQS) and develop plans for attainment. YSAQMD meets the CAAQS for sulfur dioxide, nitrogen dioxide, and carbon monoxide, but is designated nonattainment for the State ozone and particulate matter standards. The CCAA requires districts that do not meet the State ozone standard to adopt an Air Quality Attainment Plan and to submit progress reports to the CARB every three years. The YSAQMD adopted the 2012 Triennial Assessment and Plan Update on April 10, 2013, which assesses air quality data from 2009 through 2011 and includes a list of control measures the YSAQMD may take to ensure that the State standard for ozone is reached. The YSAQMD is not required to prepare an attainment plan for PM_{10} or $PM_{2.5}$; however, the YSAQMD continues to work to reduce particulate emissions through rules affecting stationary sources, the construction industry, and the YSAQMD's agricultural burning program. The YSAQMD also works with the CARB to identify measures that can, where possible, reduce both ozone and particulate emissions. The YSAQMD has been proactive in attempts to implement the most readily available, feasible, and cost-effective measures that can be employed to reduce emissions of PM.[6]

Compliance with Existing Law

The proposed project is also required to comply with all applicable YSAQMD rules and regulations, such as Rule 2.1 (Control of Emissions), Rule 2.5 (Nuisance), Rule 2.11 (Particulate Matter Concentration), Rule 2.14 (Architectural Coatings), Rule 2.37 (Natural Gas-Fired Water Heaters and Small Boilers), Rule 2.40 (Wood Burning Appliances), Rule 3.4 (New Source Review), and Rule 3.7 (Emission Statements), and any other YSAQMD rule or regulation related to operations determined to be applicable to the project by YSAQMD staff. Compliance with the aforementioned

[6] Yolo-Solano Air Quality Management District. Triennial Assessment and Plan Update. April 2013. Available at: http://www.ysaqmd.org/documents/plans/Triennial%20Plan%202012%20DRAFT.pdf. Accessed October 11, 2022.

YSAMQD rules and regulations would help to minimize emissions generated during project operations.

Conclusion

The unmitigated proposed project would not exceed YSAQMD's mass emission threshold for construction or operational emissions for criteria pollutants. The proposed project would not conflict with and/or obstruct implementation of the YSAQMD's air quality planning efforts, violate any applicable standard, or contribute substantially to an existing or projected air quality violation. As such, the project would not be considered to conflict with or obstruct implementation of regional air quality plans. Because the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, violate any air quality standards or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria air pollutant, project impacts are considered ***less than significant***.

Response c): Less than Significant. Sensitive receptors are those individuals within the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptors include children, the elderly, and those with pre-existing serious health problems affected by air quality, and sensitive receptor locations include schools, parks and playgrounds, day care center, nursing homes, hospitals, and residences. The closest sensitive receptors are the residences located approximately 500 feet north of the project site.

Construction-Related Impacts on Sensitive Receptors

The construction phase of the project would be temporary and short-term, and the implementation of all State, Federal, and YSAQMD requirements would greatly reduce pollution concentrations generated during construction activities. As shown in Table 5 above, the proposed project's construction-related criteria pollutant emissions would not exceed the applicable thresholds. Therefore, dust from construction of the proposed project would be reduced and would be consistent with YSAQMD guidance on this topic. Impacts to sensitive receptors during construction would be negligible and this is a ***less than significant*** impact.

Toxic Air Contaminant Impacts on Sensitive Receptors

Toxic Air Contaminants (TACs) are also a category of environmental concern. TACs are defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for

those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommendations for siting new sensitive land uses near sources typically associated with significant levels of TAC emissions, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. It should be noted that the project site is adjacent to railroad tracks across 2nd Street; however, due to the lack of idling trains, the CARB does not consider tracks to be a significant source of TAC emissions, and the project site is not located in the vicinity of a rail yard. The CARB has identified diesel particulate matter (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. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

Any potential sensitive individuals at the proposed project site would not be expected to be on-site for any such long-term periods of time. I-80, a high traffic freeway, is located nearby, south of the proposed project site. According to the Yolo-Solano Air Quality Management District's Handbook for Assessing and Mitigating Air Quality Impacts (2007), the recommended minimum separation for sensitive receptors from freeways and high-traffic roads should be at least 500 feet.[7] However, the project site does not include sensitive receptors as identified above. Therefore, additional analysis of TACs from nearby freeways and high-traffic roads is unnecessary. The nearest existing sensitive receptors to the project site would be the residences 500 feet north of the project site. Therefore, impacts to sensitive receptors from substantial pollutant concentrations would be a ***less-than-significant*** impact.

CO Hotspots

Emissions of carbon monoxide (CO) are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of

[7] Yolo-Solano Air Quality Management District. Handbook for Assessing and Mitigating Air Quality Impacts. Adopted July 11, 2007.

20 ppm or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

Although the YSAQMD has not established a specific numerical screening threshold for CO impacts, a nearby air district, the Bay Area Air Quality Management District (BAAQMD), has established that, under existing and future vehicle emissions rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix (i.e., bridges and tunnels)—in order to generate a substantial CO impact. Overall, the vehicle emissions that would be generated by the proposed project, on a daily basis, as well as during the maximum daily peak hour, would be extremely minor, in comparison to the numerical screening threshold for CO impacts. Thus, the proposed project would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the project site, and impacts would be ***less than significant***.

Conclusion

There are several existing similar land uses located within the project vicinity. However, implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Air emissions would be generated during the construction phase of the project, but would be short term in duration. The construction phase of the project would be temporary and short-term, and the construction-related emissions is not anticipated exceed the YSAQMD thresholds.

Implementation of the proposed project is not anticipated to result in a significant increased exposure of sensitive receptors to localized concentrations of toxic air contaminants (TACs), or create a CO hotspot. This project would have a **less-than-significant** impact relative to sensitive receptors.

Response d): Less than Significant. According to the CARB's Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The proposed project would not contain any of these land uses. The proposed project site is located within a developed area and is surrounded by office and manufacturing land uses that are not expected to be substantial objectionable odors or induce significant

odor impacts as those mentioned above. The proposed project does not include new industrial uses that are not already present in the vicinity of the project site, such as manufacturing. Accordingly, the proposed project is not located in the vicinity of any substantial objectionable odor sources such as those mentioned above. If a project would locate receptors and known odor sources in proximity to each other, further analysis may be warranted; however, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted. The project does not propose sensitive receptors that could be exposed to odors in the vicinity. Should any of the future tenants of the project site generate odors during operation, the odors would be contained within the building envelope and proper ventilation would be provided. Any odors generated by construction activities would be minor and would be short and temporary in duration.

The proposed project is not anticipated to produce any objectionable odors (or other emissions) at buildout that would affect a substantial number of people. The project does it propose uses that would create odors that could expose receptors in the area. Therefore, operation of the proposed project would not result in significant objectionable odors. Impacts associated with exposure to odors would be ***less than significant.***

IV. BIOLOGICAL RESOURCES -- WOULD THE PROJECT:

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

A biological resources assessment was completed for the proposed project, and is included as Appendix A.[8] Information in the biological resources analysis relies on that report.

[8] Madrone Ecological Consulting, 2022. Biological Resources Assessment 3808 Faraday Avenue, Yolo County, California. October.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. The property consists primarily of ruderal grasslands. The project site was previously used for agricultural production, but has been vacant for the past several decades. Due to cultivation practices, the site contains no high-quality habitat for covered and no take plant species. In addition, none of the covered or no-take plant species are expected to occur on the site due to the site's history of heavy disturbance.

An Arborist Report and Tree Inventory Summary was completed for the project site by California Tree and Landscape Consulting, Inc. in October 2022. A total of 37 trees were evaluated on the parcel; one additional, off-site tree was surveyed because of its proximity to proposed construction. All trees surveyed are considered Street Trees according to City of Davis Municipal Code Chapter 37. 14 trees are considered 'Trees of Significance' by the City of Davis Tree Preservation Code Section 37.01.020. A total of 8 'Trees of Significance' are proposed to be removed for development. A total of 23 trees are proposed for removal and 14 of the surveyed trees will remain onsite.

The tree inventory consists of 10 Flowering Cherries in poor to moderate condition, 3 Chinese elms in poor condition, 1 Coast Redwood in moderate condition, and 23 Callery Pear trees in poor to moderate condition. None of the trees identified on this site are desirable candidates for retention.[9]

Special Status Plant Species

The species database searches resulted in 23 special-status plant species that could occur within the project site. No wetlands or mesic habitats occur within the project site, and soils within the project site are not alkaline, saline, or clay; therefore, the project site is not suitable for plants that rely on these habitats. Furthermore, none of the covered or no-take species were observed during the field survey, and due to its disturbed state, the site is highly unlikely to contain any of these species.

Potentially occurring special-status plant species listed in the Yolo Habitat Conservation Plan & Natural Community Conservation Plan (Yolo HCP/NCCP) for the grassland habitat type are not expected to occur on-site because of the heavy disturbance the site has received being under past intensive agricultural uses. Therefore, the project is not expected to impact any covered or no-take plants.

[9] California Tree and Landscape Consulting, Inc. (CalTLC). 2022. *Development Plan for 3808 Faraday Avenue, APN# [071-477-009], City of Davis Jurisdiction.* Prepared for Buzz Oates Construction, Inc. Dated 3 October 2022. 15 pp.

Special Status Wildlife Species

Invertebrates

The species database searches resulted in seven special-status invertebrate species that could occur within the project site. The project site does not contain suitable habitat (depressional wetlands or blue elderberry shrubs) to support Conservancy fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, or valley elderberry longhorn beetle.

Crotch Bumble Bee and Western Bumble Bee: Crotch bumble bee and western bumble bee have no formal listing status, but a petition for listing as Threatened under CESA is forthcoming. Crotch bumble bee inhabits open grassland and scrub habitats, while western bumble bee is found in meadows and grasslands with abundant floral resources. Both species require the availability of nectar and pollen from floral resources throughout the duration of the entirety of spring, summer, and fall. The project site provides marginally suitable habitat for these species, which could forage on flowering plants and could use existing burrows for overwintering/nesting habitat. Therefore, the impact is potentially significant.

As described below, Mitigation Measure BIO-1 would require the project applicant to conduct pre-construction surveys for special status species, including the Crotch bumble bee and western bumble bee. If such species are found, the project applicant must coordinate with the appropriate wildlife agencies to prepare a mitigation plan, and that plan must be followed. Therefore, implementation of Mitigation Measure BIO-1 would ensure that any potential impact is reduced to a **less-than-significant level**.

Monarch Butterfly: The Monarch butterfly is currently a candidate species for listing under FESA. This 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 for laying eggs on as larval host plants. The monarch life cycle varies by geographic location, and in many regions where monarchs are present, monarchs breed year-round. While this species was not observed onsite during the field surveys, a couple of narrowleaf milkweed, a larval host plant for monarch butterfly, were documented within the project site. Additionally, flowering plants within the project site may provide nectar for foraging adults. A query of the Western Monarch Milkweed Database yielded an observation of monarch breeding in 2020 approximately 1.7 miles east of the project site. Because of the proximity to the project site and potential for suitable habitat, the impact is potentially significant.

As described below, Mitigation Measure BIO-1 would require the project applicant to conduct pre-construction surveys for special status species, including the Monarch Butterfly. If such species are found, the project applicant must coordinate with the

appropriate wildlife agencies to prepare a mitigation plan, and that plan must be followed. Therefore, the project site provides marginal habitat for this species. Mitigation Measure BIO-1 will ensure that any potential impact is reduced to a **less-than-significant level**.

Amphibians

The species database searches resulted in one special-status amphibian species that could occur within the project site: California tiger salamander. However, the project site does not contain suitable habitat (depressional wetlands) for this amphibian species.

Reptiles

The species database searches resulted in two special-status reptile species that could occur within the project site: western pond turtle and giant garter snake. However, the project site does not contain suitable habitat (rivers, creeks, irrigation canals, wetlands) for these species.

Fish

The species database searches resulted in two special-status fish species that could occur in the vicinity of the project site: green sturgeon and Delta smelt. However, the project site does not contain suitable habitat (rivers) for these fish species.

Birds

The species database searches resulted in nine special-status bird species that could occur within the project site. Of these, the project site does not support suitable habitat (beaches, lagoons, evaporation ponds, riparian habitat, cut riverbanks) for western snowy plover, western yellow-billed cuckoo, bank swallow, and least Bell's vireo. The onsite ruderal annual brome grassland does provide marginally suitable foraging habitat for raptors including Swainson’s hawk, white tailed kite, and northern harrier, and northern harrier could nest on the ground within the project site. The project site also supports numerous burrows created by California ground squirrel; these burrows present marginally suitable habitat for western burrowing owl.

Western Burrowing Owl: The project site is within the range of western burrowing owl. Field surveys found a moderate potential for western burrowing owl to occur within the project site. A relatively large California ground squirrel colony is present on the project site and, while there was no evidence of burrowing owl presence or use during the surveys, the squirrel burrows may be used by burrowing owl for temporary refuge or breeding habitat.

The most recent CNDDB record within five miles for burrowing owl is from 2008. This occurrence is located approximately 2.8 miles north of the project site, along County Road 28H in an undeveloped area along the north side of Willow Slough, north of the Davis City limit. The habitat in this location is very different from that present in the project site. Historically, the species has used the area near the intersection of Mace Boulevard and 2nd Street, about 0.5 miles east of the project site; use in that area is well-documented.

Western burrowing owl is a Covered Species under the Yolo HCP/NCCP; therefore, potential habitat for this species within the project site and within 500 feet of the project site was mapped in compliance with Yolo HCP/NCCP planning-level requirements. Because of the proximity to the project site and potential for suitable habitat, the impact is potentially significant.

As described below, Mitigation Measure BIO-2A and BIO-2B would require the project applicant to conduct pre-construction surveys for special status species, including the Western Burrowing Owl. If such species are found, the project applicant must coordinate with the appropriate wildlife agencies to prepare a mitigation plan, and that plan must be followed. Mitigation Measures BIO-2A and 2B would ensure that any potential impact to western burrowing owls is reduced to a **less-than-significant level.**

Tricolored Blackbird: Tricolored blackbird populations, which are currently in decline throughout the state, was listed as threatened under the CESA by the California Fish and Game Commission on April 19, 2018. It is also a Yolo HCP/NCCP Covered Species. Historically, colonies were established in freshwater marshes dominated by cattails and bulrushes. More recently, they have utilized non-native mustards, blackberries, thistles, and mallows 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. This current trend of nesting in active agricultural fields has further imperiled the species as nestlings typically have not fledged by the time the triticale is harvested.

The CNDDB includes four records of this species within five miles of the project site. Two of these records are from 1932; the remaining records are from 1999 and 2008. The most recent record was from statewide tricolored blackbird surveys and was located at the Yolo Landfill West, which lies about three miles northeast of the project site. This observation includes observations of about 350 birds exhibiting nesting behavior (carrying nesting material and singing). There are no records of nesting colonies within 500 feet of the project site.

In an unmowed state, the project site supports thickets of milk thistle; milk thistle thickets have been documented to be used as a nesting substrate for tricolored blackbird. However, due to the small parcel size, surrounding developed land use, and lack of suitable foraging habitat needed during the breeding season (i.e., irrigated pastures and annual grasslands, habitats that provide high amounts of insects such as grasshoppers), the project site does not provide suitable habitat for this species. Comprehensive inspection of potential den habitat was accomplished by walking meandering transects throughout the property. Nevertheless, there is still the potential of the species to occur on the project site due to the proximity of sightings to the project site, the impact is potentially significant.

As described below, Mitigation Measure BIO-10 would require the project applicant to conduct pre-construction surveys for special status species, including the Tricolored Blackbird. If such species are found, the project applicant must coordinate with the appropriate wildlife agencies to prepare a mitigation plan, and that plan must be followed. Mitigation Measure BIO-10 would ensure that any potential impact is reduced to a **less-than-significant level**.

Swainson's Hawk: Swainson's hawk is listed as threatened under CESA and is classified as 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.

This species was not observed during the field surveys, and foraging habitat on the project site is low quality due to small parcel size and surrounding development. Onsite landscaping trees are likely too small to be suitable nesting trees; however, trees within 0.25-mile of the project site provide potential nesting habitat. The CNDDB lists five Swainson’s hawk records recorded between 2012 and 2016 within five miles of the project site, with the closest being about 1,200 feet to the southwest. This record is of a nest tree between the railroad tracks and Interstate 80, but the entry notes that the tree was removed (the nest was last active in 2003). The most recent active nest is about a mile west in Covell Park (active in 2016), on a site surrounded by development. Cornell Laboratory’s eBird database lists some recent (2021-2022) records for the species in the area, including in trees surrounding an existing commercial building on the north side of Faraday Avenue, across from the project site, though none of those listings describe active nests.

Swainson’s hawk is a Yolo HCP/NCCP Covered Species; therefore, potential foraging habitat for this species within the project site and within 1,320 feet (0.25-miles) of the project site was mapped in compliance with Yolo HCP/NCCP planning-level

requirements. Because of the proximity to the project site and potential for suitable habitat, the impact is potentially significant.

As described below, Mitigation Measure BIO-10 would require the project applicant to conduct pre-construction surveys for special status species, including the Swainson's Hawk. If such species are found, the project applicant must coordinate with the appropriate wildlife agencies to prepare a mitigation plan, and that plan must be followed. Mitigation Measures BIO-10 would ensure that any potential impact is reduced to a **less-than-significant level**.

White-Tailed Kite: White-tailed kite is a CDFW fully protected species and a Covered Species under the Yolo HCP/NCCP. This species is a year-round resident in 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.

This species was not observed during the August and September 2022 survey, and foraging habitat is low quality due to small parcel size and surrounding development. Onsite landscaping trees are likely too small to be suitable nesting trees; however, trees within 0.25-mile of the project site provide potential nesting habitat. The nearest CNDDB record for this species is about 0.5 miles to the northwest. Cornell Laboratory's eBird database lists some recent sightings (2021- 2022) within about 0.5-1 mile of the project site.

White-Tailed Kite is a Yolo HCP/NCCP Covered Species; therefore, potential foraging habitat for this species within the project site and within 1,320 feet (0.25-mile) of the project site was mapped in compliance with Yolo HCP/NCCP planning-level requirements. Because of the proximity to the project site and potential for suitable habitat, the impact is potentially significant.

As described below, Mitigation Measure BIO-10 would require the project applicant to conduct pre-construction surveys for special status species, including the White-Tailed Kite. If such species are found, the project applicant must coordinate with the appropriate wildlife agencies to prepare a mitigation plan, and that plan must be followed. Mitigation Measures BIO-10 would ensure that any potential impact is reduced to a **less-than-significant level**.

Northern Harrier: The northern harrier is categorized as a species of special concern by the CDFW. This raptor is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California. It is a ground nesting species, and typically utilizes emergent wetland/marsh, open grasslands, or savannah habitats. Foraging

occurs within a variety of open habitats such as marshes, agricultural fields, and grasslands.

One CNDDB occurrence of northern harrier occurs within five miles of the project site. This record is from 2015 and is approximately four miles northeast of the project site. This species was not observed foraging over the project site during the field surveys. The ruderal/disturbed annual brome grassland within the parcel provides only marginally suitable foraging and nesting habitat due to small parcel size and surrounding development. Because of the proximity to the project site and potential for suitable habitat, the impact is potentially significant.

As described below, Mitigation Measure BIO-10 would require the project applicant to conduct pre-construction surveys for special status species, including the Northern Harrier. If such species are found, the project applicant must coordinate with the appropriate wildlife agencies to prepare a mitigation plan, and that plan must be followed. Mitigation Measure BIO-10 would ensure that any potential impact is reduced to a **less-than-significant level**.

Mammals

The species database searches resulted in four special-status mammalian species that could occur within the project site. Of these species, suitable habitat (caves) is not present within the project site for pallid bat. The remaining three species are discussed below.

Silver-haired Bat: Silver-haired bat is not federally or state listed but is identified as a medium threat rank species by the Western Bat Working Group (WBWG). Though it is primarily a forest-dwelling species, silver-haired bat has been recorded within five miles of the project site. This species roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark. Mitigation Measure BIO-1 would ensure that any potential impact is reduced to a **less-than-significant level**.

Hoary Bat: Hoary bat is not federally or state listed but is identified as a medium threat rank species by the WBWG. It is the most widespread North American bat species and can be found in any location in California. This solitary species primarily roosts in in dense foliage of medium to large trees. Preferred roosting sites are hidden from above, with few branches below, and have a ground cover of low reflectivity. Hoary bat prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Once CNDDB record of hoary bat occurs within five miles of the project site.

Foliage, loose bark, and hollows within landscaping trees, and other crevices associated with man-made structures such as power poles on-site represent

marginally suitable roosting habitat for these species. However, due to small tree size and a lack of quality foraging habitats such as a pond or stream system, potential for these species is low. Mitigation Measure BIO-1 would ensure that any potential impact is reduced to a **less-than-significant level**.

American Badger: The American badger is a CDFW species of special concern. This burrowing carnivorous mammal is solitary and very territorial, and hunts small mammals, lizards, snakes, and insects. It has no known natural enemies and inhabits dry, open fields, grasslands, and pastures. The CNDDB documents one occurrences of this species within five miles of the project site. Although ground squirrel burrows offer denning opportunities for the American badger, habitat is not appropriate for American badger due to the surrounding development, small parcel size, and low-quality foraging habitat. Mitigation Measure BIO-1 would ensure that any potential impact is reduced to a **less-than-significant level**.

Conclusion

Due to the disturbed nature of the project site, suitable habitat does not exist to support special-status plant species. Grading of the project site is subject to the City's Grading Ordinance, which requires a pre-construction survey for sensitive species on a project site and the general vicinity for nesting raptors within 0.25-mile and appropriate measures in the event of any discovery. Additionally, the City of Davis is a member of Yolo HCP/NCCP. As a member agency to the HCP/NCCP, the City has discretion over this project. If habitat for covered species associated with the HCP/NCCP were present, applicable impact avoidance and minimization measures consistent with the HCP/NCCP would be necessary.

If the necessary preconstruction surveys are not carried out, the project could result in a potentially significant 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 U.S. Fish and Wildlife Service (USFWS), or the CDFW. The following mitigation measures would reduce the above-stated special-status wildlife impacts to a **less-than-significant level**.

Mitigation Measure(s)
Sensitive Species Survey

Mitigation Measure BIO-1: *Prior to any ground disturbance, a qualified biologist shall conduct a preconstruction survey for sensitive species covered under the Yolo HCP/NCCP. Preconstruction surveys shall be conducted within 30 days prior to ground disturbance. Preconstruction survey requirements include but are not limited to mapping of all dens, nests, and suitable habitat within the project site footprint and*

within a 250-foot radius of the project site, and the provision of written survey results to the USFWS within five working days after surveying. If sensitive species and/or occupied dens or nests, are identified in the survey area, the applicant shall consult with the USFWS and CDFW to establish a mitigation plan that meets the requirements established by the USFWS prior to or during ground disturbance. Ground disturbing activities shall not commence until the USFWS and CDFW verify that all required mitigation and avoidance measures identified in the mitigation plan have been properly implemented.

Mitigation Measure BIO-2: *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 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.*

Mitigation Measure BIO-3: *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.*

Mitigation Measure BIO-4: *Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.*

Mitigation Measure BIO-5: *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.*

Mitigation Measure BIO-6: *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.*

Mitigation Measure BIO-7: *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.

Mitigation Measure BIO-8: *Project proponents will comply with stormwater management plans that regulate development as part of compliance with regulations under National Pollutant Discharge Elimination System (NPDES) permit requirements. Covered activities that result in any fill of waters or wetlands will also comply with requirements under Section 404 of the Clean Water Act, State Water Resources Control Board (State Board), Fish and Game Code Section 1602, and Regional Board regulations. Other than requirements for buffers, minimizing project footprint, and species-specific measures for wetland-dependent covered species, this HCP/NCCP does not include specific best management practices for protecting wetlands and waters because they may conflict with measures required by the USACE, State Board, Regional Board, and CDFW.*

Burrowing Owls

Mitigation Measure BIO-9A: *No less than 14 days prior to ground-disturbing activities covered under the Yolo HCP/NCCP, a preconstruction survey of the 7.81-acre development plan area shall be completed. The survey shall establish the presence*

or absence of western burrowing owl and/or habitat features, and evaluate use by owls in accordance with CDFW survey guidelines.

An approved biologist shall conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines.[10] *On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. Surveys should take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. Surveys will take place no more than 30 days prior to construction. During the breeding season (February 1—August 31), surveys will document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1—January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results will be valid only for the season (breeding or nonbreeding) during which the survey is conducted. If burrowing owls and/or occupied burrows are identified in the survey area, Mitigation Measure 9B shall be implemented. If burrowing owls and/or occupied burrows are not discovered, then further mitigation is not necessary.*

Mitigation Measure BIO-9B: *If burrowing owls are found during the breeding season (February 1 August 31), the project proponent shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance shall include establishment of a non-disturbance buffer zone consistent with Yolo HCP/NCCP Table 4-2, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls, of the Yolo Habitat Conservation Plan/Natural Community Conservation Plan, or as otherwise approved by the Conservancy and wildlife agencies.*

If burrows cannot be avoided, consistent with Table 4-2 of the Yolo Habitat Conservation Plan/Natural Community Conservation Plan, a qualified biologist will conduct preconstruction surveys up within three days prior to ground disturbance to identify active burrows in the area of impact. Construction may occur inside the disturbance buffer if the project proponent develops an avoidance, minimization, and monitoring plan, as described in AMM18, Minimize Take and Adverse Effects on Habitat of Western Burrowing Owl (Section 4.3.4, Covered Species of the Yolo Habitat

[10] Yolo County Final Habitat Conservation Plan/Natural Community Conservation Plan. Volume 1. Chapter 4 Application Process and Conditions on Covered Activities. Pg.4-28.

Conservation Plan/Natural Community Conservation Plan). During the nonbreeding season (September 1 —January 31), the project proponent shall avoid the owls and the burrows they are using, if possible. Avoidance would include the establishment of a buffer zone (described below). During the breeding season, buffer zones of at least 250 feet in which no construction activities can occur shall be established around each occupied burrow (nest site). 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 of the Yolo Habitat Conservation Plan/Natural Community Conservation Plan, 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.[11] *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*

[11] Yolo County Final Habitat Conservation Plan/Natural Community Conservation Plan. Volume 1. Chapter 4 Application Process and Conditions on Covered Activities. Pg.4-30.

monitoring guidelines[12] and consistent with the most up-to-date checklist of passive relocation techniques.[13] 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.

Covered Migratory Birds

Mitigation Measure BIO-10: *Prior to any ground disturbance a pre-construction survey for covered migratory birds shall be completed. This survey shall be conducted in the morning or evening hours within 15 days prior to any construction activities. 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

[12] Yolo County Final Habitat Conservation Plan/Natural Community Conservation Plan. Volume 1. Chapter 4 Application Process and Conditions on Covered Activities. Pg.4-30.
[13] The Conservancy will maintain a checklist of passive relocation techniques. The wildlife agencies will approve the initial list prepared by the Conservancy, and the Conservancy will update as needed in coordination with the wildlife agencies

surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee.[14] 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.

Mitigation Measure BIO-11: *Prior to issuance of building permits, the applicant shall submit an application for coverage under the Yolo HCP/NCCP for review and approval by the City of Davis and the Yolo Habitat Conservancy and pay necessary application fees and applicable land cover mitigation fees, consistent with the biological resources assessment prepared for the project, or as updated.*

Responses b), c): Less than Significant. Riparian habitats are described as the land and vegetation that is situated along the bank of a stream or river. Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded). Vernal pools are seasonal depressional wetlands that are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. Vernal pools range in size from small puddles to shallow lakes and are usually found in a gently sloping plain of grassland.

There is no aquatic habitat at the site and no jurisdictional waters or wetlands are present onsite, and no Army Corps of Engineers or Regional Water Quality Control Board (RWQCB) permits would be required relating to jurisdictional waters. As a result, implementation of the proposed project would have a **less-than-significant** impact on riparian habitat, seasonal wetlands, or vernal pools as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means.

Responses d): Less than Significant. While the proposed project would result in full development of the project site, the site is adjacent to existing developments. The project site provides limited opportunities for native, resident, or migratory wildlife to use it as a movement corridor. The CNDDB record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the project site.

Given that the project site provides limited habitat, impacts related to the movement of any resident or migratory fish or wildlife species or with established resident or

[14] Yolo County Final Habitat Conservation Plan/Natural Community Conservation Plan. Volume 1. Chapter 4 Application Process and Conditions on Covered Activities. Pg.4-27.

migratory wildlife corridors, or impeding the use of wildlife nursery sites are considered **less than significant**.

Response e): Less than Significant. The proposed project would comply with all applicable City ordinances and requirements, including tree preservation and removal. According to the Arborist Report prepared for this project, the project would remove 23 trees on the site, of which 14 trees are protected trees of significance, as defined by the City's Tree Ordinance. Furthermore, the City's Tree Ordinance 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. It also provides for requirements related to tree removal.

The project is required to comply with the City's Tree Ordinance and is addressed in a standard City condition of approval, which requires preparation of a Tree Protection Plan for trees being preserved and approval of Tree Modification Permit for trees being removed with standard measures for tree replacement or payment for the appraised value of the trees. The Tree Protection Plan would include measures to ensure that all trees to be preserved would be protected during construction of the project, resulting in an impact that is **less than significant**.

Responses f): Less than Significant. The site is within the boundaries of the Yolo HCP/NCCP. In May 2018 the Yolo HCP/NCCP was adopted by the Yolo Habitat Conservancy, which consists of Yolo County and the incorporated cities of Davis, West Sacramento, Winters, and Woodland, the USFWS and the CDFW. The Yolo HCP/NCCP provides guidance for the mitigation of impacts to covered species.

Implementation of the project will result in the entire study area being permanently impacted and converted to the Urban or Built Up Yolo HCP land cover type. Table 5 and Figure 8 of the Biological Resource Assessment (see Appendix A) quantifies the land cover impacts within the Study Area as 6.7 acres of California Annual Grassland Alliance, 1.1 acres of Vegetated Corridor Without Covered Species Habitat, and 0.7 acre of Urban or Built Up. Of these three land cover types, only California Annual Grassland Alliance is subject to Yolo HCP land cover fees.[15] Currently, the Yolo HCP

[15] Consero Solutions, ICF, Alford Environmental, Tschudin Consulting Group. 2020. Yolo Habitat Conservation Plan/Natural Community Conservation Plan Permitting Guide. Dated February 2020. Retrieved from: https://www.yolohabitatconservancy.org/_files/ugd/8f41bd_28e5aceaae294d438de619e 726e641e7.pdf [accessed 8 August 2022]. As cited In Madrone Ecological Consulting, 2022. Biological Resources Assessment, 3808 Faraday Avenue, Yolo County, California. October 2022.

land cover cost per acre is $15,629.[16] Therefore, land cover fees for the project's permanent impacts to 6.7 acres of California Annual Grassland Alliance will be $104,325.70. No land cover fees are required for the project's 1.1 acres of Vegetated Corridor Without Covered Species Habitat and 0.7 acre of Urban or Built Up land cover types, as conversion of these areas has already occurred. Mitigation of impacts is accomplished through the payment of a Development Fee. The Development Fee requires payment based on a cost per acre for all acres converted to non-habitat with the cost per acre based on the quality of the habitat converted. The fees are used to acquire higher value habitats in preserved areas and to fund their restoration and management. Because the City of Davis is a signatory to the Yolo HCP/NCCP, anticipated project impacts could be mitigated through the payment of Development Impact fees to the Yolo HCP/NCCP Conservancy as required in Mitigation Measure BIO-11. Therefore, the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, resulting in an impact that is **less than significant**.

[16] Yolo Habitat Conservancy, 2022. Permitting. Available: https://www.yolohabitatconservancy.org/permitting. Accessed: December 12, 2022.

V. CULTURAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. A record search was conducted for the project site and surrounding area through the Northwest Information Center (NWIC) of the California Historical Resources Information System (NWIC file No.:22-0569) (see Appendix B). The record search indicates that the project site does not contain any recorded buildings or structures listed on the State Office of Historic Preservation Historic Property Directory (which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places). In addition to these inventories, the NWIC base maps show no recorded buildings or structures within the proposed project area.

The Davis General Plan EIR identifies that the City's planning area has seven historic sites listed with the National Register of Historic Places, seven in the California Inventory of Historic Resources, and 149 with the City's Cultural Resources Inventory. The City has designated 38 structures and 2 cultural landscapes, which it considers historic landmarks. None of the above-referenced historical resources are located on the project site and none are within 500 feet of the project site.[17] Since there are no existing buildings on the project site, there is nothing on that site that could be considered a "historical resource" under Section 15064.5 of the CEQA Guidelines.

For the above-stated reasons, development of the proposed project would have a **less-than-significant** impact on historical resources.

Responses b), c): Less than Significant with Mitigation. As noted above, a record search was conducted for the project area and surrounding area through the NWIC of the California Historical Resources Information System (NWIC file No.:22-0569) (see

[17] City of Davis. Davis General Plan Program EIR. May 2000. Pg. 5J-6.

Appendix B). There are no known sites in the project area or within a one-eighth mile radius of the project area.

Given that no known archaeological resources are associated with the project site, the subject parcel is considered of low archaeological sensitivity for prehistoric cultural resources. However, ground-disturbing activities may have the potential to uncover buried cultural deposits. As a result, during construction and excavation activities, previously unknown archaeological resources, including human bone, may be uncovered, resulting in a potentially significant impact.

Implementation of Mitigation Measures CUL-1 and CUL-2 would ensure steps would be taken to reduce impacts to cultural resources in the event that they are discovered during construction Therefore, this potentially significant impact would be reduced to a ***less than significant*** level regarding this topic.

Mitigation Measure(s)

Mitigation Measure CUL-1: *Prior to grading permit issuance, the developer shall submit plans to the Community Development Department for review and approval which indicate (via notation on the improvement plans) that if historic and/or cultural resources are encountered during site grading or other site work, all such work shall be halted immediately within the area of discovery and the developer shall immediately notify the Community Development Department of the discovery. In such case, the developer shall be required, at their own expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery would not be allowed until the preceding work has occurred.*

Mitigation Measure CUL-2: *Pursuant to California Health and Safety Code §7050.5l, if human bone or bone of unknown origin is found during construction, all work shall stop with 100 feet of the find and the Yolo County Coroner shall be contacted immediately. If the remains are determined to be Native American, then per California Public Resources Code §5097.98, the coroner shall notify the Native American Heritage Commission, who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for reinternment of the human remains and any associated artifacts. Additional work is not to take place within 100 feet of the find until the identified appropriate actions have been implemented.*

VI. ENERGY -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Appendix G of the CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix G of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The amount of energy used at the project site would directly correlate to the energy consumption (including fuel) used by vehicle trips generated during proposed project construction, fuel used by off-road construction vehicles during construction, fuel used by vehicles during proposed project operation, and electricity and other energy usage during proposed project operation.

The following discussion provides calculated levels of energy use expected for the proposed project, based on commonly used modelling software (i.e., CalEEMod v.2020.4.0 and the California Air Resource Board's EMFAC2021). It should be noted that many of the assumptions provided by CalEEMod are conservative relative to the proposed project, and therefore may overstate actual emissions. Therefore, this discussion provides a conservative estimate of proposed project emissions.

Electricity and Natural Gas

Electricity and natural gas used by the proposed project would be used primarily to power on-site buildings. Total annual electricity (kWh) and natural gas (kBTU) usage associated with the operation of the proposed project are shown in Table 5, below (as provided by CalEEMod).

According to Calico's *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. This is a comprehensive energy use assessment that includes the end use for various climate zones in California.

Table 5: Project Operational Natural Gas and Electricity Usage

Natural Gas (kBTU/year)	*Electricity (kWh/year)*
1,985,400	972,425

SOURCE: CALEEMOD (V.2020.4.0)

Energy usage during the operational phases of the proposed project would be typical for a project of this kind, and therefore would not represent a wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, the proposed project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency.

On-Road Vehicles (Operation)

The proposed project would generate vehicle trips during its operational phase. In order to calculate new daily vehicle trips and operational on-road vehicle energy usage and emissions, default average daily trips and trip lengths generated by CalEEMod were used, which are based on the project land use, location and urbanization level parameters selected within CalEEMod (i.e., "Manufacturing" Land Use, "Yolo County" project location, and "Urban" setting, respectively). These values are provided by the individual districts or use a default average for the state, depending on the location of the proposed project.[18] Based on default factors provided by CalEEMod, the project is estimated to generate a total of approximately 3,904 average daily vehicle miles traveled (Average Daily VMT). Using fleet mix data provide by CalEEMod (v2020.4.0), and Year 2024 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2021, the weighted MPG factors for operational on-road vehicles of approximately 24.6 MPG for gasoline vehicles were derived. With this information, conservative estimate calculated that the unmitigated proposed project would generate vehicle trips that would use a total of approximately 159

[18] California Air Pollution Control Officers Association. CalEEMod. 2022. Available at https://caleemod.com/

gallons of gasoline fuel per day, on average, or 57,986 gallons of gasoline fuel per year.

On-Road Vehicles (Construction)

The proposed project would also generate on-road vehicle trips during project construction (from construction workers and vendors). Estimates of vehicle fuel consumed were derived based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2023 gasoline MPG factors provided by EMFAC2021. For the purposes of simplicity, it was assumed that all worker vehicles used gasoline as a fuel source (as opposed to diesel fuel or alternative sources) and all vendor vehicles used diesel fuel as a fuel source (as opposed to gasoline or alternative sources). Table 6, below, describes gasoline and diesel fuel used by on-road mobile sources during each phase of the construction schedule. As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed project would occur during the building construction phase. See Appendix C for a detailed calculation.

Table 6: On-Road Mobile Fuel Generated by Project Construction Activities – By Phase

Construction Phase	*# of Days*	*Total Daily Worker Trips[(a)]*	*Total Daily Vendor Trips[(a)]*	*Gallons of Gasoline Fuel[(b)]*	*Gallons of Diesel Fuel[(b)]*
Site Preparation	10	18	-	68	-
Grading	20	15	-	113	-
Building Construction	230	143	56	12,377	16,304
Paving	20	15	-	113	-
Architectural Coating	20	29	-	218	-
Total	**N/A**	**N/A**	**N/A**	**12,889**	**16,304**

NOTE: [(A)] PROVIDED BY CALEEMOD. [(B)] SEE APPENDIX C FOR FURTHER DETAIL
SOURCE: CALEEMOD (V. 2020.4.0); EMFAC2021.

Off-Road Vehicles (Construction)

Off-road construction vehicles would use diesel fuel during the construction phase of the proposed project. A non-exhaustive list of off-road constructive vehicles expected to be used during the construction phase of the proposed project includes: cranes, forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO_2 emissions expected to be generated by the proposed project (as provided by the CalEEMod output), and a CO_2 to diesel fuel conversion factor (provided by the U.S. Energy Information Administration), the proposed project would use a total of approximately 4,249 gallons of diesel fuel for off-road construction vehicles during the site preparation and grading phases of the proposed project. Detailed calculations are provided in Appendix C.

The proposed project could also use other sources of energy not identified here. Examples of other energy sources include alternative and/or renewable energy (such as solar PV) and/or on-site stationary sources for electricity generation. The proposed project would be solar-ready, which could reduce the need for fossil fuel-based energy (for proposed project buildings), including for electricity.

Conclusion

The proposed project would be in compliance with all applicable federal, state, and local regulations regulating energy usage. For example, statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard) are improving vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

As a result, the proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the proposed project including construction, operations, maintenance, and/or removal. PG&E, the electricity and natural gas provider to the site, maintains sufficient capacity to serve the proposed project. In addition, PG&E is on its way to achieving the statewide requirement of 50% of total energy mix generated by eligible renewables by year 2030. As of 2021 PG&E generated approximately 50% of its energy from eligible renewables.[19] The proposed project would comply with all existing energy standards, including the statewide Title 24 Energy Efficiency Standards, and would not result in significant adverse impacts on energy resources. Therefore, the proposed project would not result in potentially significant environmental impacts due to inefficient, wasteful, or unnecessary use of energy resources during construction and operation, nor conflict with or construct with a State or local plan for renewable energy or energy efficiency. This is a ***less-than-significant*** *impact*.

[19] Pacific Gas & Electric Company. Exploring Clean Energy Solutions. 2021. Available at: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page

VII. GEOLOGY AND SOILS -- WOULD THE PROJECT:

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

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii), aiii): Less than Significant. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, and known surface

expression of active faults does not exist within the site. However, the site is located within a seismically active region. According to the USGS Fault and Fold Database, the nearest active fault is the Green Valley Fault located about 28.4 miles southwest[20]. The Green Valley Fault is considered to be capable of a magnitude earthquake of approximately 7.1.[21]

Other potentially active faults include the Midland fault located approximately 7.6 miles to the southwest, Dunnigan Hills fault approximately 16.6 miles to the northwest, Vaca fault approximately 18.2 miles to the southwest, and Kirby Hills fault located approximately 24.4 miles to the southwest.

Geologic Hazards

Potential seismic hazards resulting from a nearby moderate to major earthquake could generally be classified as primary and secondary. The primary seismic hazard is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and ground lurching.

Ground Rupture

Because the property does not have known active faults crossing the site, and the site is not located within an Earthquake Fault Special Study Zone, ground rupture is unlikely at the subject property.

Ground Shaking

The Office of Planning and Research has placed the Davis area in Seismic Activity Intensity Zone II, which indicates that the maximum intensity of an earthquake would be VII or VIII on the Modified Mercalli Intensity Scale. An earthquake of such magnitude would result in "slight damage in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures."[22] The California Building Code places all of California in the zone of greatest earthquake severity because recent studies indicate high potential for severe ground shaking.

There will always be a potential for ground shaking caused by seismic activity anywhere in California, including the project site. However, the proposed project would be required to meet the standards of applicable Building and Fire Codes, including the 2022 California Building Code (CBC), as adopted or updated by the City of Davis.

[20] United States Geological Survey. Quaternary Fault and Fold Database of the United States. 2022. Available at: https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf.
[21] 2014 CBS Broadcasting Inc. Earthquake Study Finds Fault Between Napa, Fairfield Primed For Magnitude-7.1 Temblor.
[22] United States Geological Survey. The Severity of an Earthquake. November 05, 2021.

Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures would be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

Ground Lurching

Ground lurching is a result of the rolling motion imparted to the ground surface during energy released by an earthquake. Such rolling motion could cause ground cracks to form in weaker soils. The potential for the formation of these cracks is considered greater at contacts between deep alluvium and bedrock. Such an occurrence is possible at the site as in other locations in the Bay Area, but based on the site location, the offset is expected to be very minor.

Liquefaction

Liquefaction normally occurs when sites underlain by saturated, loose to medium dense, granular soils are subjected to relatively high ground shaking. During an earthquake, ground shaking may cause certain types of soil deposits to lose shear strength, resulting in ground settlement, oscillation, loss of bearing capacity, land sliding, and the buoyant rise of buried structures. The majority of liquefaction hazards are associated with sandy soils, silty soils of low plasticity, and some gravelly soils. Cohesive soils are generally not considered to be susceptible to liquefaction. In general, liquefaction hazards are most severe within the upper 50 feet of the surface, except where slope faces or deep foundations are present. Because the compaction and placement history of the fill is unknown, and the anticipated seismic and groundwater conditions, the exact liquefaction potential is unknown, although it is expected to be low during seismic events.

Conclusion

The project site is not within an Alquist-Priolo Special Studies Zone; however, the Davis area is located in a seismically active zone. A number of active faults are located within the vicinity of the project site. The nearest State of California zoned, active fault is the Green Valley fault, located approximately 28.4 miles southwest of the project site and the nearest potentially active fault is the Midland fault located approximately 7.6 miles to the southwest. Development of the proposed project in this seismically active zone could expose people or structures to substantial adverse effects, including

the risk of loss, injury, or death involving rupture of a known earthquake fault and/or strong seismic ground shaking.

The Office of Planning and Research has placed the Davis area in Seismic Activity Intensity Zone II, which indicates that the maximum intensity of an earthquake would be VII or VIII on the Modified Mercalli Intensity Scale. An earthquake of such magnitude would result in "slight damage in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures." The California Building Code places all of California in the zone of greatest earthquake severity because recent studies indicate high potential for severe ground shaking.

There will always be a potential for ground shaking caused by seismic activity anywhere in California, including the project site. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code.

Overall, the project site has a low-moderate potential for seismic activity, ground shaking, or liquefaction. Building design that meets Building Code requirements and compliance with the recommendations of the required site-specific soils report, which is a standard city requirement prior to construction, would reduce any potential impact. Therefore, this proposed project would have a **less-than-significant**.

Responses a, iv): Less than Significant. The proposed project site is not susceptible to landslides because the area is essentially flat. This is a **less-than-significant** impact.

Responses b), c), d): Less than Significant. Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is directly associated with areas of liquefaction. Areas in the region that are susceptible to this hazard are located along creeks or open water bodies, or within the foothills to the west. There are no creeks or open bodies of water within an appropriate distance from the project site for lateral spreading to occur on the project site. For this reason, the probability of lateral spreading occurring on the project site is low.

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result

of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections. Soil expansion is dependent on many factors. The more clayey, critically expansive surface soil and fill materials will be subjected to volume changes during seasonal fluctuations in moisture content. According to the City of Davis General Plan EIR Table 51-2, Summary of Soils, Geology, and Mineral Resource Impacts by Land Use Alternative, expansive soils exist in many parts of the planning area, with at least a moderate potential for shrink-swell effects. As indicated on Table 51-2, the Sycamore silty loam, drained (sp) soils, which exist in the entirety of the project site have a moderate shrink-swell potential.

Monitoring of subsidence in Yolo has been occurring since 1999 on a regional level. The monitoring efforts show that the greatest subsidence occurs in the corridor that runs north from Davis, through Woodland, north to Zamora and through to the northeast corner of the county. The subsidence does not appear to be strictly uniform, a characteristic of subsidence, but rather a result of several factors. Subsidence is likely a result of the groundwater pumping, water usage, and other related issues, but additional regional studies are needed over an extended period to better understand the subsidence. Subsidence is present throughout the City of Davis, including the project site, albeit at a low level.

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform compaction of the soil strata, resulting in movement of the near-surface soils. Since the compaction and placement history of the fill is unknown, removal and re-compaction would likely be required during grading.

There is no evidence that the project site is at a significant risk of erosion under the existing conditions or the proposed condition. Construction activities including grading could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters. A project-specific Storm Water Pollution Prevention Plan (SWPPP) is required to be prepared pursuant to the RWQCB and Green Building Code. The SWPPP will include project specific best management measures that are designed to control drainage and erosion and is a standard City requirement for applicable projects. The SWPPP and the project specific drainage plan would reduce the potential for erosion.

The General Plan EIR considered whether development would result in the potential for soil erosion and concluded that given the types of soil present within the City and with the implementation of the General Plan policies, the impact would not be significant. Because the conclusion applies to the entire City, the development of the proposed project will not have more significant effects than analyzed in the prior EIR.

In addition, the City's General Plan identifies policies that provide explicit actions for reducing construction-related water quality impacts, including the erosion of topsoil.[23] The General Plan policies require the continued application and enforcement National Pollutant Discharge Elimination System (NPDES) regulations for sites over one acre. Chapter 30.03.010 of City of Davis Municipal Code adopts by reference the standards of the State of California's NPDES General Permit for Stormwater Discharges Associated with Construction Activity (NPDES General Permit No. CAS000002). Construction projects that would disturb more than 5,000 square feet is regulated project subject to site design measures and other requirements of the NPDES General Permit. The project site is approximately 7.81 acres, and, as such, the project would be subject to applicable requirements of the NPDES General Permit.

Additionally, Section 30.03.010 of the City's Municipal Code requires preparation of an Erosion Control Plan as part of a permit requirement and would include implementation of Best Management Practices (BMP) to reduce erosion. The proposed project would be required, per standard conditions of approval, to provide and implement an Erosion Control Plan and comply with the City's Stormwater Management and Discharge Control Ordinance. Thus, the project would not result in any new specific effects or effects that are more significant than what was already analyzed in the General Plan EIR.

Compliance with the recommendations of the required site-specific soils report and required erosion control and stormwater quality control plans, which are standard city requirements, would reduce any potential impact. Therefore, this proposed project would have a **less-than-significant** impact.

Response e): No Impact. The project has been designed to connect to the existing City sewer system and septic systems will not be used. Therefore, **no impact** would occur related to soils incapable of adequately supporting the use of septic tanks.

Responses f): Less than Significant with Mitigation. The project is not expected to contain subsurface paleontological resources; however, it is possible that undiscovered paleontological resources could be encountered during ground-disturbing activities.

Damage to or destruction of a paleontological resource would be considered a potentially significant impact under local, state, or federal criteria. Implementation of Mitigation Measure GEO-1would ensure steps would be taken to reduce impacts to

[23] City of Davis. Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School [pg. 51-2 to 51-8]. January 2000.

paleontological resources in the event that they are discovered during construction. This mitigation measure would reduce this impact to a ***less-than-significant level***.

Mitigation Measure(s)

Mitigation Measure GEO-1*: If any paleontological resources are found during grading and construction activities, all work shall be halted immediately within a 100-foot radius of the discovery until a qualified paleontologist has evaluated the find.*

Work shall not continue at the discovery site until the paleontologist evaluates the find and makes a determination regarding the significance of the resource and identifies recommendations for conservation of the resource, including preserving in place or relocating within the project site, if feasible, or collecting the resource to the extent feasible and documenting the find with the University of California Museum of Paleontology.

VIII. GREENHOUSE GAS EMISSIONS – WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

EXISTING SETTING

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NOX), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three GHGs have increased globally by 47, 169, and 23 percent, respectively (IPCC 2013; NOAA/ESRL 2021a, 2021b, 2021c).[24]Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

The emissions from a single project would not cause global climate change; however, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change presented in this section is presented in terms of the

[24] Environmental Protection Agency. Inventory of Greenhouse Gas Summary and Sinks. 2021.

proposed project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a proposed project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the combined effects from both the proposed project and other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the proposed project's incremental effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. 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 carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O). Sources of GHG emissions include area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents ($MTCO_2e/yr$).

The 2008 document, *City of Davis Greenhouse Gas Emissions Inventory & Forecast Update*, includes an estimation of citywide 2010 emissions levels, which was previously used as the basis of the City of Davis's citywide GHG reduction target thresholds.[25] The 2010 emissions levels were then used to generate emissions reduction targets, which were adopted by the City on November 18, 2008. The

[25] City of Davis Department of Community Development and Sustainability. City of Davis Greenhouse Gas Emissions Inventory & Forecast Update. June 2008.

emissions reductions goals adopted in 2008 provided a desired rate of reduction, which were more ambitious than Assembly Bill (AB) 32 or Senate Bill (SB) 32, and included achievement of citywide carbon neutrality by 2050. In addition to the aggressive, desired reduction targets, the City also adopted minimum reduction targets equal to the State mandated reductions levels. By adopting two reductions targets, the City created a range of acceptable emissions reductions, where the minimum reductions target would achieve statewide reductions goals based on AB 32, while the desired reduction level would surpass the state minimum. To ensure that new developments within the city would not impede the City's progress towards the City's adopted emissions reductions targets, the City identified carbon allowances for new developments. The carbon allowances set a maximum emissions level for the operation of new developments,[26] while maintaining the City's emissions reductions goals.[27]

On March 5, 2019, the City Council adopted a resolution declaring a climate emergency. As part of the resolution, the City's adopted goal of net carbon neutrality by the year 2050 was accelerated to the year 2040. Achievement of carbon neutrality by the year 2040 would place the City on an emissions reductions trajectory that surpasses the minimum reduction targets previously established by the City, which were based on AB 32, as well as the City's previously adopted desired reductions levels, thus surpassing the emissions reductions goals of the City's Climate Action and Adaptation Plan (CAAP).[28] Despite the acceleration of the desired date for carbon neutrality, the resolution declaring a climate emergency did not include any updates regarding the anticipated means of achieving carbon neutrality. Consequently, while the City's climate emergency resolution accelerated the City's net carbon neutrality target year from 2050 to 2040, the City's CAAP continues to provide the planning level approach to meeting the City's emissions goals. As stated in Table 1 of the City's CAAP, carbon neutrality by 2050 is a "desired" goal and was anticipated to be achieved by a "combination of actions at the local, regional, national, and international levels and carbon offsets." The City of Davis is in the process of preparing the 2020 CAAP Update to support recent City Council actions and assess GHG reduction progress made since the adoption of the 2010 CAAP, identify physical and social vulnerabilities, establish and prioritize climate action and carbon reduction policies toward carbon neutrality, and bring the City into compliance with current State legislation. However, the 2020 CAAP Update has not yet been adopted.

Although the YSAQMD has not officially adopted any thresholds of significance for GHG emissions, the YSAQMD currently recommends use of the Sacramento

[26] City of Davis. Staff Report: Adoption Davis Climate Action and Adaptation Plan. June 2, 2010.
[27] Niemeier, Deb. Carbon Development Allowances. September 2008.
[28] City of Davis. Staff Report: Adoption Davis Climate Action and Adaptation Plan. June 2, 2010.

Metropolitan Air Quality Management District's (SMAQMD's) adopted GHG emissions thresholds of significance. The threshold of significance for both construction-related and operational GHG emissions (each) is 1,100 MTCO2e/year.[29]

In addition, in order to determine whether or not the proposed project would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, the proposed project is analyzed for consistency with the City's D-CAAP, which is implemented through the City's adopted greenhouse gas emission thresholds, standards, and mitigation guidelines, as described above. The D-CAAP was developed by the City in order for future development projects and City actions to be consistent with – or better than - the statewide GHG reductions goals outlined in AB 32. If the project would generate GHG emissions below the thresholds identified above, then the project would be consistent with the D-CAAP, and would result in a less than significant impact related to the generation of GHG emissions.

The approach still relies on the Appendix G of the CEQA Guidelines thresholds which indicate that climate change-related impacts are considered significant if implementation of the proposed project would do any of the following:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

These two CEQA Appendix G threshold questions are provided within the Initial Study checklist and are the thresholds used for the subsequent analysis. The focus of the analysis is on the project's consistency with the CAAP. The CAAP contains an inventory of GHG emissions, reduction strategies, and a means to implement, monitor, and fund the Plan. The purpose of the CAAP is to outline a course of action for the City government and the community of Davis to reduce per capita greenhouse gas emissions by amounts required to show consistency with SB 375 and SB 32 goals for the year 2030 and beyond, and to adapt to effects of climate change. The CAAP also provides clear guidance to City staff regarding when and how to implement key provisions of the CAAP. The analysis provided herein includes quantitative modeling to show the construction and operational emissions of GHGs as a result of the project, however, the conclusions are based on the fact that the project is consistent with the reduction strategies contained within the CAAP.

In addition, the City of Davis has adopted per unit and per capita carbon allowances that set a maximum emissions level for the operation of new residential

[29] Sacramento Air Quality Management District. Greenhouse Gas Thresholds for Sacramento County. June 1, 2020.

developments,[30] while maintaining the City's emissions reductions goals.[31] However, the City has not established specific emission allowances for non-residential development, which are generally covered by the City's CAAP target and policies and compliance with on-going measures to achieve carbon neutrality.

Project Greenhouse Gas Emissions

The proposed project would generate GHGs during the construction and operational phases of the proposed project. The primary source of construction-related GHGs from the proposed project would result from emissions of CO_2 associated with the construction of the proposed project, and worker vehicle trips. The proposed project would require limited grading, and would also include site preparation, building construction, architectural coating, and paving phases. Sources of GHGs during project operation would include CO_2 associated with operational vehicle trips and on-site energy usage (e.g., electricity). Other sources of GHG emissions would be minimal.

Table 7 provides the estimated GHG emissions that would be generated during project construction and operation.

Table 7: Project Mitigated Construction and Operational GHG Emissions

Year	*MTCO2e*
Construction	
2023	309.5
2024	245.4
Operation	
Annual	819.3

Source: CalEEMod, v.2020.4.0.

Construction GHG 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. Construction-related activities that would generate GHGs include construction worker commute trips, haul trucks carrying supplies and materials to and from the project site, and off-road construction equipment (e.g., dozers, loaders, excavators). While the proposed development project would contribute GHGs during construction of the site it would be not be significant amount. CalEEMod results for the project estimates that the project's

[30] City of Davis. Staff Report: Adoption Davis Climate Action and Adaptation Plan. June 2, 2010.
[31] Niemeier, Deb. Carbon Development Allowances. September 2008.

maximum unmitigated and mitigated construction-related CO2e emissions would be 309.5 MT/yr, which does not exceed the threshold of 1,100 MTCO2e/yr.

Operational GHG Emissions

The proposed project would be a direct and indirect source of GHG emissions, in that it would generate and attract vehicle trips in the region (mobile source GHG emissions), and generate area source GHG emissions. The mobile source GHG emissions would be entirely from vehicles, while the area source GHG emissions would be primarily from landscape fuel combustion, consumer products, and architectural coatings. Operational GHG emissions would also be generated from solid waste disposal, water usage, and electricity usage. CalEEMod results for the project estimates that the project's total unmitigated operational CO2e emissions would be 819.3 MT/yr, which does not exceed the operational threshold of 1,100 MTCO2e/yr.

It is also expected that the new building will comply with Chapter 8.01 of the City of Davis' Municipal Code, which requires that buildings are to comply with the Tier 2 standards of the California Green Building Standards (CALGreen) Code, and would comply with any other adopted measures and requirements related to the reduction of GHGs.

Project Consistency with the Davis CAAP

Table 8, below provides a consistency analysis of the relevant Davis CAAP policies in comparison to the proposed project.

TABLE 8: PROJECT CONSISTENCY WITH THE DAVIS CAAP

Category	*Strategy*	*Consistency Determination*
Building Energy and Design	Transition to high efficiency, zero carbon homes and buildings	**Consistent**: The proposed project would be developed to be consistent with the latest California Title 24 Building Energy Efficiency requirements.
Building Energy and Design	Expand local renewable energy development and storage	**Consistent**: The proposed project is required to implement all local renewable energy development and storage requirements as promulgated by the State of California.
Transportation and Land Use	Adopt zero emissions vehicles and equipment to reduce fossil fuel use	**Consistent**: The proposed project does not hinder the adoption of zero emissions vehicles and equipment and includes the development of Electric Vehicle Charging Station (EVCS) in the parking lot area

Category	*Strategy*	*Consistency Determination*
Transportation and Land Use	Increase opportunities for active mobility in the community	**Consistent**: The proposed project does not hinder opportunities for active mobility in the community. Bike racks would be provided onsite to encourage the use of bicycles to and from the site.
Transportation and Land Use	Strengthen transit service within Davis and among regional neighbors	**Consistent**: The proposed project is located on an existing Davis Unitrans line. Route Z (weekdays) and Route O (weekends) run westerly on 2nd Street, immediately adjacent to the project site. There is one bus stop to the east of the project site, and another to the west of the project site, both along 2nd Street. Therefore, the site is easily accessible via transit service.
Transportation and Land Use	Reduce single occupant vehicle use	**Consistent**: The proposed project is located near to existing transit service, and provides bicycle and pedestrian access to the project site, thereby reducing dependence on single occupant vehicle use. There would also be a dedicated ride-share drop-off space/area within the proposed parking lot, providing opportunities for easy ride sharing.
Transportation and Land Use	Expand opportunities for local housing development to balance local employment opportunities	**Consistent**: The proposed project does not include housing development. However, the proposed project provides an employment opportunity that is near existing housing, and which could strengthen the City's jobs-housing balance.
Water Conservation	Conserve water in our buildings and landscapes	**Consistent**: The proposed project would be developed to be consistent with the latest California Title 24 Building Energy Efficiency requirements, which includes water conservation and efficiency measures.

Category	*Strategy*	*Consistency Determination*
Climate Resilience and Carbon Removal	Create a cooler city with more urban forest and green space for people and habitat	**Consistent**: The proposed project includes extensive landscaping around the perimeter of the project site, as well as surrounding the project building and within the parking areas.
Climate Resilience and Carbon Removal	Protect public health, safety, and infrastructure against damage and disruption from flooding	**Consistent**: The proposed project is not at significant risk of damage and disruption from flooding. The project site is not within a floodway and would not hinder or redirect flood flows.
Climate Resilience and Carbon Removal	Prepare and respond to climate hazards to ensure that the City is equipped to address current and future challenges	**Consistent**: The proposed project would adhere to the latest California Title 24 Building Energy Efficiency requirements and the requirements of the Davis CAAP. Implementation of those measures would reduce the proposed project's impact on climate hazards.
Climate Resilience and Carbon Removal	Demonstrate climate leadership through innovation, education and investment	**Consistent**: The proposed project includes adherence to the latest California Title 24 Building Energy Efficiency requirements and the requirements of the Davis CAAP. Overall, adherence to these requirements would reduce the proposed project's impact on climate hazards.
Climate Resilience and Carbon Removal	Reduce waste generation and increase diversion away from landfills	**Consistent**: The proposed project would adhere to the California requirements associated with landfill diversion.

Project Consistency with SACOG's RTP/SCS

In addition, the proposed project would not conflict with the implementation of regional transportation-related GHG targets outlined in Sacramento Area Council of Governments (SACOG) 2020 Metropolitan Transportation Plan and Sustainable Communities Strategy (2020 MTP/SCS). The 2020 MTP/SCS includes the project site in their population and employment projections, and VMT increases associated with buildout of the City of Davis.

Conclusion

Overall, the proposed project would be consistent with the strategies as described in the City of Davis CAAP and it functions as an implementation project toward achieving

the City's climate action goals. Since the proposed project would not conflict with the Davis CAAP or the relevant 2020 RTP/SCS, the proposed project would not generate a significant cumulative impact to GHGs.

CalEEMod results conducted for the project estimate that the project's total operational CO2e emissions would be 819.3 $MTCO_2e$/yr, which does not exceed the operational threshold of 1,100 $MTCO_2e$/yr. Overall, the operational GHG emissions are not anticipated to increase significantly beyond the existing conditions. Additionally, the construction CO2e emissions would be a maximum of 309.5 MT/year, which also does not exceed the construction threshold of 1,100 MTCO2e/year. The proposed project would not generate GHG emissions that would have a significant impact on the environment or conflict with any applicable plans, policies, or regulations. Therefore, impacts related to greenhouse gases are ***less than significant***.

IX. HAZARDS AND HAZARDOUS MATERIALS -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant with Mitigation. The following discussion addresses potential hazards associated with existing site conditions of the project site, as well as the potential use of hazardous materials during operation of the project.

Proposed Project Uses

The proposed project has limited potential for the routine transport, use, or disposal of hazardous materials. The project narrative includes the potential development of an approximately 7,500 square foot testing pool and an associated bridge crane, all manufacturing associated with the bio-technology manufacturing facility are expected to occur within the building envelope of the facility and limited and temporary use of the testing pool. Materials are not proposed to be stored or permanently exposed outside of the building envelope of the manufacturing facility. Furthermore, the Public Works Utilities and Operations department of the City of Davis also manages Commercia and Industrial Program that regulates specific activities that take place at commercial and industrial areas, such as material, chemical, and waste handling. The goal of the Commercial and Industrial Program is to reduce or control the discharge of pollutants in runoff from these activities. The City has established this program to encourage and assist businesses in their efforts to promote stormwater pollution prevention.[32]

City activities under the Industrial and Commercial Activities Program include:

- Inspecting all industrial and commercial sites within the city's inventory once per year for pollution prevention.
- Promoting the Partners for a Greener Davis Program which provides a checklist of items to assist businesses in operating in an environmentally-friendly fashion.
- Requiring and reviewing Stormwater Pollution Prevention Plans (SWPPPs) for applicable industrial businesses.
- Annually inspect all sites required to provide a SWPPP consistent with the State's Industrial General Permit.
- Develop and distribute educational outreach materials for specific pollution and prevention activities identified at these business locations.

The proposed project would be required to comply with the Industrial and Commercial Activities Program. The proposed bio-technical and manufacturing use does not involve the routine transport, use, or disposal of hazardous materials, or present a reasonably foreseeable release of hazardous materials. Hazardous materials associated with the bio-technical and manufacturing uses would consist mostly of typical commercial/industrial products and fertilizers and cleaners, which would be utilized in small quantities and in accordance with label instructions. This is a ***less-than-significant*** *impact*, and no mitigation is required.

Existing Project Site Conditions

[32] City of Davis Public Works Utilities and Operations Department. Pollution Prevention for Businesses. 2022.

A Phase 1 Environmental Site Assessment Report was prepared for parcel 071-411-009, and was analyzed for potential soil contamination and other existing hazards, prior to the preparation of this IS/MND (see Appendix F). As described in greater detail below, there were no significant hazardous substances found on this site.

A Phase I Environmental Site Assessment (Phase I Report), dated July 26, 2021, was prepared for the project site at APN: 071-411-009 by Brusca Associates Inc. (Brusca). Brusca conducted a review of federal, state and local regulatory agency databases provided by Environmental Data Resources (EDR) to evaluate the likelihood of contamination incidents at and near the site. The database sources and the search distances are in accordance with the requirements of ASTM E 1527-13. The purpose of the records review was to obtain reasonably available information to help identify Recognized Environmental Conditions (RECs). Additionally, TRC conducted a reconnaissance of the project site on June 7, 2021. The site reconnaissance was conducted by walking and driving representative areas of the site.

A past Phase 1 Environmental Site Assessment completed in 2011 reported that a 50-gallon plastic septic holding tank had been discovered at a depth of about 4 feet during demolition of two former agricultural buildings on the southern portion of the property.[33] The holding tank reportedly was connected to a restroom in one the buildings, and it is indicted that no leach lines or drainage fields were evident during the demolition activities. The 2011 Phase 1 report did not identify the former sceptic holding tank as an environmental concern. Additionally, the 2011 Phase 1 Study indicated a PVC riser on the southern portion of the property that was reported to be a water supply well associated with the former onsite buildings. Research as part of the current Phase 1 Environmental Site Assessment did not identify records of abandonment of the water well and did not observe the well during the site reconnaissance. If the well remains at the site, the Phase 1 Environmental Site Assessment notes that it should be abandoned in accord with State and County regulations.

Site Reconnaissance: The site was observed to be vacant and entirely unpaved. No hazardous substances or petroleum products are used/stored on the project site. Small, concrete foundations were observed on the southern portion of the project site. These features may have been associated with agricultural buildings that were historically situated in that area. Minor amounts of environmentally innocuous debris were observed locally on the site, including wood/lumber, rubbish, and a discarded bicycle. Two approximately ten-foot-high metal poles were observed along the northern and southern property margins, which supported apparent weather gauges

[33] Phase 1 Environmental Site Assessment, DMG MORI Land – Davis. Brusca Associates Inc. July 26, 2021. Pg. 6.

or air monitoring devices. Pole mounted electrical transformers were observed along the eastern and southern margins of the property. It is unknown whether these transformers contain polychlorinated biphenyl (PCB) fluid. However no evidence of discharge or leakage from the transformers were observed.

The site reconnaissance did not observe evidence of contamination conditions, improper hazardous substance/petroleum products use or storage, environmentally suspicious dumping or discharge, or significant staining. Site reconnaissance identified no evidence that current use or activities on the project site have resulted in a significant release of hazardous substances or petroleum products to the environment on the project site.

Adjacent Site Conditions

The eastern adjoining property is identified as the Frontier Fertilizer Superfund site. The facility to the east of the project site was utilized as an agricultural chemical storage and sales facility from the early 1970s through the 1980s. It is indicated that chemicals were routinely disposed of in unlined pits at the facility. Extensive past environmental investigations have identified soil, soil gas, and groundwater contamination conditions attributed to the past handling, storage, and disposal of pesticides/fertilizers at the Frontier Fertilizer site, and remediation work has taken place at the property over many years.

Hazardous Substances and Soil Sampling

No hazardous substances including raw materials; finished products and formulations; hazardous wastes; hazardous constituents and pollutants including intermediates and byproducts are currently present at the site. No unidentified substance containers (when open or damaged, and containing unidentified substances suspected of being hazardous or petroleum products) were observed at the project site.

Brusca observed no visual evidence, including vent pipes, fill ports, dispensing equipment, underground storage tanks (USTs) or aboveground storage tanks (ASTs) on the project site.

In conjunction with performance of the Phase 1 Environmental Site Assessment, Brusca performed soil gas screening sampling/testing at the subject property to evaluate whether VOCs associated with the eastern adjacent Frontier Fertilizer Superfund site exist in soil gas beneath the project site at concentrations that could be considered an indoor air vapor intrusion concern for any future buildings constructed at the site. The results of the soil gas sampling and testing are included in Appendix E. The recent soil gas investigation included the collection of seven soil gas samples beneath the eastern portion of the project site. Four of the soil gas

samples were collected at a depth of five feet and thee of the samples were collected at a depth of 10 feet. The soil gas samples were tested for VOCs by EPA Method TO-15, including specific VOCs indicated to be primary contaminants associated with the eastern adjoining Frontier Fertilizer site.

All of the soil gas samples collected at the subject site contained some of the tested VOCs at concentrations above laboratory reporting limits. Except as discussed below, the detected VOC concentrations are considered very low. Notably, none of the primary contaminants of concern known to associated with the eastern adjoining Frontier Fertilizer site were detected in the soil gas samples.

Despite the lack of detection of the primary Frontier Fertilizer VOC contaminants in soil gas beneath the project site, some of the soil gas samples contained somewhat elevated concentrations of other VOCs, including benzene, tetrachloroethene (PCE) and trichloroethene (TCE). The source of these VOCs in soil gas has not been identified. Detected concentrations of these VOCs were compared to Environmental Screening Level (ESL) values for both residential and commercial/industrial site usage. None of the VOC concentrations detected in the soil gas samples collected at the project site exceeded their respective commercial/industrial ESL values. However, the benzene, PCE, and TCE concentrations in some of the soil gas samples exceed their respective residential ESL values. This data indicates that these VOCs could pose a potential vapor intrusion health risk for any residential structures or other sensitive site usage (such as a school, day care, hospital, etc.). In the event that such site usage is contemplated, further site assessment and/or mitigation measures may be necessary. The elevated concentrations of VOCs detected locally in soil gas beneath the property is considered a Recognized Environmental Condition (REC). However as indicated above, the soil gas concentrations do not exceed commercial/industrial screening values, and therefore would not appear to be a significant concern to future commercial/industrial usage of the site.

Conclusion

The Phase 1 prepared for the project site revealed Recognized Environmental Conditions at the project site associated with contaminated soils. Soil sampling was conducted, and no potential impacts associated with soil contamination were identified. No additional soil investigation requirements were identified in the Phase 1 ESA. No additional mitigation is required for the project site.

The proposed operations of the office and manufacturing facility could potentially introduce the routine transport or use of potentially hazardous materials, but would not occur any substantial or unusual levels. However, the operational phase of the

proposed project does not include the storage of fuel and other hazardous materials in any substantial or unusual levels.

The General Plan EIR anticipated that development in the city could involve the use of hazardous materials during construction-related activities and could expose workers to an increased risk of exposure to materials. The impact was considered significant in the short term. Mitigation measures were not proposed within the General Plan EIR. The use, transportation, and disposal of construction-related hazardous materials, such as paints, solvents, and fuels, is strictly regulated. Applicable regulations include the uniformly applicable federal regulations related to the Resource Conservation and Recovery Act, the Toxic Substances Control Act, and the Hazardous Materials Transportation Law. In addition to the foregoing federal regulations, uniformly applicable state laws and regulations relating to hazardous materials include the Hazardous Waste Control Law, and the California Accidental Release Program. The regulations would be applicable during both construction and operation of the proposes project. For construction activities in particular, the City's General Plan includes Standard HAZ 4.1a, which ensures the proper handling of hazardous materials during construction through the preparation and implementation of a hazardous materials management plan. Implementation of Standard HAZ 4.1a would ensure that construction activity related to the proposed project would not result in the improper handling of hazardous materials, which would reduce the likelihood of an accidental release of such material. Therefore, the proposed project would not result in a project-specific effect or an effect greater than that studied in the General Plan EIR related to the use of hazardous materials during construction-related activities.

Construction equipment and materials would likely require the use of petroleum-based products (oil, gasoline, diesel fuel), and a variety of common chemicals including paints, cleaners, and solvents. Transportation, storage, use, and disposal of hazardous materials during construction activities and site operation would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment would not be exposed to hazardous materials. Therefore, the proposed project would have a ***less-than-significant*** *impact* relative to this issue

Response c): Less than Significant. Merryhill preschool is located approximately 0.2 miles to the south; Fred T. Korematsu Elementary School is located approximately 0.5 miles to the north; UCNS preschool is located approximately 0.8 miles to the northeast; Marguerite Montgomery Elementary School is located approximately 1.0 miles to the southwest; and Pioneer Elementary School is located approximately 1.1 miles to the east. However, the proposed project has limited potential for the routine transport, use, or disposal of hazardous materials as discussed above in Responses

a) and b). The operation of the proposed project is not anticipated to emit hazardous emissions or result in the storage or handling of hazardous or acutely hazardous materials, substances or waste above the level of existing conditions. Therefore, the project would have a **less-than-significant** impact with respect to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.

Response d): No impact. In preparing the Phase 1 Environmental Site Assessment (2021), Brusca performed a search of Federal, State, and local hazardous materials/sites databases regarding the project site and nearby properties.

The Yolo County Environmental Health Department (YCEHD) is the local Certified Unified Program Agency (CUPA) responsible for sites located with Yolo County. Research was performed to determine whether YCEHD maintains environmentally-relevant listings or records pertaining to the project site; it was determined that YCEHD does not have records for the project site. Additionally, research does not indicate that other local agencies maintain any environmentally-relevant records or files specific to the project site.

Additional research has not revealed that the project site appears on the federal or state listing. As previously described, a report on file with state agencies indicated limited past soil sampling on the project site related to investigation of pesticide contaminants associated with the eastern adjoining Frontier Fertilizer site. Additionally, it is indicated that certain land use restrictions, including sensitive uses (residential, school, hospital, etc.), apply to the project site in relation to the Frontier Fertilizer site.

The project site is not included on a list of hazardous materials sites compiled by the California Department of Toxic Substances (DTSC) pursuant to Government Code § 65962.5. According to a DTSC Envirostor records search, there is one Federal Superfund Site, the Frontier Fertilizer site, located adjacent to the east of the project site.[34] Review of agency listings and records indicate that nearby sites appear on agency listings within up to one mile from the project site. As noted in the Phase 1 Environmental Site Assessment, the agency information reviewed does not indicate that any of the nearby listed sites are relevant to the environmental integrity of the project site, except for the eastern adjoining Frontier Fertilizer Superfund site. The Frontier Fertilizer Site is an active site undergoing clean up, but would not impact or be impacted by the proposed project. There are no State Response Sites within half

[34] Department of Toxic Substances Control. EnviroStor. Available at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=davis.

a mile of the project site. The Target Property is also within a quarter mile of the project site and is a Voluntary Cleanup Site and does not require any further action, as noted.

The project site has not been identified in any of the hazardous databases, nor is the site on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As a result, the proposed project would have **no impact** under this criterion.

Responses e): No impact. The project site is not within an airport land use plan or within two miles of an airport. The nearest airport, University Airport, is a private airfield located approximately 4.6 miles southwest of the project site. Therefore, implementation of the proposed project would result in **no impact** to this environmental topic.

Response f): Less than significant. The Davis General Plan currently designates the proposed project site for business park uses, such as those proposed for the project. The applicant proposes abandonment/vacation of a portion of right-of-way of Faraday Avenue, both the currently existing cul-de-sac and the future extension. The plan proposes to pull back and reconstruct the existing Faraday Avenue cul-de-sac west of its current location and incorporate a portion of the abandoned right-of-way into the proposed site plan. However, implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. Therefore, the impact would be **less than significant**.

Response g): No impact. The site is not located within an area where wildland fires occur. The site is predominately surrounded by existing development which have a low potential for wildland fires. Therefore, **no impact** would occur.

X. HYDROLOGY AND WATER QUALITY – WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;			X	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
(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			X	
(iv) impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant with Mitigation. During the early stages of construction activities, topsoil would be exposed due to grading and partial leveling of the site. After grading and leveling and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff.

The State Water Resources Control Board (SWRCB) regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. The State's General Construction Permit requires a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the site. A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project, including post-construction impacts. The proposed project is a regulated project that must also meet the guidelines and requirements set forth in the "Phase II Small MS4 General Permit, 2013-0001-DWQ," dated February 5, 2013, adopted by the City of Davis. Permanent storm water control measures would be incorporated into the project in order to mitigate the impacts of pollutants in storm water runoff from the proposed project. The proposed project would incorporate site design measures, source control measures, and treatment control measures consisting of biotreatment basins dispersed throughout the site.

Additionally, the project is not anticipated to significantly affect groundwater quality because sufficient stormwater infrastructure would be constructed as part of the project's stormwater quality control requirements to detain and filter stormwater runoff and prevent long-term water quality degradation, in accordance with the City's Phase II Small MS4 General Permit, 2013-0001-DWQ.

Chapter 30, Stormwater Management and Discharge Control, of the City of Davis Municipal Code contains standards related to stormwater facilities. In particular, Chapter 30 enforces the State's NPDES General Permit requirements for Stormwater Discharges Associated with Construction Activity, and the State of California NPDES Phase II Small Municipal Separate Storm Sewer System General Permit for applicable projects.

Because development of the site would require construction activities that would result in a land disturbance greater than one acre, the applicant would be required by the State to obtain a 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 applicant to file a Notice of Intent (NOI) with the SWRCB and prepare a SWPPP prior to construction. The SWPPP would incorporate BMPs in order to prevent, or reduce to the greatest feasible extent, adverse impacts to water quality from point sources and erosion and sedimentation. The City's standard SWPPP mitigation measures are adopted and required as standard conditions of approval on development projects and would require the project be designed and engineered to ensure implementation of BMPs to reduce pollutants in stormwater discharges, ensure the development of adequate stormwater facilities, and be consistent with the requirements of the SWPP.

Therefore, the proposed project would result in a **less-than-significant** impact relative to water quality.

Response b): Less than Significant. The proposed project would connect to the City of Davis water system. There are three primary water rights and contracts that are used within the City's existing service area and Sphere of Influence (SOI). All three of these water supplies are used to meet the water demands for the City's residents and businesses. In several areas within the city, the water supplies can be interchanged and commingled for delivery to end users. The water supplies are:

- Woodland-Davis Clean Water Agency (WDCWA) State Water Resources Control Board (SWRCB) Appropriative Water Right Permit 20281;
- WDCWA's Central Valley Project (CVP) Contract No. 14-06-200-7422X-R-1; and
- City of Davis' groundwater rights.

In June 2016, the City of Davis began receiving treated surface water through the Woodland Davis Clean Water Agency (WDCWA) at an amount of approximately 10.2 million gallons per day (mgd) to reduce the City's reliance on groundwater and deep aquifer wells. The City plans to maximize surface water use by routinely using the surface water supply as a base load and using the deep aquifer wells as a supplemental supply during the summer when demands would exceed the surface water supply capacity. Given that the majority of the City's water supplies are provided by surface water sources, increases in demand for water supplies associated with the proposed project would not be anticipated to substantially deplete groundwater supplies.

The majority of the project site would transition from pervious soil to impervious asphalt and concrete. As a result, the natural percolation of rainfall would not be distributed evenly over the project site, but would be directed toward dedicated storm water detention basins at the edges of the project site. Onsite bioswales would assist with onsite groundwater recharge. However, there is adequate water to supply the project and project construction and operation would comply with City standards and requirements related to erosion control, stormwater runoff, and related best management practices so that it would not substantially deplete or interfere with groundwater supply or quality or its management. The proposed project would not interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). Additionally, the project is not anticipated to significantly affect groundwater quality because sufficient stormwater infrastructure would be constructed as part of the project's stormwater quality control requirements to detain and filter stormwater runoff

and prevent long-term water quality degradation, in accordance with the City's Phase II Small MS4 General Permit, 2013-0001-DWQ.

The project would use low water use irrigation systems and landscaped bio-swales that provide preliminary treatment and recharge opportunities and would incorporate other water-conserving measures as part of its operations. Nevertheless, new impervious surfaces would be constructed, such as pavement, concrete, and structures, and would reduce infiltration capacity of the site. However, there is adequate water to supply the project and project construction and operation would comply with City standards and requirements related to erosion control, stormwater runoff, and related best management practices so that it would not substantially deplete or interfere with groundwater supply or quality or its management. Therefore, the project would result in a **less-than-significant impact** with respect to substantially depleting groundwater supplies or interfering substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level

Responses c.i), c.ii), c.iii, e): Less than Significant with Mitigation. When land is in a natural or undeveloped condition, soils, mulch, vegetation, and plant roots absorb rainwater. This absorption process is called infiltration or percolation. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed. Buildings, sidewalks, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff can result in flooding if adequate storm drainage facilities are not provided.

The project site is currently undeveloped and new impervious surfaces that would be constructed, such as pavement, concrete, and structures, would reduce infiltration capacity and affect site drainage. The proposed project would require the installation of storm drainage infrastructure to ensure that storm water properly drains from the project site. It includes compliance with the Phase II Small MS4 General Permit (see

Article 30.02 and 30.04 of the City of Davis Municipal Code). The proposed project must meet the guidelines and requirements set forth in the "Phase II Small MS4 General Permit, 2013-0001-DWQ," dated February 5, 2013, adopted by the City of Davis. Permittees must also implement a post-construction stormwater management program, as specified in Section E.12 of the Phase II Small MS4 General Permit.

In order to meet the guidelines and requirements set forth in the "Phase II Small MS4 General Permit, 2013-0001-DWQ," permanent storm water control measures would be incorporated into the project in order to mitigate the impacts of pollutants in storm water runoff from the proposed project and address erosion control. The proposed project would incorporate site design measures, source control measures, and treatment control measures and is required as a standard City condition of approval on development projects.

For the proposed project, three onsite bio-retention areas are proposed that would channel stormwater to a catch basin at the periphery of the site. Flows would percolate through the basin before being released into the storm drain system.

A long-term maintenance plan is needed to ensure that all proposed stormwater treatment BMPs and facilities function properly. Should the proposed water quality treatment facilities not be maintained properly, a potentially significant impact could occur with respect to creating or contributing runoff water that would exceed the capacity of existing or planned stormwater drainage systems or providing substantial additional sources of polluted runoff.

The proposed project would not substantially alter the existing drainage pattern of the site or the area. Therefore, the proposed project would result in **less-than-significant impact**s related to the alteration of the existing drainage pattern of the site or area, or 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.

Responses c.iv): No-impact. According to the June 18, 2010 FEMA Flood Insurance Rate Maps (FIRM), the project site is not located within a designated flood zone. Therefore, a **no-impact** impact would result from implementation of the proposed project with respect to placing structures within a 100-year floodplain, which would impede or redirect flood flows.

Response d): Less than Significant. Tsunamis are defined as sea waves created by undersea fault displacement. A tsunami poses little danger away from shorelines; however, when a tsunami reaches the shoreline, a high swell of water breaks and washes inland with great force. Historic records of the Bay Area used by one study indicate that nineteen tsunamis were recorded in San Francisco Bay during the period

of 1868-1968, and therefore have not occurred recently. Maximum wave height recorded at the Golden Gate tide gauge (where wave heights peak) was 7.4 feet.[35] The available data indicate a standard decrease of original wave height from the Golden Gate to about half original wave height on the shoreline near Richmond, and to nil at the head of the Carquinez Strait. As Davis is dozens of miles inland from the Carquinez Strait, the project site would not exposed to flooding risks from tsunamis and adverse impacts are not expected to result. This is a **less-than-significant** impact.

A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, whose destructive capacity is not as great as that of tsunamis. Seiches are known to have occurred during earthquakes, but none have been recorded in the Bay Area. Since Davis is many miles inland from the San Francisco Bay Area and associated water bodies, the project site is not exposed to flooding risks from tsunamis and adverse impacts are not expected to result. This is a **less-than-significant** impact.

[35] National Oceanic and Atmospheric Administration. Historical Golden Gate Tidal Series. October, 2002.

XI. LAND USE AND PLANNING - Would the project:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Physically divide an established community?			X	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant. As noted in the General Plan, the City of Davis has planned for orderly, logical development that supports compatibility among adjacent uses. The General Plan goals seek to retain the character of existing communities and ensure that future land uses are compatible with existing uses. Currently, there are no existing structures on the project site, but has industrial buildings immediately to the west and north. Parcels to the east are undeveloped. Residential, industrial, commercial, and highway uses are just beyond the adjacency of the project site. The proposed project would not physically divide an established community due to the nature of the site, and its location within city limits. The project site is considered an infill site with development surrounding it. Therefore, the project would have a **less-than-significant** impact and would not physically divide an established community.

Responses b): Less than Significant. The Davis General Plan identifies the project site for Business Park uses. The proposed project for a bio-technology and manufacturing facility is consistent with the Business Park General Plan designation. Therefore, the proposed project is consistent with the existing General Plan land use designation.

Furthermore, the project site would remain zoned Planned Light Industrial/Business Park (PD 4-88). As stated in Article 40.22 of the City's Municipal Code, the P-D zone allows for any use or combination of uses shown on the approved preliminary development plan which are so arranged and designed to provide a development which is in conformity with the general plan and which is consistent with the requirements of the municipal code.

The Planned Light Industrial/Business Park (PD 4-88) zoning designation was not adopted for the purpose of avoiding or mitigating an environmental effect, and amendments to the Zoning Code reflect the City's vision identified for the project site

under the current General Plan Land Use Map. As a result, the project would have a **less-than-significant** impact and would not conflict with applicable land use plans, policies, regulations, or surrounding uses.

XII. MINERAL RESOURCES -- Would the project:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. According to the Davis General Plan, the most important mineral resources in the region are sand and gravel, which are mined on Cache Creek and other channels in Yolo County. There are no known mineral resources located on the project site or in the immediate vicinity. Additionally, there is no land designated or zoned for mineral resources within the city limits. Given that no known mineral resources are located in the vicinity of the proposed project, implementation of the proposed project would not result in the loss of availability of a known mineral resource or of a locally-important mineral resource recovery site, and there would be **no impact** on mineral resources.

XIII. NOISE -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less-than-significant impact*	*No Impact*
a) 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?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

BACKGROUND

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz). Noise is a subjective reaction to different types of sounds.

Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can

be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound. Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise. The day/night average level (Ldn) is based upon the average noise level over a 24-hour day, with a +10- decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Effects of Noise on People

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

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

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

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

Significance Criteria

A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the City of Davis General Plan. Specifically, Table 19 of the City of Davis General Plan[36] identifies standards for exterior noise exposure. For industrial, manufacturing, utilities, and agriculture uses, an exterior noise level is normally acceptable under 65 dBA, and conditionally acceptable between 70-80 dBA. Noise levels above 80 dBA are unacceptable.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The project site is located in proximity to Interstate 80, which contributes a significant amount of roadway noise to ambient conditions. Heavily used railroad tracks are between 2nd Street and Interstate 80, further contributing to high ambient noise levels at the project site. A recently completed noise study for the Chiles Road Apartments project at 3820 Chiles Road (located directly across Interstate 80 from the project site) indicated that site would be consistent with the General Plan standards for exterior noise levels.[37] Given that the proposed project is a similar distance from Interstate 80 as the Chiles Road Apartments, a conclusion can be drawn that exterior noise levels at the project site would also be consistent with the General Plan standards for exterior noise levels.

[36] City of Davis, 2007. Davis General Plan Adopted May 2001 / Amended Through January 2007. Chapter 21, Noise. Table 19, page 340.
[37] Raney Planning & Management, Inc., 2018. 3820 Chiles Road Apartments Draft Environmental Impact Report Volume 1. August.

Sensitive receptors to noise include residential areas, schools, churches, nursing homes/senior housing, hospitals, libraries, and childcare facilities. The project site is surrounded by other commercial, office, and manufacturing uses and there are no sensitive receptors in close proximity to the project site. The nearest sensitive receptors are single family homes approximately 500 feet north of the project site.

Operational Noise

For stationary noise sources, Section 24 of the City's Municipal Code establishes maximum noise levels for each type of land use. For the commercial/industrial/core commercial land uses, a standard of 60 dB during the hours of 7:00 a.m. to 10:00 p.m., and 55 dB during the hours of 9:00 p.m. to 10:00 a.m. shall not be exceeded. Further, the proposed project shall not cause noise levels at residential uses to exceed 55 dBA from 7:00 a.m. to 9:00 p.m., and 50 dBA from 9:00 p.m. to 7:00 a.m.

The proposed project would involve manufacturing activities within a newly constructed building. Some activities, such as truck deliveries could occur outside, and those activities are expected to occur during business hours. Manufacturing work would occur within the building and employees would not be subject to any permanent exposure to excessive noise. The proposed bio-tech and manufacturing facility uses are not expected to generate any significant operational noise. Additionally, there are no sensitive receptors in close proximity to the project site that would be impacted by project operations. The nearest sensitive receptors are single family homes approximately 500 feet to the north, with an intervening building between the neighborhood and the project site. Other uses, including office and manufacturing, are already existing adjacent to and within close proximity of the project site. Therefore, operational noise from the proposed project would have a **less-than-significant** impact.

Construction Activities

Construction activities associated with development of the project site would result in temporarily increased noise levels. Construction noise from site development would include mechanical equipment such as earthmovers, dump trucks, and similar equipment during the delivery of construction materials, construction/redevelopment of foundations, framing, roofing, and similar operations. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. According to the Federal Highway Administration, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet.[38] Building construction would occur at

[38] Federal Highway Administration. Roadway Construction Noise Model User's Guide. January 2006.

distances of greater than 50 feet from the nearest residences, which are located approximately 500 feet from the project site.

Construction activities would be temporary in nature and would only be permitted to occur during normal daytime working hours.

Noise would also be generated by construction truck traffic on area roadways, specifically truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration, and would occur during daytime hours.

Construction activity would occur over a relatively short period of time and would be anticipated to occur during normal daytime hours, consistent with Chapter 24.02.040 of the Davis Municipal Code, which states that construction noise levels are exempt between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and between the hours of 8:00 a.m. to 8:00 p.m. on Saturdays and Sundays 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 jackhammers 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. No individual powered blower shall produce a noise level exceeding seventy dBA measured at a distance of fifty feet.

5. No powered blower shall be operated within one hundred feet radius of another powered blower simultaneously.

6. On single-family residential property, the seventy dBA at fifty feet restriction shall not apply if operated for less than ten minutes per occurrence.

The proposed project is required to comply with the standards listed above, which would ensure that construction noise levels at the nearest sensitive receptors would be minimized to the maximum extent feasible. Therefore, construction noise associated with the proposed project would not be considered to generate a substantial temporary increase in ambient noise levels in excess of standards established in the noise ordinance, and construction noise would be considered a **less-than-significant** impact.

Response b): Less than Significant. Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Although most construction equipment generates some level of vibration, vibration impacts are most acute with significant, heavy construction activities such as pile driving. Site preparation of the project site and construction of the building would involve the use of scrapers, graders, loaders and other equipment. Table 9 shows the typical vibration levels produced by a sampling of construction equipment.

Table 9: Vibration Levels for Various Construction Equipment

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/Drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009

Vibratory Compactor/Roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

SOURCE: TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES. FEDERAL TRANSIT ADMINISTRATION. MAY 2006.

Table 9 data indicates that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 500 feet from the project site. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would occur during normal daytime working hours. As a result, short-term groundborne vibration impacts would be considered **less than significant.**

Response c): No Impact. The project site is not located near an existing airport and is not within an existing airport land use plan. The nearest airport, University Airport, is a private airfield located approximately 4.6 miles southwest of the project site. Although aircraft-related noise could occasionally be audible at the project site, noise would be extremely minimal. Exterior and interior noise levels resulting from aircraft would be compatible with the proposed project. Therefore, there would be **no impact**.

XIV. POPULATION AND HOUSING -- Would the project:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed project does not propose any housing that would result in direct population growth. However, projects that do not directly induce population growth still have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. The proposed project would not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. The project is located on an infill site, and would only extend infrastructure from existing mains to the project site. No substantial population increases would result from implementation of the proposed project. Therefore, implementation of the proposed project would have a **less-than-significant impact** relative to this topic.

Responses b): No Impact. There are no existing homes or residences located on the project site. The proposed project would not displace housing or people. Implementation of the proposed project would have **no impact** relative to this topic.

XV. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less-than-significant impact*	*No Impact*
Would the project 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:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed project is located within the jurisdiction of the Davis Fire Department. The City of Davis Fire Department responds to incidents including, but not limited to, medical emergencies, fires, hazardous materials conditions, technical rescues, and public assistance.

The Department 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 emergencies within the city. The city is divided into three emergency first-response areas, which provide clearly defined territories for dispatching the nearest fire and EMS personnel and equipment to an emergency. In addition, the Department has an automatic aid agreement with UC Davis, the cities of Woodland, West Sacramento, and Dixon and a mutual aid agreement with all other fire protection agencies in Yolo County and in the State of California.

The Davis Fire Department currently operates three fire stations within the City of Davis:

- Station 31, located at 530 Fifth Street;
- Station 32, located at 1350 Arlington Boulevard; and

- Station 33, located at 425 Mace Boulevard.

Station 33 is located in the vicinity of the project site, approximately ½ mile to the southeast. In 2018, the total number of emergency incidents responded to by the Davis Fire Department was 5,447. Currently, the City of Davis Fire Department is staffed by 36 shift personnel (nine captains and 27 firefighters). The shift personnel are divided into three shifts, with each shift working a 24-hour workday. Department apparatus inventory consists of three engines, two squads, two grass/wildland units, one water tender, two reserve engines, three command vehicles, two fire prevention staff vehicles, and two antique fire apparatus. The Davis Fire Department does not have a ladder truck. For all incidents in the City of Davis requiring the response of a ladder truck, Truck 34 from the UC Davis Fire Department is dispatched to assist.[39]

The City relies on a total response time goal of responding to calls for service within 6:00 minutes for EMS calls and 6:20 minutes for fire calls, 90 percent of the time, consistent with the National Fire Protection Agency (NFPA) 1710. The 6:20 minute response time goal for fire calls and NFPA 1710 were adopted by City Council in January 2013.[40]

The proposed project would develop a one-story office and manufacturing facility within infill area of the city. It does not include any additional residential units or people in the City of Davis. The proposed project would result in development of a land use and the addition of structures that are consistent with Davis General Plan land use designation for the site. The proposed project would not require additional substantial demands for fire protection services from the City of Davis Fire Department as the project is within the expected infill development goals of the City and the project would be constructed in compliance with current safety standards. Additionally, the proposed project would not result in a need to construct a new fire station or physically alter an existing fire station. The Fire Department would receive development impact fees from the project applicant for capital improvements and infrastructure costs, although a new facility would not be created. The fair share funds are intended to pay for a project's financial impacts on fire protection service. Therefore, the proposed project would have a **less-than-significant** impact relative to fire protection.

Response b): Less than Significant. The City of Davis Police Department would provide police protection services to the project site. Currently, the Davis Police Department provides law enforcement and police protection services throughout the

[39] City of Davis Fire Department. About DFD. 2022. Available at: https://www.cityofdavis.org/city-hall/fire-department/about-dfd.
[40] City of Davis. Davis City Council Hearing Minutes. January 29, 2013.

city. The Davis Police Department (DPD) is located at 2600 Fifth Street, approximately ¾ miles west of the project site. The DPD is a municipal law enforcement agency, currently staffed with 61 sworn police officers, 34 civilian support professionals, and over 40 volunteers.[41] The DPD provides professional law enforcement, maintenance of public order and safety, crime prevention planning, and coordination services that contribute to discouraging criminal behavior and enhancing community livability and sustainability.

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 & Communications Division: The Records & 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.

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. UC Davis also maintains an on-campus police department that has a mutual aid agreement with the City for major incidents.

The proposed project develops an office and manufacturing facility within a undeveloped area. It does not include any additional residential units or people in the City of Davis. The proposed project will not result in significant intensification of land use, although the site will be developed and include structures, but the proposed use and development is consistent with the current General Plan land use designation. No significant additional demand for police protection will be created by the project. Implementation of the proposed project would not require additional demands for police protection services from the City of Davis Police Department.

Additionally, the proposed project would not result in a need to construct a new police station or physically alter an existing police station. The City's development impact fees for capital improvements and infrastructure costs would be collected. The fair

[41] City of Davis Police Department. Annual report 2021. Available at: https://www.cityofdavis.org/home/showpublisheddocument/17627/637884777031670000.

share funds are intended to pay for project financial impacts on police protection service

Therefore, consistent with the General Plan EIR conclusion related to governmental facility impacts resulting from General Plan build-out, the project would have a **less-than-significant impact** regarding the need for the construction of new police protection facilities which could cause significant environmental impacts.

Response c): No Impact. The proposed project is an office and manufacturing use. No residential uses are proposed as part of the project, and no students would be generated by the proposed project. Therefore, the proposed project would have **no impact** on school facilities.

Response d): No Impact. The proposed project does not include any residential units and would not result in an increase in the population of the city. While new employees would be onsite, the proposed project would have onsite employee amenities such as benches, green space, and a half basketball court. Existing bike trails to the west and north are within close proximity to the project site and could be used by site employees. The proposed project would not significantly increase the use of existing park facilities and would not result in the need for the construction of new or expanded facilities. Therefore, the proposed project would have a **less-than-significant** impact relative to park facilities.

XVI. RECREATION

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less-than-significant impact*	*No Impact*
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a-b): Less than Significant. The proposed project does not include any residential units or any other type of use that would increase the population, or park and recreation facility demand in the area, or include any other type of use that would directly increase the use of park and recreation facilities. While new employees would be onsite, the proposed project would have onsite employee amenities such as benches, green space, and a half basketball court. Existing bike trails to the west and north are within close proximity to the project site and could be used by site employees. The proposed project would not significantly increase the use of existing park or recreation facilities and would not result in the need for the construction of new or expanded facilities. Therefore, the proposed project would have a **less-than-significant** impact relative to recreation facilities.

XVII. TRANSPORTATION -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less-than-significant impact*	*No Impact*
a) Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		X		
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?		X		
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a), b): Less than Significant with Mitigation. The project would be constructed in the northeast quadrant of the 2nd Street / Faraday Avenue intersection. Three driveways are proposed to provide access to the project site: one on 2nd Street about 600 feet east of Faraday Avenue, and two driveways along Faraday Avenue. A driveway about 250 feet north of 2nd Street would provide access to employee parking while a driveway at the end of the proposed cul-de-sac would provide access to additional employee parking, the yard, and the testing area of the site. The driveway entrances and internal roadways would allow fire department access around the entire site. The Traffic Impact Analysis prepared for the project can be found in Appendix G.

Vehicle Miles Traveled Analysis

Vehicle Miles Traveled (VMT) refers to the amount and distance of vehicle travel attributable to a project. VMT generally represents the number of vehicle trips generated by a project multiplied by the average trip length for those trips. For CEQA transportation impact assessment, VMT shall be calculated using the origin-destination VMT method, which accounts for the full distance of vehicle trips with one end from the project.

Process. Because the City of Davis has not yet adopted guidelines for addressing VMT impacts for land development projects in compliance with CEQA Guidelines Section 15064.3, guidance provided in the Governor's Office of Planning and Research (OPR) technical directive on CEQA has been employed. The directive addresses several aspects of VMT impact analysis, and is organized as follows:

- **Screening Criteria:** Screening criteria are intended to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study.
- **Significance Thresholds:** Significance thresholds define what constitutes an acceptable level of VMT and what is considered a significant level of VMT requiring mitigation.
- **Analysis Methodology:** These are the procedures and tools for producing VMT forecasts to use in the VMT impact assessment.
- **Mitigation:** Projects that are found to have a significant VMT impact based on OPR's significance thresholds are required to implement mitigation measures to reduce impacts to a less-than-significant level (or to the extent feasible).

Screening Criteria. Screening criteria can be used to quickly identify whether sufficient evidence exists to presume a project will have a less-than-significant VMT impact without conducting a detailed study. However, each project should be evaluated against the evidence supporting that screening criteria to determine if it applies. Projects meeting at least one of the criteria below can be presumed to have a less-than-significant VMT impact, absent substantial evidence that the project would lead to a significant impact.

The following screening criteria have been reviewed. The extent to which the proposed project qualifies under each criterion is also noted.

- **Small Projects:** Defined as a project that generates 110 or fewer average daily vehicle trips or less than 880 VMT on a typical day.

  Assessment. The proposed project is estimated to generate 511 vehicle trips per day. As this value exceeds the 110-daily-trip threshold, the proposed project does not qualify as a small project under this metric.

  Conclusion. This criterion does not apply to the project.

- **Affordable Housing:** Defined as a project consisting of deed-restricted affordable housing.

  Conclusion. The proposed project is not a residential use. This screening criteria does not apply.

- **Locations Served by High Quality Transit:** Projects within ½ mile of "high quality" transit can be presumed to have a less-than-significant impact on regional VMT. High quality transit is defined as headways of 15 minutes or less.

  Assessment. The proposed project is along the Z line serviced by Unitrans. The Z line operates at one-hour headways and therefore, does not meet the 15-minute headway requirement. The O Line operates a weekend service

within the center of the Davis from the Amtrak station, through 5th Street, and then along 2nd Street adjacent to the project site. The P and Q lines generally operate around the perimeter of the city in counter-clockwise and clockwise directions, respectively. The route is about 0.63 miles from the site and both routes operate at 30-minutes headways; therefore, the current service does not meet the High Quality Transit requirements.

Conclusion. The proposed project is not in an area served by high quality transit.

Overall, the project does not qualify under any screening criterion, and additional assessment is required.[42]

Projects in Low VMT-Generating Area. This evaluation criterion is defined as a residential or office project that is in a VMT efficient area where regional VMT reduction goals are already satisfied. The project must be consistent in size and land use type (i.e., density, mix of uses, transit accessibility, etc.) as the surrounding built environment.

The Sacramento Area Council of Governments (SACOG) has identified regional average VMT throughout the Sacramento region, including the City of Davis. As shown in Figure 6, the project site falls within a Hex that is less than or equal to 115% - 150% of the regional VMT work-tour average. *Low VMT generating locations* within this region, including Davis. The project location within the SACOG region was determined, and the work VMT characteristics of employment-generating projects was identified, as shown in Table 10.

Table 10: VMT Analysis Results

Per Capita VMT			Proposed Project Reduction from Average	Jurisdiction Goal Met?
Jurisdiction Average	15% Reduction Goal	Proposed Project Hex		
32.34	27.49	29.59	9%	No

SOURCE: SACOG, 2021. WORK TOUR VMT HEX MAP. AVAILABLE: HTTPS://SB743-SACOG.OPENDATA.ARCGIS.COM/. ACCESSED NOVEMBER 1, 2022.

The SACOG jurisdiction average work VMT per job is 32.34 vehicles miles per day. The location containing the Faraday Avenue project has a rate of 29.59. The OPR recommended goal would be a 15% reduction from the regional average, or 27.49. Thus, the project is not located in a defined Low VMT generating region, and the project's impact cannot be presumed to be less than significant under this screen line criteria.

[42] KD Anderson & Associates, Inc. Traffic Impact Analysis for 3808 Faraday Avenue Biotech Manufacturing. November 3, 2022.

The project would construct a 107,600 square foot biotech manufacturing facility. Based on the VMT analysis the project is located in a zone that results in a 9% decrease in VMT. This is less than the 15% VMT reduction goal; therefore, the project is considered to have a ***significant impact*** on VMT

Therefore, in order to meet the 15% reduction threshold for the level of significance, the project requires an additional 6% VMT reduction. To reduce the VMT and meet the 15% reduction goal, the following California Air Pollution Control Officers Association (CAPCOA) trip reduction measures[43] are recommended:

T-5, Implement Commute Trip Reduction Program – Voluntary

> This strategy would implement a voluntary Commute Trip Reduction (CTR) program with employers to discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. Using the Greenhouse Gas Reduction Formula shown in the appendix this would result in a 4% reduction. The applicant should consider joining Yolo Commute to enhance the trip reduction program..

T-10, Provide End-of-Trip Bicycle Facilities

> This measure will install and maintain end-of-trip facilities for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle, thereby reducing VMT and GHG emissions. Using the Greenhouse Gas Reduction Formula shown in the appendix this would result in a 2.52% reduction.

Trip Reduction Analysis

Utilizing the first two CAPCOA recommended trip reduction measures, CAPCOA provides the following equations for the implementation of Measure T-5, Implement Commute Trip Reduction Program – Voluntary and Measure T-10, Provide End-of-Trip Bicycle Facilities.

T-5, Implement Commute Trip Reduction Program – Voluntary

The user reduces employee commute VMT by requiring that employers of a project offer a voluntary commute trip reduction program to their employees. Compliance could include joining an established program such as Yolo Commute

[43] California Air Pollution Control Officers Association, 2021. Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity: Designed for Local Governments, Communities, and Project Developers. December. Available: https://www.caleemod.com/documents/handbook/full_handbook.pdf. Accessed: November 1, 2022.

(www.yolocommute.net) as a trip reduction program. The percent of employees eligible is 100 percent, which would reduce GHG emissions from employee commute VMT by 4 percent.

$$A = 100\% \times -4\% = -4\% \text{ GHG Reduction}$$

CAPCOA notes that the percent reduction in GHG emissions would be the equivalent to the percent reduction in VMT. Therefore, with implementation of CAPCOA trip reduction Measure T-5 Implement Commute Trip Reduction Program – Voluntary, VMT percent reductions would be further reduced an additional 4%.

T-10, Provide End-of-Trip Bicycle Facilities Analysis

The user reduces VMT by providing end-of-trip facilities for the project's employees, which encourages bicycle trips in place of vehicle trips. These facilities include parking with showers, bike lockers, and personal lockers, as considered by CAPOCA. The project is within Sacramento-Roseville-Arden-Arcade CBSA, and the user does not have project-specific values for trip lengths and mode shares and for bicycles and vehicles. Per Tables T-10.1 and T-10.2 in Appendix C of the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, inputs for these variables are 2.9 miles, the existing bicycle trip length for all trips in region; 10.9 miles, the existing vehicle trip length for all trips in region; 2.2 percent, the existing bicycle mode share for work trips in region; and 89.5 percent, the existing vehicle mode share for work trips in region. Therefore, GHG emissions from employee commute VMT would be reduced by 2.52 percent.

$$A = \frac{2.9 \text{ miles x } (2.2\% - (4.86 \times 2.2\%))}{10.9 \text{ miles x } 89.5\%} = -2.52\% \text{ GHG Reduction}$$

CAPCOA notes that the percent reduction in GHG emissions would be the equivalent to the percent reduction in VMT. Therefore, with implementation of CAPCOA trip reduction Measure T-10, Provide End-of-Trip Bicycle Facilities, VMT percent reductions would be further reduced an additional 2.52%.

Conclusion

In accordance with CEQA Guidelines Section 15064.3, the traffic analysis for the project evaluated transportation impacts relative to VMT, which is the appropriate metric used to determine the significance of the transportation impacts.

As discussed above, in order to meet the 15% reduction threshold for the level of significance, the project requires an additional 6% VMT reduction. As shown above, Based on CAPCOA trip reduction measures. the implementation of the following Mitigation Measures TRT-1 and TRT-2 would result in a GHG reduction of 6.52%

which would meet the 15% reduction goal. Therefore, the impact is ***less than significant*** with mitigation.

Mitigation Measure(s)

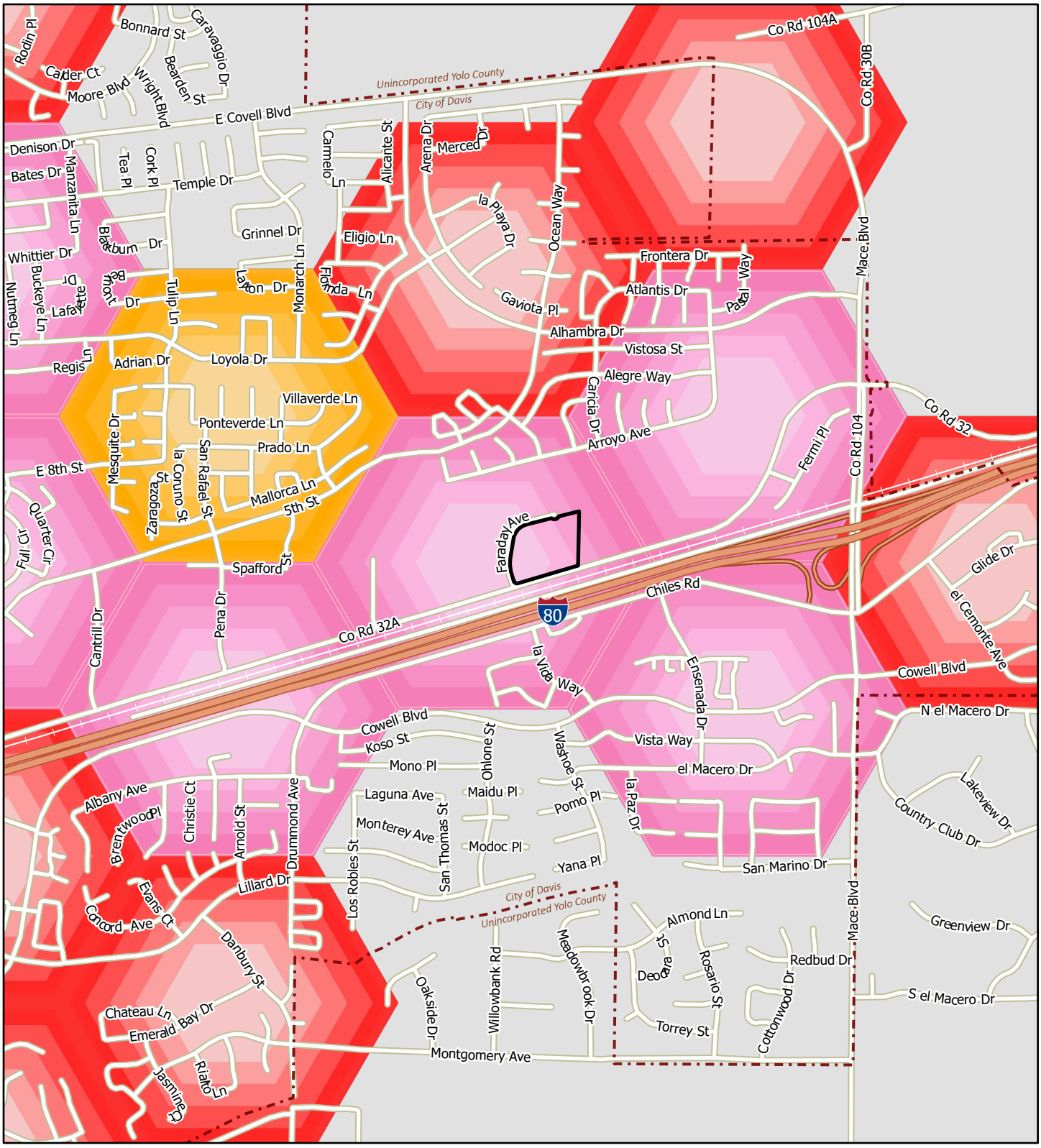
Mitigation Measure TRT-1: *In conjunction with development of the proposed project, the project applicant shall implement CAPCOA Measure T-5, Implement Commute Trip Reduction Program – Voluntary. Compliance could include joining an established program such as Yolo Commute (www.yolocommute.net) as a trip reduction program. The City's Community Development Department must review and approve the proposed program.*

Mitigation Measure TRT-2*: In conjunction with development of the proposed project, the project applicant shall implement CAPCOA Measures T-10, Provide End-of-Trip Bicycle Facilities. The City's Community Development Department shall identify the number of secure bike parking spaces required to ensure end-of-trip facilities are installed at a size proportional to the number of commuting bicyclists.*

Response c): Less than Significant. Existing access to the project site is provided via off 2nd Street and Faraday Ave. One of the access points off Faraday Ave. will be dedicated for normal autos, while the other two will accommodate both normal autos and larger trucks, if required. An emergency vehicle access (EVA) entry would be provided along the west side of the project site, also along 2nd Street.

No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. As mentioned earlier, the project site would provide 161 automobile parking spaces, which is above the minimum requirements of 143 parking spaces required by the City, and would provide both short-term and long-term bicycle parking consistent with the minimum requirements of 15 bicycle parking stations required by the City. Twenty four of the automobile parking spaces are proposed to be Electric Vehicle Charging Stations. The site access, on-site circulation, and parking is adequate. Therefore, the project will not increase hazards due to a geometric design feature or incompatible use. In addition, the project will undergo a comprehensive site plan review by the City. This impact would be **less than significant**.

Responses d): **Less than Significant.** All accesses would be designed to City standards that accommodate turning requirements for fire trucks, facilitating entry by emergency vehicles into the project site. Implementation of the proposed project would have a less-than-significant impact related to emergency access, and would not interfere with an emergency evacuation plan. Therefore, the impact is **less than significant.**



Legend

- Project Boundary

Work VMT (Including work VMT made by external workers)

- <= 50% of Regional Average
- <= 50%-85% of Regional Average
- <= 85%-100% of Regional Average
- <= 100%-115% of Regional Average
- <= 115%-150% of Regional Average
- > 150% of Regional Average

Sources: Yolo County GIS; SACOG Work VMT, updated 5/26/2021. Map date: November 2, 2022.

3808 FARADAY AVENUE
CITY OF DAVIS, CALIFORNIA

Figure 6. Regional Work-Tour VMT Average

0 500 1,000
Feet

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less-than-significant impact*	*No Impact*
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.		X		

BACKGROUND

Assembly Bill 52 (AB 52) requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation. The City of Davis received a request from the Yocha Dehe Wintun Nation, California Native American tribe to be informed through formal notification of proposed projects in the City's geographic area and has requested a site visit to the project area to evaluate cultural concerns. The site visit did not identify any specific tribal concerns with the project site, but included a general concern about the possibility of uncovering cultural resources.

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii): Less than Significant with Mitigation. The City of Davis General Plan and EIR do not identify the site as having prehistoric period cultural resources. Additionally, there are no unique cultural resources known to occur on, or within the immediate vicinity of the project site. The site has previously been used for agricultural uses. There are no records of instances of cultural resources or human remains being unearthed on the project site. However, based on the record search conducted by the Northwest Information Center of the California Historical Resources Information System (NWIC file No.:22-0569) (see Appendix B), the project site has the potential for the discovery of prehistoric, ethnohistoric, or historic archaeological sites that may meet the definition of Tribal Cultural Resources. Although no Tribal Cultural Resources have been documented in the project site, the project is located in a region where cultural resources have been recorded and there remains a potential that undocumented archaeological resources that may meet the Tribal Cultural Resource definition could be unearthed or otherwise discovered during ground-disturbing and construction activities. Examples of significant archaeological discoveries that may meet the Tribal Cultural Resources definition would include villages and cemeteries.

Due to the possible presence of undocumented Tribal Cultural Resources within the project site, construction-related impacts on tribal cultural resources would be potentially significant. Mitigation Measure TRI-1 would require cultural sensitivity training for onsite construction personnel so workers understand what resources to be aware of. Further, Mitigation Measure TRI-2 would require construction activities to stop if a resource is discovered during construction. Mitigation Measures CUL-1 and CUL-2 would further require appropriate steps to preserve and/or document any previously undiscovered resources that may be encountered during construction activities, including human remains. Implementation of these mitigation measures would reduce this impact to a **less-than-significant level**.

Mitigation Measure(s)
Implement Mitigation Measures CUL-1 and CUL-2.

Mitigation Measure TRI-1: *Prior to the initiation of any excavation activities, the developer shall consult with the Yocha Dehe* Wintun *Nation to schedule cultural sensitivity training for all construction personnel through the contact information provided below. Proof of compliance shall be submitted to the City of Davis Department of Community Development and Sustainability.*

CRD Administrative Staff
Yocha Dehe Wintun Nation
Office: (530) 796-3400
Email: THPO@yochadehe-nsn.gov

Mitigation Measure TRI-2: *If cultural resources are discovered during project-related construction activities, all ground disturbances within a minimum of 50 feet of the find shall be halted until a qualified professional archaeologist can evaluate the discovery. The archaeologist shall examine the resources, assess their significance, and recommend appropriate procedures to the lead agency to either further investigate or mitigate adverse impacts. If the find is determined by the lead agency in consultation with the Native American tribe traditionally and culturally affiliated with the geographic area of the project site to be a tribal cultural resource and the discovered archaeological resource cannot be avoided, then applicable mitigation measures for the resource shall be discussed with the geographically affiliated tribe. Applicable mitigation measures that also take into account the cultural values and meaning of the discovered tribal cultural resource, including confidentiality if requested by the tribe, shall be completed (e.g., preservation in place, data recovery program pursuant to Public Resources Code §21083.2[i]). During evaluation or mitigative treatment, ground disturbance and construction work could continue on other parts of the project site.*

XIX. UTILITIES AND SERVICE SYSTEMS -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less-than-significant impact***	***No Impact***
a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), and c): Less than Significant. The following discussion addresses available utility and infrastructure capacity to serve the project site.

New and Expanded Facilities

The proposed project includes improvements on the project site, which would be developed with the addition of a manufacturing facility. The project site has adjacent connectivity to storm water drainage, electric power, natural gas, or telecommunications facilities, with infrastructure available in Faraday Avenue and 2nd Street. The new manufacturing facility would have an incremental demand on existing facilities. However, as the manufacturing facility uses complies with the designated land use of the site and analyzed under existing projections of the buildout of the Davis General Plan Program EIR, it would not add a substantial demand and would not require or result in the relocation or construction of new or expanded storm water

drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects. Therefore, the proposed project would have a **less-than-significant** impact relative any new or expanded facilities.

Wastewater Treatment Plant Capacity

The proposed project would connect to the City's existing wastewater infrastructure in the rights-of-way in the adjacent streets. Wastewater generated at the project site would be conveyed to the City's WWTP for treatment and disposal. The facility is permitted to treat 7.5 million gallons per day (MGD) of wastewater. The existing treatment system design capacity is 6.0 MGD based on average dry weather flow. 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. Now that the Secondary and Tertiary Improvements (STI) Phase of the WWTP upgrade project has been completed, West Yost has estimated that the available ADWF capacity of the WWTP is 1.66 MGD, or 28 percent of design capacity.[44]

The increase in wastewater generated by the proposed project due to development of the site and the employees on the site would be within the City's wastewater capacity, and would not result in exceedance of the design capacity of the WWTP. The current capacity of the WWTP would be sufficient to handle the wastewater flow from the proposed project. In addition, the proposed project is required to pay sewer impact fees, which would contribute towards the cost of future upgrades when needed. As a result, the proposed project would not have adverse impacts to wastewater treatment capacity; it would not result in construction of new wastewater facilities; and it would not require a determination by the wastewater treatment provider about its capacity to serve the project. Therefore, the proposed project would have a **less-than-significant** impact relative to wastewater service and facilities.

Response b): Less than Significant. The following discussion addresses available water supply infrastructure to serve the project site.

Water Supply System

The proposed project would be served by City's water service, which is available for the site, and would connect to the City's existing water distribution infrastructure. . The water comes from the City's existing and future portfolio of water supplies. The City of Davis has prepared an Urban Water Management Plan (UWMP) that predicts the

[44] West Yost Associates. Impacts of Innovation Center/Nishi Property Development on Wastewater Collection System Capacity. Technical Memorandum. March 25, 2015.

water supply available to the City of Davis in normal, single-dry, and multiple-dry years out to 2045.[45]

The total supply available in 2045 during all scenarios (normal, single-dry, and multiple-dry) well exceeds the projected demand. The future demand projections included in the UWMP are based upon General Plan land uses. The proposed project's use is consistent with the General Plan; therefore, the proposed project's future water demand was considered in the UWMP. As a result, with respect to the availability of sufficient water supplies to serve the project, the impact from the proposed project would be **less than significant**.

The project includes installation of 4-inch and 8-inch water lines within the internal street ROWs which would connect to the existing mains along Faraday and 2nd Street.

Because adequate long-term water supply is available to serve full buildout of the proposed project and the project includes the extension of adjacent water line infrastructure, the project's impact to water supply would be **less than significant**.

Responses d) and e): Less than Significant. Solid waste collection and disposal in the City of Davis (including the project site) is provided by Recology, Inc. Non-recyclable waste generated by the City of Davis is disposed of at the 722-acre Yolo County Central Landfill. This landfill has a permitted maximum disposal of 1,800 tons per day. The total permitted capacity of the landfill is 49,035,200 cubic yards, which is expected to accommodate an operational life of about 68 years (January 1, 2081).[46]

As previously stated, the proposed project would result in the development of a vacant infill parcel. Chapter 32 of the City's Municipal Code sets forth solid waste collection and disposal requirements for residential and commercial customers. It addresses yard waste, hazardous materials, recyclables, and other forms of solid waste, and proposed project would comply with the applicable requirements to separate and divert recyclable and compostable materials. Additionally, the proposed infill development and use is consistent with the current General Plan and zoning for the site and no significant additional demand for landfill or other waste facilities would be created by the project's operations as an office and manufacturing facility.

The project site is vacant and there would be no demolition of any existing structures. However, limited amounts of solid waste could be generated during the construction phase of the project, but this would be temporary, would not be in substantial amounts, and would not interfere with a waste facility's permitted capacity. Project construction is required to comply with applicable state and local requirements, including those

[45] City of Davis. Urban Water Management Plan. June 15, 2021.
[46] CalRecycle. SWIS Facility/Site Summary. Yolo County Central Landfill (57-AA-0001). 2019. Available at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/4033.

pertaining to solid waste, construction waste diversion, and recycling and specifically, Chapter 32 of the City's Municipal Code, which regulates the management of garbage, recyclables, and other wastes and includes diversion requirements for construction waste. Finally, the project would comply with all applicable regulations and would not interfere with any related to solid waste. Therefore, proposed project would have a **less-than-significant impact** relative to solid waste.

XX. WILDFIRE

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

EXISTING SETTING

There are no State Responsibility Areas (SRAs) within the vicinity of the Davis Planning Area. The City of Davis is not categorized as a "Very High" Fire Hazard Severity Zone (FHSZ) by CalFire. Only a few communities within Yolo County have portions categorized as a "Very High" FHSZ by CalFire. Although this CEQA topic only applies to areas within a SRA or Very High FHSZ, out of an abundance of caution, these checklist questions are analyzed below.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less Than Significant. The project site would connect to an existing network of City streets. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts from project implementation would be considered **less than significant** relative to this topic.

Response b): Less Than Significant. The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures,

humidity levels and fuel moisture contents), and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The project site is located in an area that is predominately urban, which is not considered at a significant risk of wildlife. Therefore, impacts from project implementation would be considered **less than significant** relative to this topic.

Response c): Less Than Significant. The project includes development of infrastructure (water, sewer, and storm drainage) required to support the proposed manufacturing facility. The project site is surrounded by existing and future urban development. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project would not require the installation or maintenance of infrastructure that may exacerbate fire risk. Therefore, impacts from project implementation would be considered **less than significant** relative to this topic.

Response d): Less Than Significant. The proposed project would require the installation of storm drainage infrastructure to ensure that storm waters properly drain from the project site and do not result in downstream flooding or major drainage changes. Storm drainage would be conveyed to on-site bio-swales, which would discharge to the City's storm drainage system. The project proposes to include 5 bioretention areas in the throughout the site. Various storm drainage supporting structures and inlets will be located throughout the project site directing the direction of flow into the bioretention areas.

Runoff from the project site currently flows to the existing City storm drains located in Faraway Avenue and 2nd Street. Upon development of the site, stormwater would flow to the on-site bioretention areas and/or the existing storm drains in the adjacent roadways. Additionally, the project site is not located within a FEMA designated flood hazard zone. Furthermore, because the site is essentially flat and located in an existing urbanized area of the city, downstream landslides would not occur.

Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. The project site is relatively flat; therefore, the potential for a landslide in the project site is essentially non-existent.

Overall, impacts from project implementation would be considered **less than significant** relative to this topic.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE --

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

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. Although relatively unlikely, based upon the current land cover types found on-site, special- status wildlife species and/or federally- or state-protected birds not covered under the Yolo HCP/NCCP could be occupying the site. In addition, although unlikely, the possibility exists for subsurface excavation of the site during grading and other construction activities to unearth deposits of cultural significance, resulting in a potentially significant impact. However, this IS/MND includes mitigation measures that would ensure steps would be taken to reduce impacts to historical resources in the event that they are discovered during construction and therefore reduce any potential impacts to less-than-significant levels. Therefore, with implementation of Mitigation Measures CUL-1, CUL-2, TRI-1, and TRI-2, the proposed project would have less-than-significant impacts related to degradation of the quality of the environment, reduction of habitat, threatened species, and/or California's history or prehistory.

Mitigation Measure(s)

Implement Mitigation Measures CUL-1, CUL-2, TRI-1, and TRI-2.

Response b): Less than Significant. The proposed project, in conjunction with other development within the City of Davis, could incrementally contribute to cumulative impacts in the area. However, mitigation measures for all potentially significant project-level impacts identified for the proposed project in this IS/MND have been included that would reduce impacts to less than-significant levels. As such, the project's incremental contribution towards cumulative impacts would not be considered significant. In addition, all future discretionary development projects in the area would be required to undergo the same environmental analysis and mitigate any potential impacts, as necessary. Therefore, the proposed project would not have any impacts that would be cumulatively considerable, and impacts would be **less than significant**.

Response c): Less than Significant. The proposed project site is located within areas of existing and planned development and is consistent with the land use designation for the site. Due to the consistency of the proposed land use, substantial adverse effects on human beings are not anticipated with implementation of the proposed project. It should be noted that during construction activities, the project could result in potential impacts related to soil erosion and surface water quality impacts, and noise. However, building design that meets Building Code requirements and compliance with the recommendations of the required site-specific soils report, which is a standard City requirement prior to construction, would reduce any potential impact. Therefore, impacts related to environmental effects that could cause adverse effects on human beings would be **less than significant**.