City of Dixon
Community Development Department

Dixon Commerce Center Expansion

Initial Study/Mitigated Negative Declaration

April 2022

Prepared by

RANEY PLANNING & MANAGEMENT, INC. 20 years
1501 Sports Drive, Suite A, Sacramento, CA 95834

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Appendices

INITIAL STUDY

A. BACKGROUND

1. Project Title: Dixon Commerce Center Expansion Project

2. Lead Agency Name and Address: City of Dixon
Community Development Department
600 East A Street
Dixon, CA 95620

3. Contact Person and Phone Number: Raffi Boloyan
Community Development Director
(707) 678-7000

4. Project Location: 2299 Commerce Way
Dixon, CA 95620
Assessor Parcel Numbers (APNs) 011-120-010, 011-109-088, -089, -094, and -095

5. Project Sponsor's Name and Address: Nearon
101 Ygnacio Valley Road, Suite 450
Walnut Creek, CA 94595

6. Existing General Plan Designation: Industrial

7. Existing Zoning Designation: Heavy Industrial-Light Industrial-Planned Development (MH-ML-PD)

8. Required City Approvals: Design Review

9. Surrounding Land Uses and Setting:

The Dixon Commerce Center Expansion Project (proposed project) would involve expansion of an existing warehouse building located at 2299 Commerce Way in the City of Dixon, California. It should be noted that Commerce Way was formerly called Kids Way, but underwent a street name change that was approved by the City Council on November 19, 2019 by Resolution 19-027. The overall property consists of five parcels totaling 31.25 acres, identified by APNs 0111-200-100, 0111-090-880, -890, -940, and -950. The property is bound by Vaughn Road to the north and Commerce Way to the east. The Atkinson Court cul-de-sac is located near the southwestern corner of the site. The 20.95-acre northernmost parcel (APN 011-120-100) is currently developed with an existing 427,042-square-foot (sf) warehouse building and associated parking lot areas with a total of 229 parking stalls. The 1.46-acre parcel located in the central portion of the overall property (APN 011-109-089), along the eastern property line, currently contains a detention basin. The remaining parcels (APNs 0111-090-880, -940, and -950) located south of the existing warehouse consist of 8.84 acres and currently contain a concrete slab, a ruderal field that is regularly mowed and disked, and a gravel road that extends from the Atkinson Road cul-de-sac to the detention basin.

Existing surrounding land uses include undeveloped land to the north, across Vaughn Road; undeveloped land, a ground-mounted photovoltaic (PV) array, and industrial uses to the east, across Commerce Way; an off-site ephemeral drainage channel and industrial uses to the south; and light industrial uses to the west. The City of Dixon's (City) General Plan designates the site as Industrial. According to the City's Zoning Map, the site is zoned MH-ML-PD.

10. Project Description Summary:

    The proposed project would involve expansion of the existing warehouse and associated improvements. The expansion would add 125,712 sf of new warehouse space to the southern portion of the existing warehouse. The majority of the proposed development would occur on the southernmost parcels, including removal of the existing concrete slab, construction of the expanded building area, and addition of parking areas. In addition, limited site improvements are proposed within the 20.95-acre developed northernmost parcel, including removal of the parking lot along the southern border of the existing warehouse, new pavement and bioretention areas along the western border of the existing warehouse, minor improvements to the existing parking lot area southeast of the existing warehouse, and minor utilities improvements. The proposed project would add 223 net new parking stalls to the project site, resulting in an overall total of 452 vehicle parking stalls. In addition, 87 new semi-trailer parking stalls would be provided along the southern portion of the project site.

11. Status of Native American Consultation Pursuant to Public Resources Code (PRC) Section 21080.3.1:

    In compliance with Assembly Bill (AB) 52 (PRC Section 21080.3.1), a project notification letter was distributed to the Cachil Dehe Band of Wintun Indians of the Colusa Indian Community, Cortina Rancheria – Kletsel Dehe Band of Wintun Indians, and the Yocha Dehe Wintun Nation. The letters were distributed on August 5, 2021. The Yocha Dehe Wintun Nation submitted a response on August 18, 2021 requesting formal consultation with the lead agency, and, as such, the City, as the lead agency, initiated consultation with the tribe. Based on the information subsequently provided, the Yocha Dehe Wintun Nation indicated that the tribe is not aware of any known cultural resources near the project site and a cultural monitor is not needed. However, the tribe recommends cultural sensitivity training for any pre-project personnel (Mitigation Measure XVIII-1).

B. SOURCES

All the technical reports and modeling results used for the purposes of this analysis are available upon request at the City of Dixon Community Development Department, located at 600 East A Street, Dixon, California. The following documents are referenced information sources utilized by this analysis:

1. California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
2. California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. Available at: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2030sp_pp_final.pdf. Accessed November 2020.

3. California Building Standards Commission. *California Green Building Standards Code*. Available at: https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen. Accessed June 2021.
4. California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/dlrp/ciff/app/. Accessed June 2021.
5. California Department of Forestry and Fire Protection. *Solano County: Fire Hazard Severity Zones In SRA*. Available at: https://osfm.fire.ca.gov/media/6817/fhszs_map48.pdf. Accessed June 2021.
6. California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: https://dtsc.ca.gov/dtscs-cortese-list. Accessed June 2021.
7. California Department of Transportation. *Scenic Highways*. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed June 2021.
8. California Energy Commission. *California Energy Commission 2019 Building Energy Efficiency Standards What's New for Nonresidential*. Available at: https://www.energy.ca.gov/media/3455. Accessed June 2021.
9. California Energy Commission. *Title 24 2019 Building Energy Efficiency Standards FAQ*. November 2018.
10. California State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=dixon%2C+ca. Accessed October 2021.
11. California State Water Resources Control Board. *Phase II Small Municipal Separate Storm Sewer System (MS4) Program*. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.html. Accessed October 2021.
12. Caltrans. *2017 Traffic Volumes: Route 103-116*. 2017.
13. City of Dixon. *Emergency Operation Plan*. Available at: http://dixon-ca.granicus.com/MetaViewer.php?view_id=2&clip_id=697&meta_id=52675. Accessed June 2021.
14. City of Dixon. *General Plan 2040*. Adopted May 18, 2021.
15. City of Dixon. *General Plan 2040 Final Environmental Impact Report*. Certified May 18, 2021.
16. City of Dixon. *2016 Water System Master Plan and Strategic Asset Management Plan*. Available at: https://www.cityofdixon.us/departments/Water/WaterSystemMasterPlan. Accessed October 2021.
17. Federal Emergency Management Agency. *Flood Insurance Rate Maps 06095C0200F, effective August 2, 2012*. Available at: https://msc.fema.gov/portal/home. Accessed June 2021.
18. Live Oak Associates, Inc. *Dixon Commerce Center Expansion Project Biological Evaluation Report*. October 7, 2021.
19. Pappani, Nick, Vice President, Raney Planning and Management, Inc. Personal Communication [email] with Nick Rini, Senior Vice President, Nearon Enterprises. September 20, 2021.
20. Par Environmental Services, Inc. *Negative Archaeological Survey Report For 2299 Commerce Way, Solano County, California*. August 2011.
21. TJKM. *Technical Memorandum: Dixon Commerce Center Expansion VMT Analysis*. August 11, 2021.
22. Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [pg. 14]. July 11, 2007.
23. Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [pg. 21]. July 11, 2007.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "less-than-significant with mitigation" as indicated by the checklist on the following pages.

☐ **Aesthetics**	☐ **Agriculture and Forest Resources**	☐ **Air Quality**
✖ **Biological Resources**	✖ **Cultural Resources**	☐ **Energy**
✖ **Geology and Soils**	☐ **Greenhouse Gas Emissions**	☐ **Hazards and Hazardous Materials**
☐ **Hydrology and Water Quality**	☐ **Land Use and Planning**	☐ **Mineral Resources**
☐ **Noise**	☐ **Population and Housing**	☐ **Public Services**
☐ **Recreation**	✖ **Transportation**	✖ **Tribal Cultural Resources**
☐ **Utilities and Service Systems**	☐ **Wildfire**	☐ **Mandatory Findings of Significance**

D. DETERMINATION

On the basis of this initial study:

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

✖ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. 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" 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 pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

April 8, 2022
Date

Raffi Boloyan, Community Development Director
Printed Name

City of Dixon
For Dixon Commerce Center Expansion Project

E. BACKGROUND AND INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) identifies and analyzes the potential environmental impacts of the proposed project. The information and analysis presented in this document is organized in accordance with the order of the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines. Where the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures are prescribed. The mitigation measures prescribed for environmental effects described in this IS/MND will be implemented in conjunction with the project, as required by CEQA. The mitigation measures will be incorporated into the proposed project through project conditions of approval. The City will adopt findings and a Mitigation Monitoring/Reporting Program for the project in conjunction with approval of the project.

The City of Dixon adopted the General Plan 2040[1] (General Plan) and certified the General Plan 2040 Environmental Impact Report[2] (General Plan EIR) on May 18, 2021. The General Plan EIR was prepared as a program-level EIR, pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations [CCR], Sections 15000 et seq.). The General Plan EIR analyzed the proposed General Plan and Alternatives. Information for the environmental setting discussions for each section of this IS/MND is largely based on information in the General Plan and General Plan EIR.

According to PRC Section 21083.3(b), if a development project is consistent with the general plan of a local agency and an EIR was certified with respect to that general plan, the analysis of that development project shall be limited to effects on the environment which are peculiar to the parcel or to the project and which were not addressed as significant effects in the prior EIR, or which substantial new information shows will be more significant than described in the prior EIR. Therefore, this IS/MND is limited to the effects peculiar to the parcel and not addressed as significant in the City's General Plan EIR.

F. PROJECT DESCRIPTION

The following section includes a description of the proposed project location and surrounding land uses, as well as a discussion of the project components and necessary discretionary actions.

Project Location and Setting

The proposed project would involve expansion of an existing warehouse building located at 2299 Commerce Way in the City of Dixon, California (see Figure 1 and Figure 2). The overall property consists of five parcels totaling 31.25 acres, identified by APNs 0111-200-100, 0111-090-880, -890, -940, and -950. The property is bound by Vaughn Road to the north and Commerce Way to the east. The Atkinson Court cul-de-sac is located near the southwestern corner of the site. The 20.95-acre northernmost parcel (APN 0111-200-100) is currently developed with an existing 427,042-sf warehouse building and associated parking lot areas with a total of 229 parking stalls. On June 9, 2020, the Dixon Planning Commission, with Resolution 2020-014, approved the lifting of the existing roof and creating a uniform roof peak height of 49 feet, two inches. The warehouse is used for typical warehouse and distribution functions. The 1.46-acre parcel located in the central portion of the overall property (APN 0111-090-890), along the eastern property line, currently contains a detention basin. The remaining parcels (APNs 0111-090-880, -940, and -950) located south of the existing warehouse consist of 8.84 acres and currently contain a concrete slab, a ruderal field that is regularly mowed and disked, and a gravel road that extends from the Atkinson Road cul-de-sac to the detention basin.

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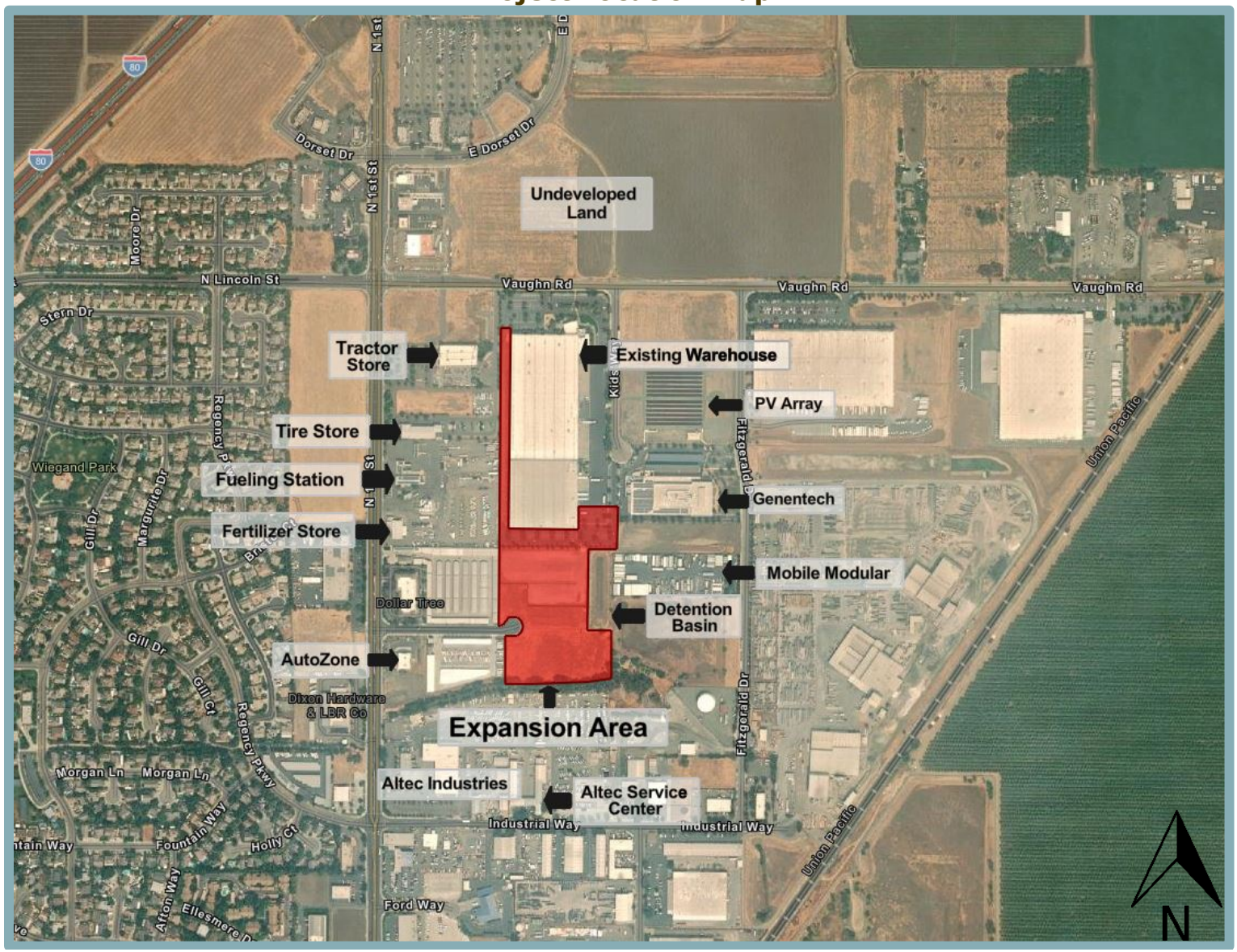
1 City of Dixon. *General Plan 2040*. Adopted May 18, 2021.
2 City of Dixon. *General Plan 2040 Final Environmental Impact Report*. Certified May 18, 2021.

Figure 1
Regional Vicinity Map

Figure 2
Project Location Map



Existing surrounding land uses include undeveloped land to the north, across Vaughn Road; undeveloped land, a ground-mounted PV array, corporate offices for biotechnology company Genentech, and trailer rental company Mobile Modular to the east, across Commerce Way; an off-site ephemeral drainage channel, manufacturer Altec Industries, and truck repair shop Altec Service Center to the south; and undeveloped land, a Tractor Supply Co. store, Les Schwab Tire Center shop, Shell fueling station, John Taylor Fertilizers retailer, Atkinson Self Storage center, Dollar Tree, and AutoZone retail store to the west. The City of Dixon's (City) General Plan designates the site as Industrial. According to the City's Zoning Map, the site is zoned MH-ML-PD.

Project Components

The proposed project consists of an expansion of the existing warehouse, which would add 125,712 sf of new warehouse space to the southern portion of the existing warehouse. The majority of the proposed development would occur on the southernmost portion of the property, including removal of the existing concrete slab, construction of the expanded building area, and addition of parking areas. Similar to the current use of the existing warehouse, the proposed expansion would be used for typical warehouse and distribution functions. The project would also involve limited site improvements within the 20.95-acre developed northernmost parcel, including removal of the parking lot along the southern border of the existing warehouse, new pavement and bioretention areas along the western border of the existing warehouse, minor improvements to the existing parking lot area southeast of the existing warehouse, and minor utilities improvements (see Figure 3, Figure 4, and Figure 5). The proposed project would add 223 net new parking stalls to the project site, resulting in an overall total of 452 vehicle parking stalls. In addition, 87 new semi-trailer parking stalls would be provided along the southern portion of the project site.

Access, Circulation, and Parking

Access to the project site would be provided by way of Vaughn Road to the north, Commerce Way to the east, and Atkinson Court to the west. An existing driveway provides access to the existing warehouse facility from Vaughn Road along the northern property boundary. Two existing points of ingress/egress are located along Commerce Way, with the northern ingress/egress providing access to the northern parking lot and the southern ingress/egress providing a gated entrance for trucks. Atkinson Court, which intersects with North First Street/State Route (SR) 113 to the west of the project site, currently ends in a curbed cul-de-sac at the project site's western property line. With implementation of the proposed project, Atkinson Court would be modified to provide a point of ingress/egress for vehicles to access the new parking lots in the western and southern portions of the project site.

In addition, the proposed project would modify the site's existing parking lots and add new parking areas. Specifically, the parking lot immediately south of the existing warehouse building would be removed to accommodate the building expansion area and the parking area southeast of the existing warehouse building would remain, with minor improvements proposed such as removal of median islands (see Figure 3). New paving for parking stalls and a drive aisle would be provided along the western border of the existing warehouse and south to the Atkinson Court cul-de-sac (see Figure 5). After implementation of the proposed project, a total of 452 parking stalls would be provided on the site, which is a net increase of 223 parking spaces from existing conditions. A total of 12 spaces would be reserved for electric vehicles (EVs). Four of the new parking spaces would be Americans with Disabilities Act (ADA) accessible, for a total of 11 ADA-accessible spaces on the property, one of which would also allow for EV charging. The southern parking lot would include 87 semi-trailer parking stalls.

Figure 3
Existing Condition and Demolition Plan

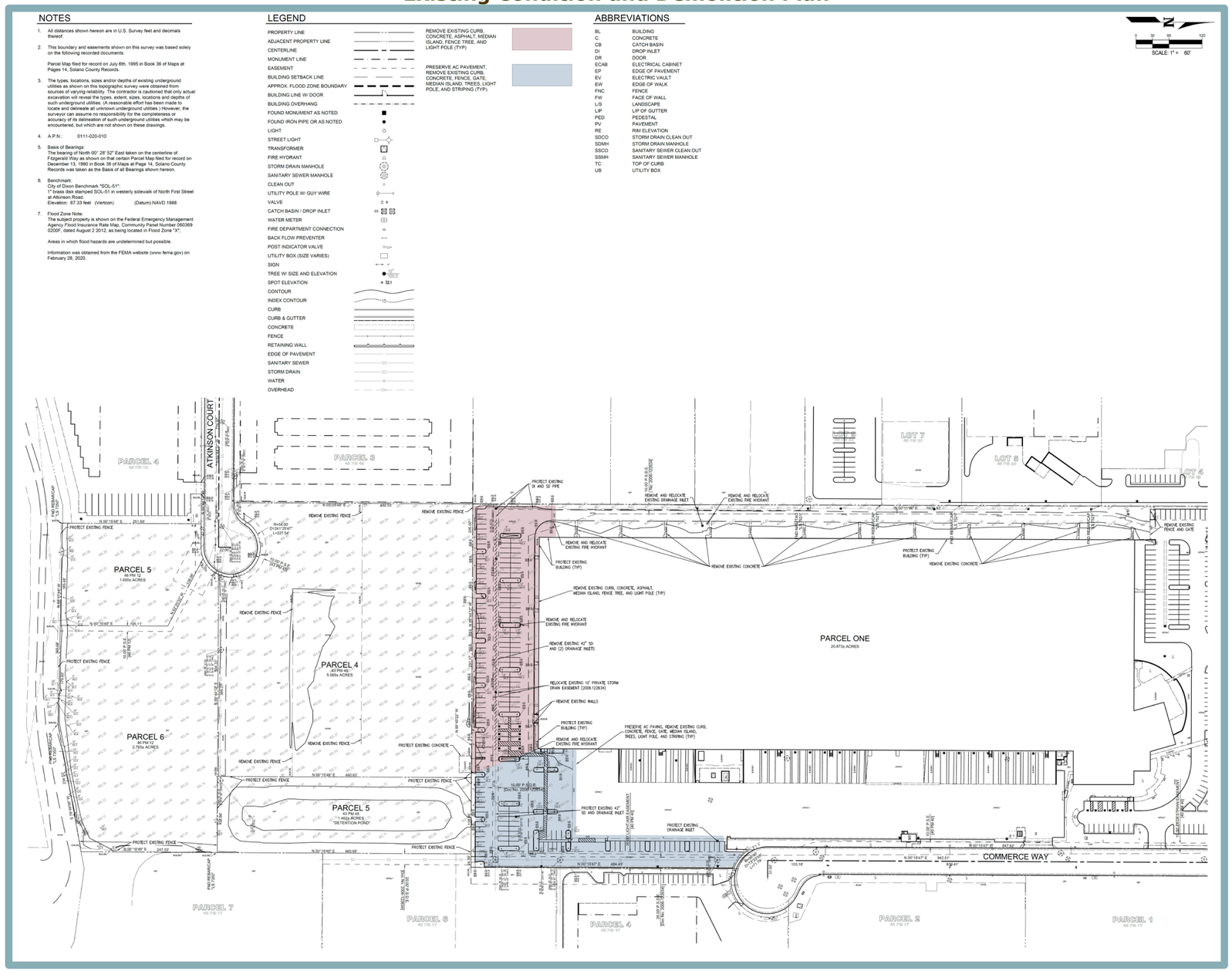


Figure 4
Site Plan and Preliminary Utility Plan

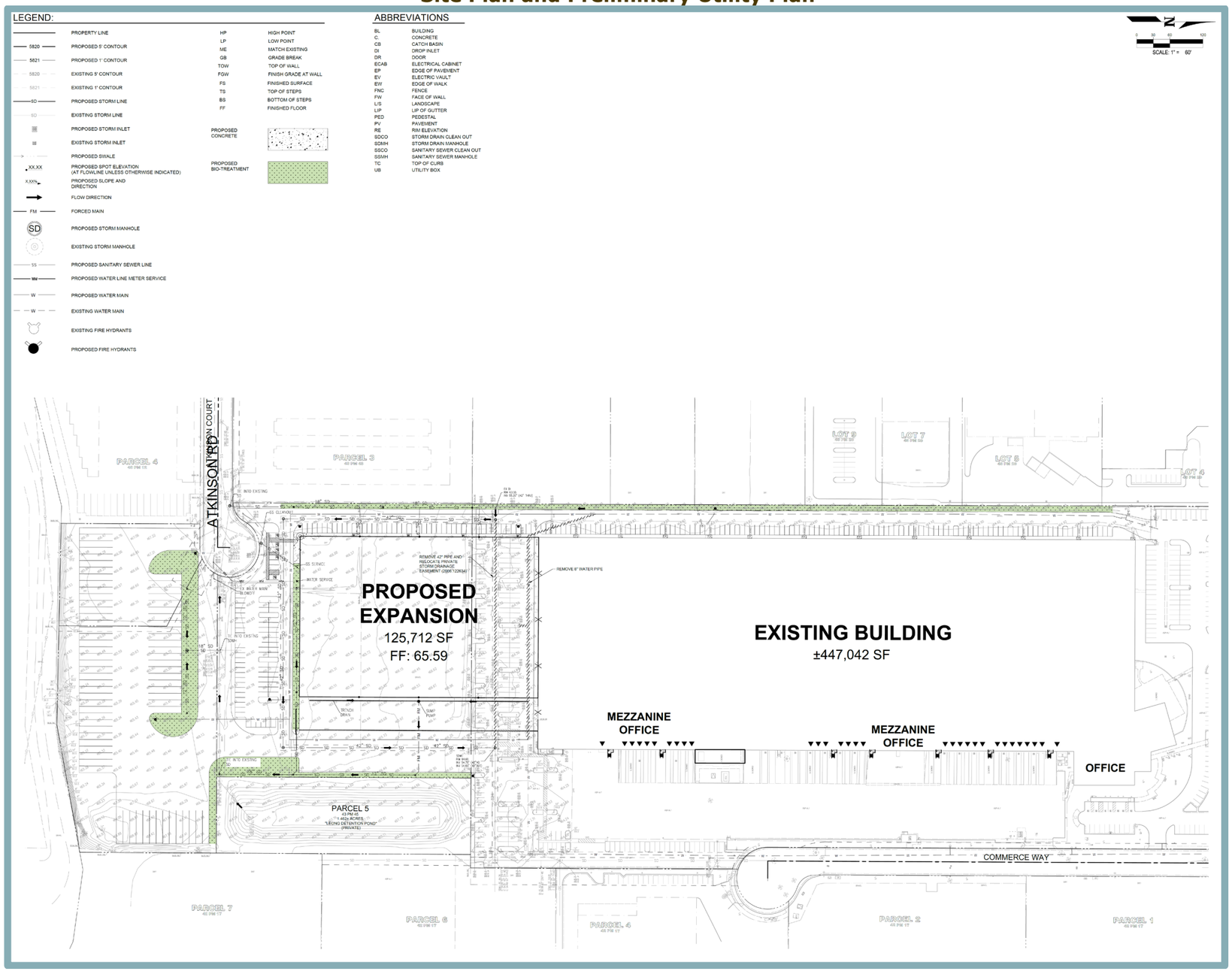
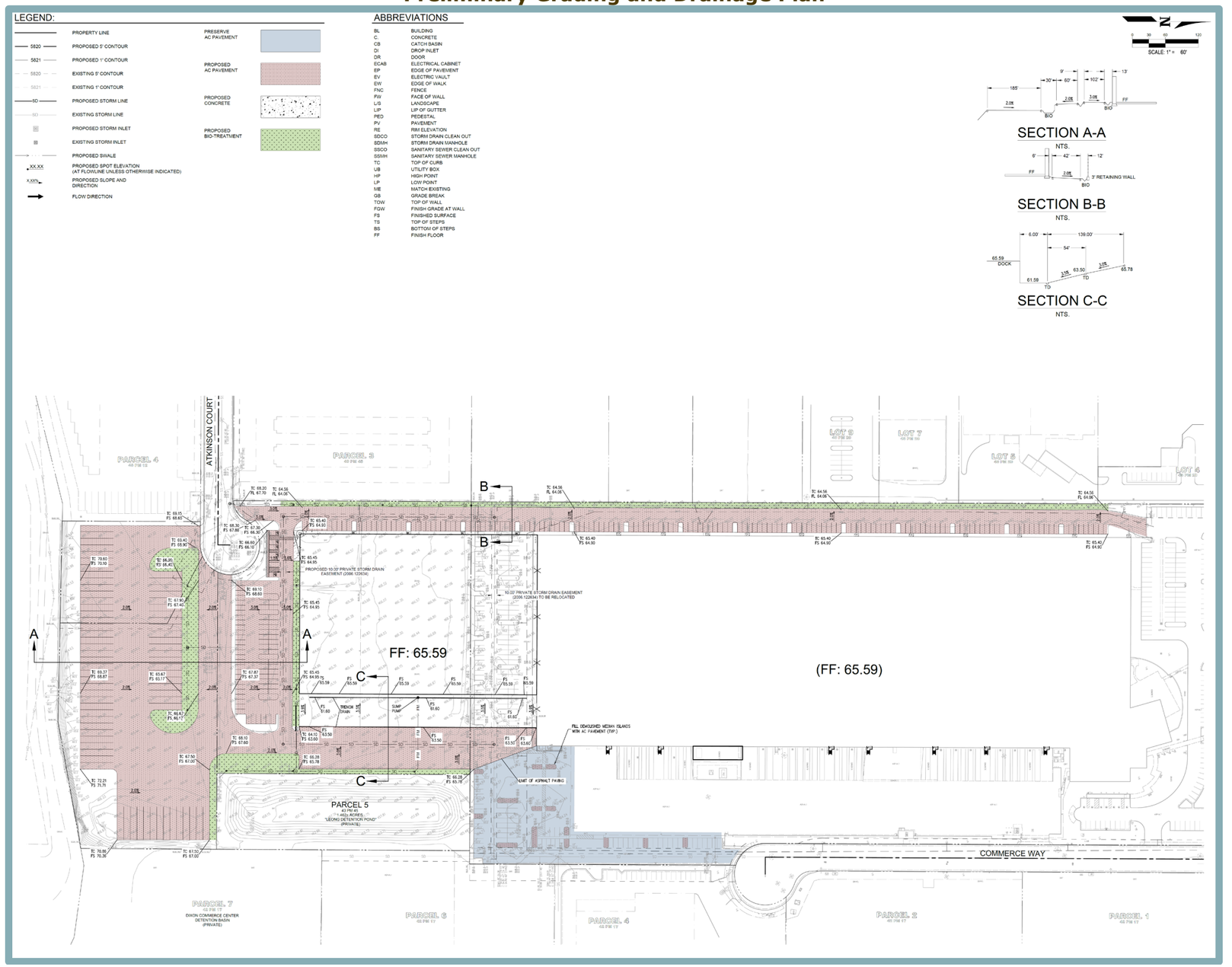


Figure 5
Preliminary Grading and Drainage Plan



The parking design of the project site would comply with Section 18.27.070 of the City's Municipal Code, which pertains to off-street parking space requirements.

Utilities

The City currently provides water to the project site. The proposed warehouse expansion area would connect to the existing infrastructure on the site for provision of services. Specifically, an existing 12-inch water main is located within Vaughn Road immediately to the north of the project site, from which the existing warehouse receives water (see Figure 4). As part of the proposed project, a new eight-inch water line would connect to the existing water infrastructure at the building's southwest corner.

The City currently provides sewer service to the project site. An existing 12-inch sewer pipeline is located in North First Street/SR 113, to which an existing eight-inch sewer pipeline in Atkinson Court is connected. The pipeline in Atkinson Court extends toward the project site and is stubbed at the cul-de-sac. The proposed project would include a connection to the stubbed sewer line, which would extend to the southwest corner of the proposed expanded warehouse (see Figure 4).

The proposed expansion area would consist of six on-site drainage management areas (DMAs), which would encompass 435,290 sf of impervious surfaces, including the new parking area along the western boundary of the warehouse, the new southern parking lot area, and the expanded portion of the warehouse (see Figure 6). In general, each DMA would direct stormwater runoff to a bioretention area that would provide initial stormwater treatment prior to metering the water to new storm drain lines located within each area. The new storm drain lines would connect to existing storm drain infrastructure within the project site. The existing on-site storm drain mains discharge runoff to the City's existing storm drain mains within Vaughn Road to the north of the project site and North First Street/SR 113 to the west of the project site.

Electricity and natural gas would be provided by Pacific Gas & Electric Co. (PG&E) through connections to the existing infrastructure in the project vicinity. Consistent with Section 17.12.120 of the Municipal Code, new electricity and natural gas would be installed underground.

Landscaping

The City's landscaping requirements are set forth in Section 18.33.070 of the Municipal Code. In industrial zoning districts, boundary landscaping is required for a minimum depth of eight feet along all property lines abutting streets, except for areas required for street openings. Additionally, a minimum of five percent of any vehicle storage or parking area must be landscaped. All portions of the building site, exclusive of structures, parking areas, recreational uses, driveway and walkways must also be landscaped. Lastly, at least one street tree is required for each 50 feet of street frontage or fraction thereof. Tree species are encouraged to be from the City's approved street tree list. The proposed project would be subject to all applicable landscaping requirements. As shown in Figure 7, the proposed project would be required to provide at least 34,300 sf of shaded area, but would provide 38,079 sf, which would equal 45.2 percent of the project site being shaded.

Discretionary Actions

Implementation of the proposed project would require discretionary Design Review approval by the City.

Figure 6
Preliminary Stormwater Control Plan

LEGEND

PROPOSED BIO-TREATMENT

PROPOSED IMPERVIOUS

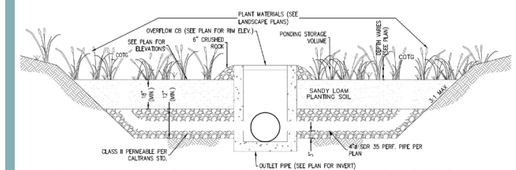
DRAINAGE MANAGEMENT AREA (DMA)

LS LANDSCAPE
PAV PAVEMENT (AC OR CONCRETE)
ST SELF TREATED
BR BIOTREATMENT AREA
(E) EXISTING

STORM WATER CALCULATIONS

Total Site Area:	481730						BIOTREATMENT FACILITIES									
DMA Names	Square Feet	Self-Treating	Self-Retaining	Runoff Factor	Drains to Self-Retaining	Name of Receiving DMA	Facility 1	Facility 2	Facility 3	Facility 4	Facility 5	Facility 6	Facility 7	Facility 8	Facility 9	Facility 10
DMA-1	60232			1		BR-1	60232									
DMA-2	80535			1		BR-2		80535								
DMA-3	84781			1		BR-3			84781							
DMA-4	103925			1		BR-4				103925						
DMA-5	80139			1		BR-5					80139					
DMA-6	25678			1		BR-6						25678				
DMA-7																
DMA-8																
DMA-9																
Total DMAs	435290	0	0		435290		60232	80535	84781	103925	80139	25678	0	0	0	0
						Sizing Factor	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
						Minimum Size	2409.28	3221.4	3391.24	4157	3205.56	1027.12	0	0	0	0
Total Facilities	46440	Step 7: Enter Facilty Footprints				Footprint on Exhibit	14491	4115	3701	13978	7303	2852				
DMAs + Facilities	481730						OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	OK	Step 8: Iterate sizes of facility footprints and DMAs until all footprints are at least the minimum **AND** DMAs + Facilities equals Total Site Area														
		Step 9: Check to make sure Areas Draining to each Receiving Self-Retaining Area do not exceed maximum 2:1 ratio.														
		Step 10: Check results on this spreadsheet are consistent with what is shown on the SCP Exhibit.														

SCALE: 1" = 60'



TYPICAL BIOTREATMENT AREA SECTION

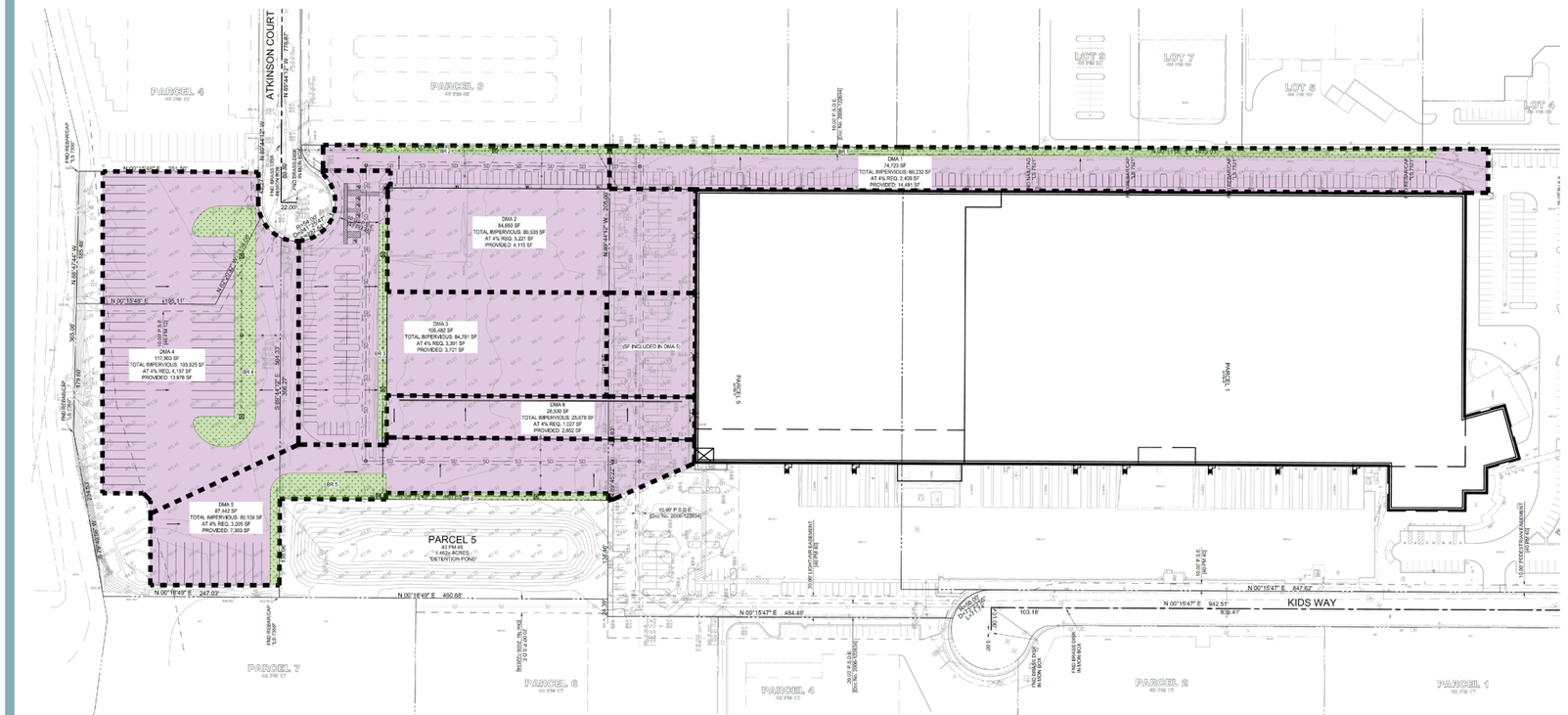
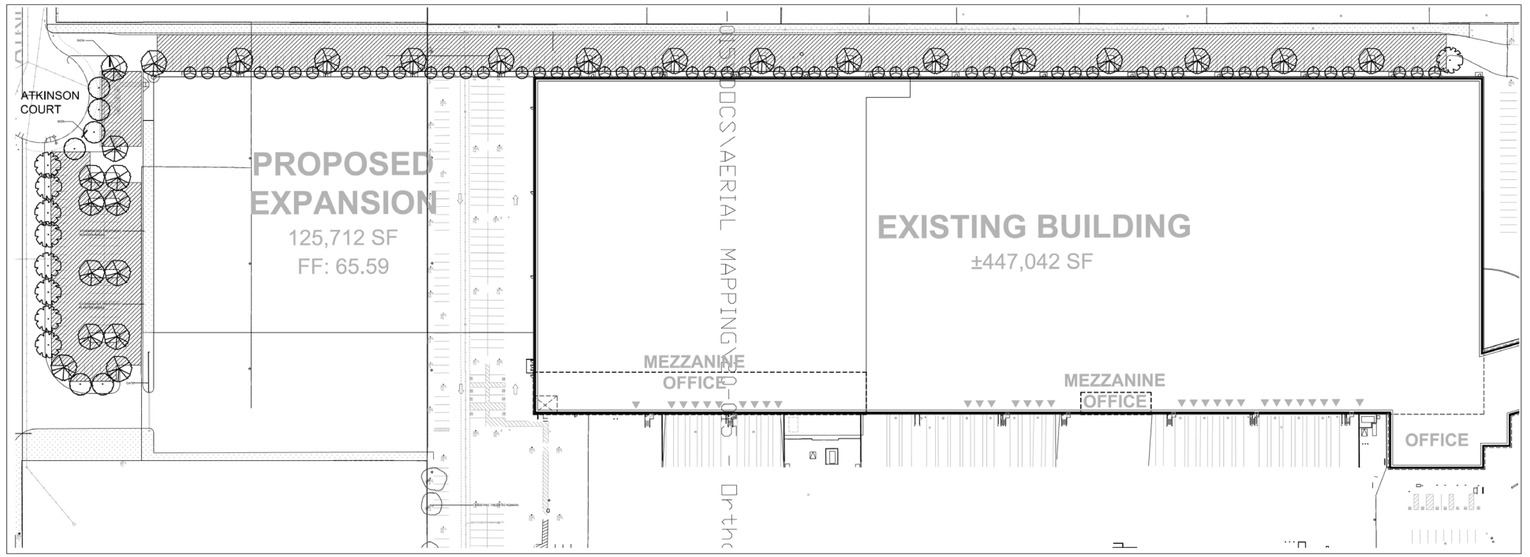
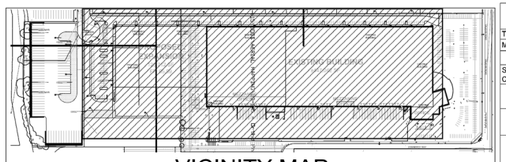


Figure 7
Preliminary Shade Calculations





GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

TREE CANOPY SHADE CALCULATIONS

TOTAL PAVED AREA (SQ. FT.):	85,552
MINIMUM REQUIRED AREA TO BE SHADED (40%)	34,200

SHADE COVERAGE	FULL CANOPY	3/4 CANOPY	1/2 CANOPY	1/4 CANOPY	SQ. FT. TOTAL
LARGE TREES	962 SF	722 SF	481 SF	240 SF	30,545
	20	3	19	0	
SMALL TREES	314 SF	181 SF	157 SF	79 SF	8,164
	0	0	52	0	
			TOTAL SQ. FT. SHADED:		38,709

SHADE REQUIRED (SQ. FT.):	34,200
SHADE PROVIDED (SQ. FT.):	38,709
PERCENT SHADED:	45.2%

ARBORIST REPORT

SITE EXISTING TREES TO REMAIN:

NUMBER	SPECIES	TRUNK DIAMETER (IN.)	PROTECTED TREE	CONDITION 1=POOR 1=EXCELLENT	STABILITY FOR PRESERVATION
250	CALLERY PEAR	9	NO	3	MODERATE
251	CALLERY PEAR	8	NO	3	MODERATE
253	CALLERY PEAR	7	NO	3	MODERATE
254	CALLERY PEAR	9	NO	3	MODERATE
258	CHINESE PISTACHE	6;5;3	NO	3	MODERATE
259	CHINESE PISTACHE	7;7;7;6;6;5;4;4	NO	2	LOW
260	ALMOND	6;3;3;3;3	NO	2	LOW
261	ALMOND	6;6;6;5;5;5;4;4;4	NO	2	LOW
262	ENGLISH WALNUT	6;6;5;4	NO	3	MODERATE
263	ENGLISH WALNUT	7	NO	3	MODERATE
264	CALIF. BLK WALNUT	11	NO	2	LOW
265	ALMOND	6;5;4;2;2	NO	2	LOW
266	ALMOND	8;4;3	NO	3	MODERATE
267	CALIF. BLK WALNUT	42	NO	3	LOW
268	CALIF. BLK WALNUT	16;11;5;4	NO	3	MODERATE
269	CALIF. BLK WALNUT	9	NO	3	MODERATE
270	CALIF. BLK WALNUT	10	NO	2	LOW
271	CALIF. BLK WALNUT	13	NO	2	LOW
272	CALIF. BLK WALNUT	22	NO	2	LOW
273	CALIF. BLK WALNUT	10	NO	3	MODERATE
274	ALMOND	6;4;4;3;3;3	NO	3	MODERATE
275	ALMOND	8;6;4;2;2	NO	2	LOW
276	ALMOND	8;8	NO	2	LOW
277	ALMOND	7;5;3	NO	2	LOW
278	ALMOND	6	NO	2	LOW
279	ALMOND	9;4	NO	2	LOW
280	RIVER RED GUM	15;13;6	NO	2	LOW
281	RIVER RED GUM	9;8;6	NO	2	LOW
282	CALIF. BLK WALNUT	7;2	NO	1	LOW
283	ALMOND	7;7;6;6;4;4	NO	3	MODERATE
284	ENGLISH WALNUT	9;8;7	NO	3	MODERATE

LARGE TREE SHADE REQUIREMENTS

TREES:

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	LARGE MATURE SIZE
	LAGERSTROMEIA F. 'TUSCARORA'	CRAPE MYRTLE	25'Hx25'W	SMALL
	PLATANUS ACERIFOLIA 'COLUMBIA'	PLANE TREE	70'Hx50'W	LARGE
	QUERCUS AGRIFOLIA	COAST LIVE OAK	40'Hx50'W	LARGE
	ULMUS PARVIFOLIA	CHINESE ELM	50'Hx60'W	LARGE

G. ENVIRONMENTAL CHECKLIST

The following Checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures recommended, as appropriate, as part of the proposed project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

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

Discussion

a. Examples of typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. The project site does not include typical scenic vistas.

The City's General Plan does not designate official scenic view corridors or vistas. The Land Use and Community Character Element of the General Plan notes that good visibility of surrounding agricultural lands is a critical element in maintaining the City's agricultural small-town character and that scenic vistas, including views from I-80 and to surrounding fields, keep the City rooted in its history and provide beauty and visual relief. In addition, General Plan Policy LCC-2.8 requires that the City protect and improve scenic vistas in the General Plan Planning Area (land within the City limits and City's Sphere of Influence [SOI]), including views from I-80 and views of surrounding agricultural and open space lands. The project site is not viewable from I-80. Furthermore, the site is bounded by existing development to the north, east, south, and west and would, thus, not block views of agricultural land.

Based on the above information, the proposed project would not have a substantial adverse effect on a scenic vista, and the project would result in ***no impact***.

b. According to the California Department of Transportation's (Caltrans) State Scenic Highway Map, the nearest officially designated State Scenic Highway to the project site is a portion of SR 160, located approximately 17.01 miles to the east.[3] Additionally, the nearest eligible highway for designation as a State Scenic Highway is SR 128, located approximately 8.51 miles to the northwest of the project site. Furthermore, the project site does not include rock outcropping or historic structures. Therefore, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway and the project would result in ***no impact***.

[3] California Department of Transportation. *Scenic Highways*. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed June 2021.

c. The project site is located within an urbanized area of the City, adjacent to existing commercial and/or industrial uses to the east, south, and west, as well as the existing warehouse on the property. Additionally, the property is bound by Vaughn Road to the north and Commerce Way to the east. The proposed project is consistent with the site's General Plan land use designation and zoning districts, as the Industrial designation provides for warehousing, distribution, and storage uses. The MH-ML-PD zone encourages warehouse activities in close proximity to other industrial uses. The proposed project would be subject to all applicable standards established in Chapters 18.15 and 18.16 of the Municipal Code. As such, the proposed project would be required to comply with all applicable regulations and would be subject to review and approval by the City, which would ensure the project would not conflict with applicable zoning and other regulations governing scenic quality; and a ***less-than-significant*** impact would occur.

d. The project vicinity contains numerous existing sources of light and glare associated with existing industrial development and street lights. The proposed warehouse expansion would introduce new sources of light and glare, including, but not limited to, exterior light fixtures, light reflecting off windows, and interior light spilling through windows.

The proposed project would be required to comply with all applicable regulations pertaining to light and glare. Signs associated with the project would be required to comply with the provisions of Section 18.24.040 of the Municipal Code, which prohibits flashing or animated signs in any district. Section 18.28.020 of the Municipal Code forbids all buildings from being occupied or used in a manner that would create glare. Section 18.28.090 of the Municipal Code requires that uses in Industrial zoning districts must not produce glare at or beyond any boundary of the zoning district. Additionally, the function of the City Design Review Commission, as identified in Chapter 18.23 of the City's Zoning Ordinance, is to review the location, design, and intensity of all exterior lighting of new development. The Zoning Ordinance also contains lighting standards for parking facilities. Furthermore, the 2016 California Green Building Standards Code, adopted as Chapter 16.17 of the Dixon Municipal Code, includes a nonresidential mandatory light pollution reduction measure that establishes maximum allowable light and glare standards for outdoor lighting systems for new nonresidential projects.

The General Plan EIR evaluated the potential for development facilitated by buildout of the General Plan Planning Area to result in impacts related to the creation of new sources of substantial light or glare that could adversely affect day or nighttime views and concluded that with compliance with existing regulations and General Plan policies, impacts would be reduced to a less-than-significant level. The proposed project would be required to comply with all applicable policies and regulations, including those discussed above. In addition, General Plan Policy LCC-2.5 requires that the City use the Design Review guidelines in the Design Review process to assess how built characteristics, including scale, materials, hardscape, lights, and landscaping, blend into the surrounding neighborhood. Given that the proposed project would be consistent with the site's General Plan land use designation, buildout of the site with the proposed uses was generally evaluated in the General Plan EIR, and the project would not result in impacts beyond those identified in the General Plan EIR.

Based on the above, through compliance with all applicable policies, regulations, and standards set forth by the City's General Plan and Municipal Code, the proposed project would not introduce new sources of substantial light or glare to the project site that would

adversely affect day or nighttime views in the area, and a ***less-than-significant*** impact would occur.

II. AGRICULTURE AND FOREST RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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 Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	✖
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	✖
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	✖
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	✖
e. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?	☐	☐	☐	✖

Discussion

a,e. According to the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP), the undeveloped southern portion of the project site is designated as "Grazing Land," while the portion of the site that includes the concrete pad and the existing parking lot areas and warehouse building are designated as "Urban and Built-up Land."[4] According to the DOC, common examples of "Urban and Built-up Land" include residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes. "Grazing Land" refers to land on which the existing vegetation is suited to the grazing of livestock. However, it should be noted that, given the project site's existing surrounding land uses and the overall urbanized nature of the project vicinity, the project site is not suited for grazing. Given the site's designations and disturbed nature, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, or otherwise result in the loss of Farmland to non-agricultural use. Therefore, the project would result in ***no impact***.

b. The project site's General Plan land use designation is Industrial and the site is currently zoned MH-ML-PD. As such, neither the site's land use designation nor zoning allows for agricultural uses. The project site is not under a Williamson Act. Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Contract, and the project would result in ***no impact***.

c,d. The project site is not considered forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), and is not zoned Timberland Production (as defined by Government Code Section 51104[g]). As such, the proposed project would

[4] California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/dlrp/ciff/app/. Accessed June 2021.

not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production or result in the loss of forest land or conversion of forest land to non-forest use. Therefore, the project would result in ***no impact***.

III. AIR QUALITY. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	✖	☐
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?	☐	☐	✖	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	✖	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	✖	☐

Discussion

a,b. The City of Dixon is located within the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter ($PM_{2.5}$) and the State particulate matter 10 microns in diameter (PM_{10}) standards, as well as for both the federal and State ozone standards.

The CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. Due to the nonattainment designations, YSAQMD, along with the other air districts in the SVAB region, periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the federal AAQS, including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies.

General conformity requirements of the SIP include whether a project would cause or contribute to new violations of any federal AAQS, increase the frequency or severity of an existing violation of any federal AAQS, or delay timely attainment of any federal AAQS. In addition, a project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the emissions inventories contained in the air quality plan. Emission inventories are developed based on projected increases in population, employment, regional vehicle miles traveled (VMT), and associated area sources within the region, which are based on regional projections that are, in turn, based on General Plans and zoning designations for the region.

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 reactive organic gas (ROG), nitrogen oxide (NO_X), 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 Thresholds	Operational Thresholds
ROG	10 tons/yr	10 tons/yr
NOX	10 tons/yr	10 tons/yr
PM_{10}	80 lbs/day	80 lbs/day

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

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 Version 2020.4.0 (CalEEMod). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including greenhouse gas (GHG) emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, vehicle mix, trip length, average speed, etc. Where project-specific information is available, such information should be applied in the model. Based on information provided by the project applicant, the proposed project's modeling assumed the following:

- Construction would begin in April 2022;
- Construction would occur over an approximately 12-month period;
- During project operations, one forklift and one tractor would run for four hours per day, 150 days per year;
- The proposed project would comply with all relevant provisions of the 2019 California Building Standards Code (CBSC), 2019 CALGreen Code, and Model Water Efficient Landscape Ordinance (MWELO); and
- Project would generate 1.74 trips per 1,000 sf for the 125,712-sf expansion.[5]

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 provided below as well. All CalEEMod results are included in Appendix A to this IS/MND.

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, NO_X, and PM_{10} would be below the applicable YSAQMD thresholds of significance.

[5] Pappani, Nick, Vice President, Raney Planning and Management, Inc. Personal Communication [email] with Nick Rini, Senior Vice President, Nearon Enterprises. September 20, 2021.

Therefore, the proposed project's construction-related emissions would not result in a 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 2
Maximum Project Construction-Related Emissions

Pollutant	Project Emissions	YSAQMD Thresholds of Significance
ROG	0.42 tons/yr	10 tons/yr
NO_X	1.87 tons/yr	10 tons/yr
PM_{10}	21.41 lbs/day	80 lbs/day

Source: CalEEMod, September 2021 (see Appendix A).

Operational Emissions

Based on the modeling parameters presented above, the proposed project's estimated operational-related emissions are presented in Table 3. As shown in the table, the proposed project's operational emissions of ROG, NO_X, 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 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 3
Maximum Project Operational Emissions

Pollutant	Project Emissions	YSAQMD Thresholds of Significance
ROG	0.67 tons/yr	10 tons/yr
NO_X	0.31 tons/yr	10 tons/yr
PM_{10}	1.47 lbs/day	80 lbs/day

Source: CalEEMod, November 2020 (see Appendix A).

Cumulative Emissions

By nature, air pollution is largely a cumulative impact. Thus, the proposed project, in combination with other proposed and pending projects in the region would significantly contribute to air quality effects within the SVAB, resulting in an overall significant cumulative impact. However, any single project is not sufficient enough in size to, alone, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's incremental impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, YSAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds that project's emissions would be cumulatively considerable, resulting in a significant adverse air quality impact to the region's existing air quality conditions. As discussed above, implementation of the proposed project would result in construction-related and operational emissions below YSAQMD's thresholds of significance. Therefore, based on the project's consistency with YSAQMD's thresholds of significance, the proposed project would not be anticipated to result in an incrementally significant contribution to the cumulatively significant impact.

Conclusion

According to YSAQMD, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the air quality plans. Based on the above, the proposed project's criteria pollutant emissions would be below applicable YSAQMD thresholds. 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 or result in a cumulatively considerable net increase in any criteria air pollutant for which the project region is non-attainment, impacts would be considered ***less than significant***.

c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors would be the existing single-family residences located approximately 1,166 feet to the west, as measured from the project site's western boundary to the property line of the nearest residence.

The major pollutant concentrations of concern are localized CO emissions and Toxic Air Contaminant (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of carbon monoxide (CO) are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. The YSAQMD recommends the use of screening thresholds to assess a project's potential to create an impact through the creation of CO hotspots. A violation of the CO standard could occur if either of the following criteria is true of any street or intersection affected by the mitigated project:[6]

- The project would reduce peak-hour level of service (LOS) on one or more streets or at one or more intersections to an unacceptable LOS (typically LOS E or F); or
- The project would increase a traffic delay by 10 or more seconds on one or more streets or at one or more intersections in the project vicinity where a peak hour LOS of F currently exists.

However, as discussed in Section XVII, Transportation, of this IS/MND, the State Legislature passed Senate Bill (SB) 743 with the intention of ultimately doing away with LOS in most instances as a basis for environmental analysis under CEQA. Therefore, LOS information is not available for the proposed project. For the purposes of assessing localized CO emission impacts, the screening criteria for determining a less-than-significant impact related to localized CO concentrations used by the nearby Bay Area Air Quality Management District (BAAQMD) were applied to the proposed project. According

[6] Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [pg. 21]. July 11, 2007.

to the BAAQMD screening levels, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

As discussed in Section XVII, Transportation, of this IS/MND, VMT has become the most appropriate measure of transportation impacts as opposed to LOS levels. The VMT analysis for the proposed project used the most recent version of the Solano-Napa Activity Based Model (SNABM), which was adopted by the Solano Transportation Authority in December 2020. As discussed in further detail in the Transportation section, the proposed project would result in VMT below the Solano County 85 percent threshold baseline of 32.26 VMT per job. Accordingly, the project would be considered consistent with the applicable congestion management program. In addition, based on the Caltrans 2017 Traffic Volumes for North First Street/SR 113, the nearest intersection in the project vicinity, the intersection of North First Street/SR 113 and North Adams Street, has an annual average daily traffic (AADT) rate of 11,700 to 11,300 vehicles per day.[7] Accordingly, the proposed project would not result in an increase in traffic volumes at any intersection to more than 44,000 vehicles per hour. Intersections where vertical and/or horizontal mixing is substantially limited do not exist in the project vicinity; thus, the project would not increase traffic volumes at any such intersection. As such, based on the BAAQMD screening criteria, the proposed project would result in a less-than-significant impact related to localized CO emissions concentrations and would not expose sensitive receptors to substantial concentrations of localized CO.

Toxic Air Contaminants (TACs)

Another category of environmental concern is TACs. The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, gasoline dispensing facilities (GDFs), chrome plating operations, distribution centers, and rail yards. 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 associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

[7] Caltrans. *2017 Traffic Volumes: Route 103-116*. 2017.

The proposed project would involve components that would result in emissions of TACs. In particular, implementation of the proposed project would result in emissions related to project-construction, and the use of heavy-duty diesel trucks to transport goods to and from the site. Each source of TACs is discussed in further depth in the sections below.

Construction Emissions

Construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction would be temporary and would occur over a relatively short duration in comparison to the operational lifetime of the proposed project. Only portions of the site would be disturbed at a time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day rather than continuously at any one location within the expansion and improvements area. Operation of construction equipment within portions of the overall development area would allow for the dispersal of emissions, and would ensure that construction-activity is not continuously occurring in the portions of the project site closest to existing receptors. Due to the temporary nature of construction and substantial distance to the closest sensitive receptors, the project would not result in any one nearby sensitive receptor being exposed to high concentration of DPM for an extended period of time.

During construction, only portions of the site would be disturbed at a time. In addition, per the City's Noise Ordinance, construction activities would be limited to the hours of 7:00 AM and 6:00 PM Monday through Saturday and 9:00 AM through 6:00 PM Sunday. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of Best Available Control Technologies.

Heavy-Duty Diesel Trucks On-site

The proposed project would consist of an expansion of the existing 427,042-sf warehouse, which currently includes the use of heavy-duty diesel trucks. The proposed warehouse expansion would involve an increase in heavy-duty diesel trucks on-site, which would represent a source of DPM. CARB considers distribution centers to be significant sources of DPM due to the high volume of heavy-duty diesel vehicles used in the distribution of goods. As defined by CARB, distribution centers are facilities that serve as a distribution point for the transfer of goods. Such facilities include cold storage warehouses, goods transfer facilities, and inter-modal facilities such as ports that attract an excess of 100 heavy-duty trucks per day.

The proposed project is anticipated to generate a total of 44 additional heavy-duty truck trips daily, which would equate to 22 trucks accessing the site each day. While the additional daily truck trips generated by the proposed project would not be large enough to be considered a significant source of DPM emissions, in combination with the existing operations of the warehouse, project operations could increase the number of heavy-duty trucks accessing the site to over 100 trucks per day. However, research conducted by CARB indicates that DPM is highly dispersive in the atmosphere. According to the CARB Handbook, providing a separation of 1,000 feet substantially reduces DPM concentrations

and public exposure downwind of a distribution center.[8] As stated above, the nearest existing sensitive receptors would be the existing single-family residences located approximately 1,166 feet to the west of the project site. Thus, emissions of DPM from trucks at the project site would be partially dispersed at the nearest sensitive receptors, and the concentration of DPM at the nearest sensitive receptors would be lower than the concentration of DPM at the source of emissions. Therefore, although the proposed project would introduce additional heavy-duty diesel trucks on-site, which could increase the total truck usage associated with the site in excess of 100 heavy-duty trucks per day, the proposed project would not expose the nearest sensitive receptors to significant levels of DPM. In addition, heavy-duty diesel vehicles are prohibited from idling for more than five minutes pursuant to CARB regulations, which would help to further minimize DPM emissions associated with trucks on-site. Therefore, the proposed project would not exacerbate any existing health risks associated with heavy-duty truck activity at the site.

The additional heavy-duty truck traffic generated by the proposed project would, similar to existing conditions, travel along North First Street/SR 113 between the project site and I-80. While sensitive receptors such as single-family residences are located along this segment of North First Street/SR 113, the nearest sensitive receptors are located approximately 450 feet from the roadway, which provides a buffer between the receptors and the truck emissions from trucks traveling along North First Street/SR 113. According to the CARB Handbook, sensitive land uses should avoid being located within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles per day. North First Street/SR 113 in this location would be considered a rural road; however, based on the Caltrans 2017 Traffic Volumes for SR 113, the nearest intersection in the project vicinity, the intersection of North First Street/SR 113 and North Adams Street, has an annual average daily traffic (AADT) rate of 11,700 to 11,300 vehicles per day, which is well below the 50,000 vehicles per day CARB threshold.[9] Therefore, the addition of 44 total daily truck trips generated by the proposed project would not increase traffic volumes along North First Street/SR 113 to more than 50,000 vehicles per day. Furthermore, as shown in Figure 1-1, Decrease in Concentration of Freeway Diesel PM Emissions with Distance, of the CARB Handbook (see Figure 8), the total particle number at sensitive receptors located 450 feet from a freeway is relatively the same as the total particle number at sensitive receptors located at the recommended 500 feet from a freeway.[10] As a result, the proposed project would not expose sensitive receptors along North First Street/SR 113 to significant levels of DPM and, thus, would not be considered to exacerbate any existing health risks associated with heavy-duty truck travel along area roadways.

Given the distance of the nearest sensitive receptors to the project site and North First Street/SR 113, idling regulations, and the dispersive nature of DPM, operation of the proposed project would not be considered a significant source of DPM from heavy-duty vehicles.

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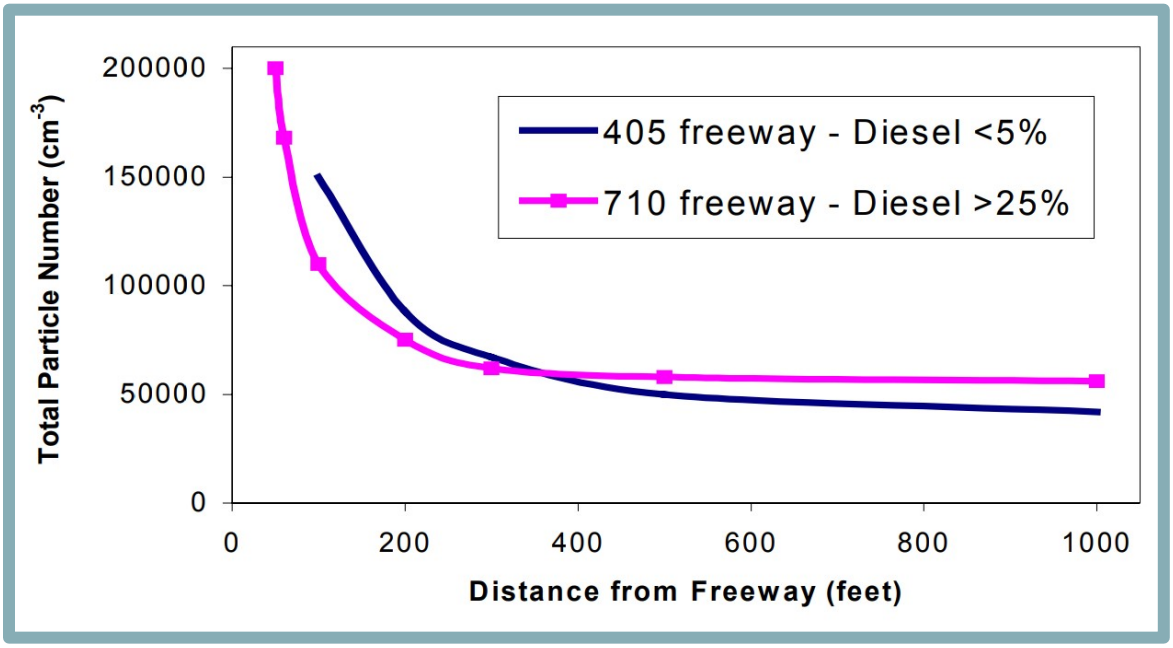
8 California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective* [pg. 14]. April 2005.

9 Caltrans. *2017 Traffic Volumes: Route 103-116*. 2017.

10 California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective* [pg. 9]. April 2005.

Figure 8
Decrease In Concentration of Freeway Diesel PM Emissions With Distance



Source: CARB, Air Quality and Land Use Handbook [Figure 1-1], 2005.

Conclusion

Based on the above discussion, the proposed project would not expose any sensitive receptors to substantial concentrations of localized CO or TACs from construction or operations. Therefore, the proposed project would result in a ***less-than-significant*** impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

d. Emissions of pollutants have the potential to adversely affect sensitive receptors within the project vicinity. Pollutants of principal concern include emissions leading to odors, emissions of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in sections "a" through "c" above. Therefore, the following discussion focuses on emissions of odors and dust.

Odors

According to the YSAQMD, common types of facilities that are known to produce odors include, but are not limited to, wastewater treatment facilities, chemical or fiberglass manufacturing, landfills, auto body shops, composting facilities, food processing facilities, refineries, dairies, and asphalt or rendering plants.[11] While offensive odors rarely inflict physical harm, the YSAQMD notes that odors can still generate considerable distress among the public because of their unpleasant nature, which in turn, potentially leads to citizen complaints to local governments and the YSAQMD. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The presence of an odor impact is dependent on a number of variables, including: the nature of the odor source; the frequency of odor generation; the intensity of odor; the

[11] Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [pg. 14]. July 11, 2007.

distance of odor source to sensitive receptors; wind direction; and sensitivity of the receptor.

The nearest sensitive receptors to the project site are the single-family residences located approximately 1,166 feet to the west. Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary and construction equipment would operate intermittently throughout the course of a day, would be restricted to daytime hours, and would likely only occur over portions of the improvement area at a time. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable YSAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors related to operation of construction equipment. Considering the short-term nature of construction activities, as well as the regulated and intermittent nature of the operation of construction equipment, construction of the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

Operation of the proposed warehouse expansion would involve diesel-fueled trucks. However, as discussed above, the nearest sensitive receptors to the project site are located approximately 1,166 feet to the west. Given the distance, sensitive receptors would not be impacted by any potential odors associated with diesel trucks at the project site. Additionally, trucks traveling to and from the project site would use North First Street/SR 113, which is the designated truck route. In addition, the nearest sensitive receptors to the portion of North First Street/SR 113 along which the project trucks would travel are approximately 425 feet to the east. Furthermore, DPM is highly dispersive. As such, odors related to DPM associated with truck traffic related to the proposed project would be fleeting. A sound wall is also situated between the nearest sensitive receptors and North First Street/SR 113, which would further help to reduce temporary exposure to odors from trucks. Therefore, sensitive receptors to the west of the project site would not be impacted by trucks traveling on North First Street/SR 113.

Dust

All projects within the YSAQMD are required to implement best management practices for dust such as application of water or dust palliatives to exposed surfaces, avoidance of grading activities during periods of high winds, and covering construction-related trucks at the end of the day. In addition, the project would be required to comply with YSAQMD Rule 2.11, Particulate Matter Concentration, and Rule 2.19, Particulate Matter Process Emission Rate, as well as the best management practices (BMPs) for reducing air pollutant emissions associated with the construction and operation of development projects noted in Policy NE-5.3 of the City's General Plan.

Implementation of all applicable YSAQMD rules would ensure that construction of the proposed project would not result in substantial emissions of dust. Following project construction, vehicles operating within the overall property would be limited to paved areas. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

For the aforementioned reasons, construction and operation of the proposed project would not result in emissions (such as those leading to odors and dust) that would affect a substantial number of people, and a ***less-than-significant*** impact would result.

IV. BIOLOGICAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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 Wildlife or U.S. Fish and Wildlife Service?	☐	✖	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	✖	☐
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?	☐	☐	✖	☐
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☐	✖	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	✖	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	✖	☐

Discussion

a,f. The City of Dixon is one of 13 plan participants of the draft Solano Multispecies Habitat Conservation Plan (Solano HCP). Although the Solano HCP is currently in draft form and slated to be finalized in early 2022, the City has voluntarily chosen to participate in the draft Solano HCP and will be responsible for its implementation within the City limits. Moreover, policies within the City's General Plan are consistent with the draft Solano HCP. The draft Solano HCP provides a framework for complying with State and federal endangered species regulations while allowing for covered activities such as new development/conversion of covered specific habitat for urban uses and flood control (i.e., flood control facilities, irrigation channel operations and maintenance). Covered activities also include habitat restoration, monitoring, and relocation of covered species. Covered species under the plan include a total of 36 species, including Swainson's hawk and burrowing owl.

A Biological Evaluation Report (BER) (Appendix B) was prepared for the proposed project by Live Oak Associates, Inc.[12] The BER evaluated the proposed project's potential impacts to on-site special-status plants and wildlife species. An impact would include substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). In addition, raptors (birds of prey), migratory

[12] Live Oak Associates, Inc. *Dixon Commerce Center Expansion Project Biological Evaluation Report*. October 7, 2021.

birds, and other avian species are protected under the Migratory Bird Treaty Act of 1918 (MBTA) and California Fish and Game Code (CFGC) Section 3503.5. The BER's analysis included review of background literature to determine the potential presence of sensitive vegetation communities, aquatic communities, and special-status plant and wildlife species. Resources reviewed include the California Native Plant Society (CNPS) Online Databases, the CDFW's California Natural Diversity Database (CNDDB), manuals and references related to plants and animals of the Solano County region, City General Plan policies and Municipal Code ordinances, and the draft Solano HCP. Additionally, the BER incorporated findings from a field survey conducted of the Study Area, which generally encompassed the area to the south of the parking lot area along the southern border of the existing warehouse building (see Figure 9). The field survey entailed identifying the principal habitats and land uses of the site and their constituent plants and animals. In addition, the survey also involved the assessment of the suitability of the site's habitats/land uses for special-status species. The results of the BER's evaluation of the proposed project's potential to impact special-status species are discussed below.

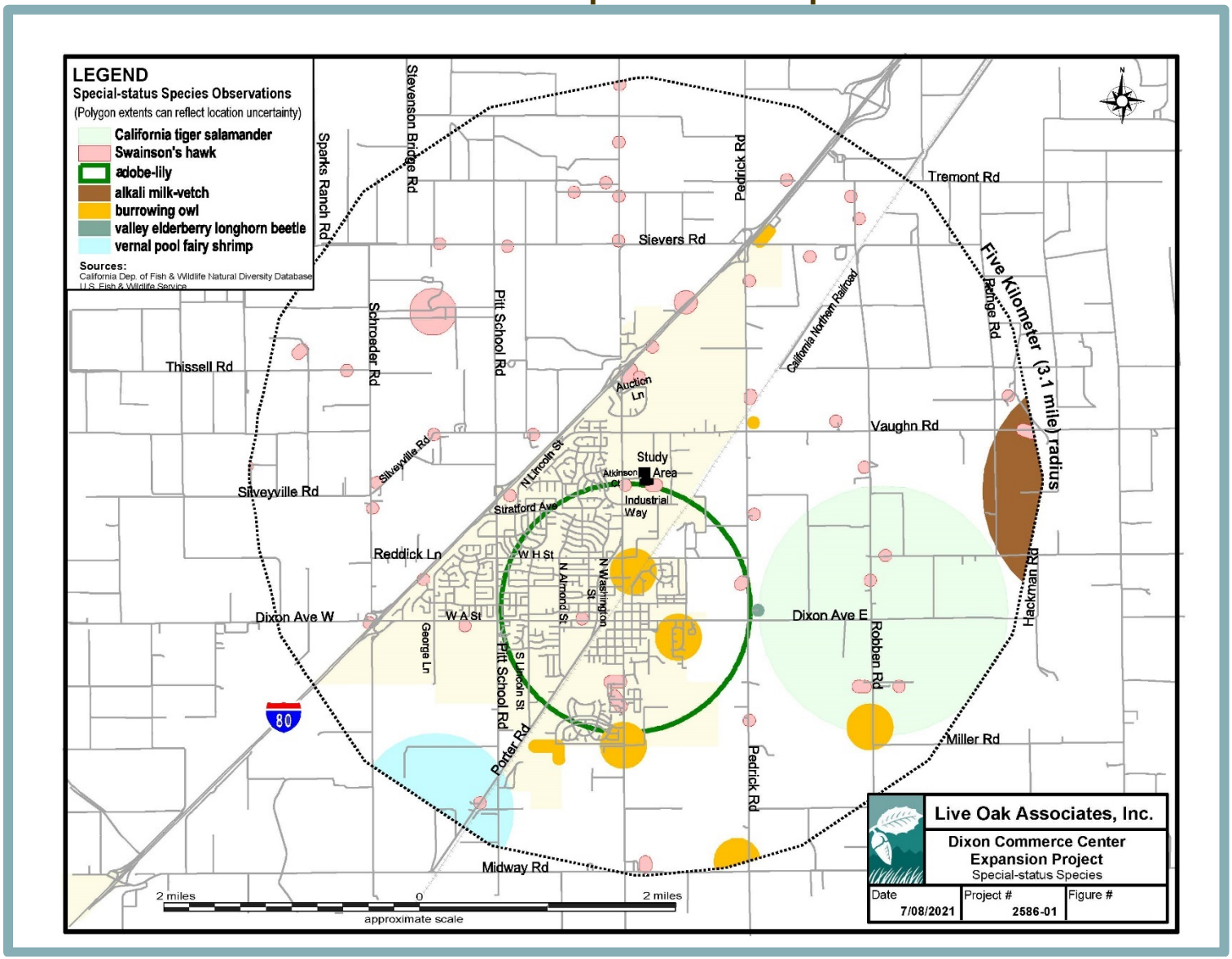
Special-Status Plants

The project site is situated in an area dominated by industrial development, and to a lesser extent, agriculture. Several large transportation corridors pass within a mile of the project site, including I-80 to the northwest and the Union Pacific Railroad (UPRR) mainline to the southeast. One habitat, an urban/ruderal field, was identified within the Study Area. The ruderal field occurs to the south of the parking lot associated with the existing warehouse. The ruderal field appeared to be routinely mowed and disked at the time of the June 21, 2021 field survey. A gravel road bisects the field, extending east from Atkinson Court. An approximately eight-foot-wide ditch traverses the field, just east of the gravel road, before extending southward and stopping short of the site's southeastern boundary. Vegetation within this field primarily consists of non-native grasses and forbs, including bromes (*Bromus* spp.), oats (*Avena* spp.), and short pod mustard (*Hirchfeldia incana*). Noxious weeds such as yellow star thistle (*Centaurea solstitialis*) dominate particular areas of the field, including those areas directly adjacent to the gravel road. Some native species such as the California poppy (*Eschscholzia californica*) occur sparingly throughout the field's eastern boundary. Orchard trees and shrubs such as English walnut (*Juglans regia*) and Prunus species dominate the vegetation that occurs along the southern boundary of the ruderal field, just above the banks of an off-site ephemeral channel. A California Buckeye (*Aesculus californica*) also occurs along the top of the bank of the off-site ephemeral channel.

A query of the CNDDB, as well as the CNPS' Inventory of Rare and Endangered Vascular Plants of California, was run as part of the BER. The search area encompassed the U.S. Geological Survey (USGS) 7.5-minute Dixon quadrangle in which the project site is located as well as the eight surrounding quadrangles. Figure 10 shows the location of special-status species reported in the query. While 41 special-status vascular plant species have been reported in the general project vicinity (see Tables 1A and 1B of the BER), the BER concluded that the proposed project would not impact the habitats or regional populations of such species, as the project site does not offer suitable habitat, given its existing setting and history of previous disturbance. More specifically, as detailed in the BER, vegetation within the site's ruderal field primarily consists of non-native grasses and forbs, including bromes (Bromus spp.), oats (Avena spp.), and short pod mustard (Hirchfeldia incana). Noxious weeds such as yellow star thistle (Centaurea solstitialis) dominate particular areas of the field, including those areas directly adjacent to the gravel road.

Figure 9
Dixon Commerce Center BER Study Area

Figure 10
Dixon Commerce Center BER Special-Status Species Occurrences



Some native species such as the California poppy (Eschscholzia californica) occur sparingly throughout the field's eastern boundary. Orchard trees and shrubs such as English walnut (Juglans regia) and Prunus species dominate the vegetation that occurs along the southern boundary of the ruderal field, just above the banks of the off-site ephemeral channel. A California Buckeye (Aesculus californica) also occurs along the top bank of the off-site ephemeral channel. Based on the existing conditions, the BER determined the ruderal field does not serve as habitat for the special-status plant species recorded with potential to occur in the project vicinity. Therefore, the proposed project would result in a less-than-significant impact to special-status plant species.

Special-Status Wildlife

Similar to the determination regarding the potential for the project to result in impacts to special-status plant species, the BER's analysis determined that while 32 special-status wildlife species are known to occur in the region (see Tables 2A and 2B of the BER), project impacts to 28 species are considered less than significant under CEQA, as such species are absent from or unlikely to occur on-site due to the absence of suitable habitat and/or project location. Additionally, while western red bat and pallid bat have some potential to occur on-site under existing conditions, the BER found that the western red bat and pallid bat have the potential to forage on or over the site but would not roost on-site or near enough to the site to be disturbed by project activities. Bats are highly mobile while foraging and would be expected to simply fly away from project-related disturbance; therefore, the project does not have the potential to result in injury or mortality to the two bat species. The expansion of an existing building surrounded by urban land uses would not result in a significant loss of habitat for the bats, as the project site's urban setting likely limits foraging value for special-status bats and similar or higher quality habitat is regionally abundant. As such, potential impacts to the western red bat and pallid bat are considered less than significant.

Of the 32 special-status wildlife species known to occur in the region, the BER determined that two species would be potentially impacted by the proposed project: Swainson's hawk and burrowing owl. Each species is discussed in further detail below, as well as potential impacts to non-special-status birds and raptors protected under the MBTA and related State laws.

Swainson's Hawk

Foraging and breeding habitat for Swainson's hawk (*Buteo swainsoni*) occurs throughout the project vicinity and a Swainson's hawk was observed over the project site during the June 2021 field survey. The species is State listed as threatened, protected by the federal MBTA and the CFGC, and a covered species under the draft Solano HCP. Project construction would permanently impact approximately 5.6 acres of Swainson's hawk foraging habitat. While the project site's ruderal field is marginally suitable and does not serve as primary foraging habitat for the species, the site is within the draft Solano HCP Swainson's Hawk Irrigated Conservation Area and Agricultural Potential Reserve, and construction activities in the foregoing areas require mitigation measures for impacts to Swainson's hawk foraging habitat. Similarly, with respect to nesting habitat, project construction would not impact any known nest trees on-site, as such trees do not occur on the property. However, the proposed project would need to comply with the draft Solano HCP mitigation measures for impacts to nesting habitat, as two known nest trees are within 50 feet and 550 feet, respectively, of the site. As such, project construction has the potential to impact individual Swainson's hawks using the aforementioned nest trees.

Should either of the trees or other nest trees become active prior to or during construction activities, project construction could cause injury to the nesting birds; a decrease in productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or nest abandonment. Such impacts would be considered a long-term indirect impact under the draft Solano HCP, constitute a potentially significant impact under CEQA, and violate the federal MBTA.

Burrowing Owl

Burrowing owls (*Athene cunicularia*) occupy open areas and are dependent on burrowing mammals to provide burrows for shelter and nesting. Although the project site is within the Irrigated Agriculture Area Conservation Area for burrowing owls in the draft Solano HCP, the property does not provide suitable breeding habitat for the species, due to the lack of ground squirrel burrows, which was noted during the June 2021 field survey. Additionally, the site's routinely mowed and disked ruderal field supports only marginal foraging habitat for the species. However, if ground squirrels colonize the site in the future prior to project construction, burrowing owls could move onto the site and construction activities could result in the mortality of burrowing owls, particularly as they are known to retreat into their burrows. Mortality of individual burrowing owls would constitute a violation of State law and a significant impact as defined by CEQA.

Migratory Birds and Raptors

Trees and other vegetation adjacent to the project site provide potential nesting habitat for migratory birds and birds of prey protected under the MBTA and CFGC. If a migratory bird or other bird of prey were to nest on or adjacent to the site prior to or during proposed construction activities, such activities could result in the abandonment of active nests or direct mortality or other harm to such birds. Project construction that adversely affects the nesting success of migratory birds and raptors or results in mortality, injury, or other harm of individual birds would be considered a significant impact under CEQA.

Conclusion

Based on the above information, because Swainson's hawk, burrowing owl, and migratory birds and raptors protected under the MBTA and CFGC could potentially be impacted by project construction, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species and conflict with the provisions of a HCP. Therefore, the project could result in a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level. Certain mitigation measures identified in this section would only be required if the draft Solano HCP is adopted prior to issuance of grading permits for the proposed project. These measures are identified in the below section.

Swainson's Hawk Foraging Habitat

IV-1 *Pursuant to California Department of Fish and Wildlife (CDFW) guidelines, the applicant shall preserve an equal acreage of Swainson's hawk foraging habitat as is proposed for development (approximately 5.6 acres) (i.e., a 1:1 ratio). The preserved habitat shall be at a location approved by the CDFW. Preservation may occur through either:*

- *Payment of a mitigation fee to an established mitigation bank, or similar habitat development and management company, or the City of Dixon through a negotiated agreement (subject to approval by CDFW) between the City and the applicant. The monies shall be held in a trust fund, and used to purchase mitigation credits to offset the loss of suitable foraging habitat for Swainson's hawk. The credits would become incorporated into the mitigation bank, owned and operated by the habitat development and management company, and protected in perpetuity (consistent with CDFW guidelines); or*
- *Purchase of conservation easements or fee title of lands with suitable Swainson's hawk foraging habitat (consistent with CDFW guidelines).*

If mitigation lands or a conservation easement have not been acquired prior to issuance of the building permit, the City shall hold the applicant's contribution in a separate, interest-bearing account until the appropriate lands are identified (through consultation with CDFW and the City) and acquired by the City or preserved through other methods acceptable to the CDFW. The foregoing funds shall be used to compensate for the loss of Swainson's hawk foraging habitat.

Swainson's Hawk Nesting Habitat

IV-2 *To avoid take of Swainson's hawk, project-related activities shall occur, where possible, between September 16 and February 28, outside of the Swainson's hawk nesting season.*

Prior to the start of project construction activities, a qualified biologist shall conduct protocol-level Swainson's hawk nesting surveys for active Swainson's hawk nests within 0.25-mile of the project site, in accordance with guidelines set by the Swainson's Hawk Technical Advisory Committee (SHTAC 2000). The SHTAC guidelines define five survey periods for Swainson's hawk: Period I: January 1-March 20; Period II: March 20-April 5; Period III: April 5-April 20; Period IV: April 21-June 10; and Period V: June 10-July 30. The guidelines prescribe a minimum of three surveys per survey period and recommend at least the two survey periods immediately prior to a project's initiation. The SHTAC guidelines specifically recommend that surveys be completed in Periods II, III, and V. Per the SHTAC guidelines, Swainson's hawks in the Solano County region typically incubate during June, and active nests can be difficult to find. Therefore, the draft Solano HCP states that June surveys shall not be acceptable for determining the absence of Swainson's hawks nests. The purpose of these surveys shall be to establish a base understanding of the location and activity of nesting Swainson's hawks within the vicinity of the project site. A written summary of the survey results shall be submitted to the City of Dixon Community Development Department.

If active nests are not found during preconstruction surveys, further mitigation is not necessary. Should any active Swainson's hawk nests be discovered within 0.25-mile of the project site, construction work (including

grading, earthmoving, and any operation of construction equipment) shall not occur within a 0.25-mile buffer zone around an active Swainson's hawk nest, except as provided below. Construction-free buffers shall be identified on the ground with flagging, fencing, or by other easily visible means, and shall be maintained until the biologist has determined that the young have fledged.

The size of nest site buffer zones may be reduced only under the following conditions:

- *A site-specific analysis prepared by an approved biologist indicates that the nesting pair under consideration are not likely to be adversely affected by construction activities (e.g., the nest is located in an area where the hawks are habituated to human activity and noise levels comparable to anticipated construction work). CDFW must approve this analysis before construction may begin within 0.25-mile of a nest, or if the draft Solano HCP is adopted prior to the issuance of a grading permit for the proposed project, then SCWA, in consultation with the HCP Technical Review Committee, may approve the analysis.*
- *Monitoring by an approved biologist is conducted for a sufficient time (during all construction activities for a minimum of 10 consecutive days following the initiation of construction), and the nesting pair does not exhibit adverse reactions to construction activities (e.g., changes in behavioral patterns, reactions to construction noise).*
- *Monitoring is continued at least once a week through the nesting cycle at that nest. This longer-term monitoring may be reduced to a minimum of two hours in the morning and two hours in the afternoon during construction activities. However, additional and more frequent monitoring may be required if any adverse reactions are noted.*
- *Monitoring reports are submitted to CDFW, or if the draft Solano HCP has been adopted prior to the issuance of a grading permit, monitoring reports are submitted to SCWA.*

IV-3 *If the draft Solano HCP is adopted prior to issuance of grading permits for the project, then the following mitigation shall be implemented if indirect Swainson's hawk nest impacts occur as a result of the project. According to the draft Solano HCP, an indirect effect can occur if project construction affects the nest such that active, Swainson's hawks are disturbed to a degree that causes, or is likely to cause: (a) injury to the nesting birds; (b) a decrease in productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (c) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. Covered Activities within 250 feet of an active nest are presumed to have a long-term indirect effect on the nest.*

Mitigation for indirect impacts to Swainson's hawk breeding habitat, including known or active nests, shall consist of the following:

- *The project applicant shall preserve an active nest site through purchase of occupied nest credits from an HCP-certified mitigation bank or approved project-specific reserve. If preserved active nest sites are unavailable, project proponents will provide funding to the HCP's Interim Nest Protection Program; or*
- *Pay current nest-protection impact fee (the fee schedule for the draft Solano HCP has yet to be determined) and monitor the nest tree for a minimum of two nesting seasons following completion and occupancy of the project upon approval from SCWA and Resource Agencies. If the nest remains active or is affected by a subsequent project, the fee, with applicable interest, will be returned to the applicant; or*
- *Demonstrate to and receive concurrence from SCWA and the Resource Agencies that the covered activity will not substantially increase disturbance to the nest site.*

If take of Swainson's hawk cannot be avoided, the project applicant shall obtain a California Endangered Species Act (CESA) Incidental Take Permit (ITP) from the CDFW.

Burrowing Owl Habitat Assessment, Surveys, and Avoidance

IV-4 *Prior to project construction activities, a qualified biologist shall conduct a habitat assessment following Appendix C: Habitat Assessment and Reporting Details of the 2012 CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012 Staff Report). The habitat assessment shall extend at least 492 feet (150 meters) from the project site boundary, or more, where direct or indirect effects could potentially extend off-site (up to 500 meters or 1,640 feet) and include burrows and burrow surrogates. If the habitat assessment identifies potentially suitable burrowing owl habitat, then a qualified biologist shall conduct a take avoidance survey following the CDFW 2012 Staff Report survey methodology. The survey shall encompass the project site and a sufficient buffer zone to detect owls nearby that may be impacted, commensurate with the type of disturbance anticipated, as outlined in the CDFW 2012 Staff Report, and include burrow surrogates such as culverts, piles of concrete or rubble, and other non-natural features, in addition to burrows and mounds. Time lapses between the survey or project construction activities shall trigger subsequent surveys, as determined by a qualified biologist, including, but not limited to, a final survey within 24 hours prior to ground disturbance. The qualified biologist shall have a minimum of two years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections. Detected nesting burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report and any passive relocation plan for non-nesting owls shall be subject to CDFW review.*

Burrowing Owl Habitat Mitigation

IV-5 *If project construction activities would impact an unoccupied nesting burrowing owl burrow or burrow surrogate (i.e., a burrow known to have been used in the past three years for nesting), or an occupied burrow (where a non-nesting owl would be evicted as described above), the*

following habitat mitigation shall be implemented prior to project construction:

- *Impacts to each nesting site shall be mitigated by permanent preservation of two occupied nesting sites with appropriate foraging habitat within Solano County, unless otherwise approved by CDFW, through a conservation easement and implementing and funding a long-term management plan in perpetuity. The same requirements shall apply for impacts to non-nesting evicted owl sites.*
- *The project applicant may implement alternative methods for preserving habitat, with written acceptance from CDFW.*

Migratory Birds and Raptors

IV-6 *To the maximum extent practicable, vegetation planned for removal as part of the proposed project shall be removed during the non-breeding season (September 1 through January 31). If it is not possible to avoid vegetation removal during the breeding season (February 1 through August 31), preconstruction surveys shall be conducted by a qualified biologist no more than 14 days prior to the start of any such activities occurring during the breeding season.*

The preconstruction survey shall include all trees, shrubs, or other areas of potential nesting habitat within the project footprint and within 250 feet for raptors and 50 feet for other birds where practicable and legal access allows. If the target species are deemed absent from the area, then no further mitigation shall be required, and construction shall commence within 14 days following the survey. A written summary of the survey results shall be submitted to the City of Dixon Community Development Department.

IV-7 *If nesting raptors or migratory birds are detected during the survey, a suitable disturbance-free buffer shall be established around all active nests. The precise dimension of the buffer shall be determined by a qualified biologist at that time and may vary depending on factors such as location, species, topography, and line of sight to the construction area, and may be up to 250 feet. The buffer area(s) shall be enclosed with temporary fencing, and equipment and workers shall not enter the enclosed buffer areas. Buffers shall remain in place until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents.*

b,c. According to the evaluation conducted as part of the BER, jurisdictional waters, wetlands, and riparian-dominated vegetation do not occur on-site. Therefore, such habitat and aquatic features would not be impacted by the project. Additionally, the BER determined that designated critical habitat and sensitive natural communities are absent from the project site and adjacent lands. It should be noted that an off-site ephemeral channel is adjacent to the project site's southern boundary. USGS quadrangle maps identify the channel as a remnant of Dudley Creek. As noted in the BER, in its current state, the dry channel appears to be isolated or disconnected from any other hydrological feature. The limit of U.S. Army Corps of Engineers (USACE) jurisdiction, as well as that of the Regional

Water Quality Control Board (RWQCB) over the creek is the ordinary high-water mark (OHWM), which is outside of the site's boundaries. Thus, portions of Dudley Creek subject to the jurisdiction of USACE and RWQCB do not occur on-site. Furthermore, as the site is located within the Zone 1 – Urban Zone of the draft Solano HCP and lacks on-site riparian dominated vegetation, the required setback from the top of bank of the off-site ephemeral channel would be at least 25 feet according to the draft Solano HCP. Therefore, the proposed project would not impact the channel.

Based on the above information, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Similarly, the project would not have a substantial adverse effect on State or federally protected wetlands. Therefore, the project would result in a ***less-than-significant*** impact.

d. Movement corridors or landscape linkages are usually linear habitats that connect two or more habitat patches, providing assumed benefits to the species by reducing inbreeding depression and increasing the potential for recolonization of habitat patches. The project site is situated within an urban setting, with existing structures surrounding the site, including the existing warehouse and parking lot areas. Additionally, the southern portion of the project site has been subjected to previous disturbance through regular mowing and discing. Although native wildlife could use the site for foraging habitat and for daily movements and migration or dispersal, wildlife presently using the area are expected to continue moving through the site post-construction. Furthermore, while expansion of the existing warehouse on the site's urban/ruderal field would decrease potential foraging and nesting habitat for a variety of common native wildlife species in the project vicinity, the routinely mowed field is of relatively low value for native wildlife due to the existing setting, and similar or higher quality habitat is regionally abundant. Thus, displaced species would be able to use similar habitats in the project vicinity, and populations of common native wildlife species associated with the site's ruderal field would not be substantially affected by buildout of the site.

   Based on the above information, development of the proposed project would not substantially interfere with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites, and a ***less-than-significant*** impact would occur.

e. Current project plans do not include removal of street trees regulated by the City. Should street trees require removal, the proposed project would be subject to the requirements set forth in Section 13.05.070 of the City's Municipal Code, which would necessitate that the project applicant obtain an encroachment permit and follow the conditions established by said permit.

   The General Plan EIR additionally cites other sections of the Municipal Code that apply to protection of biological resources. For example, Section 17.10.010 of the City's Municipal Code establishes the general design standards for proposed subdivisions, which includes development restrictions that could apply to projects based upon considerations of soil conditions. However, the proposed project would not be subject to Chapter 17.10 of the Municipal Code, as the project does not include a subdivision component. In addition, Section 18.33.090 of the Municipal Code establishes standards applicable to required landscaping. As previously discussed, the project would be consistent with all applicable landscaping requirements set forth in Section 18.33.090. As shown in Figure 7, the project

would require at least 34,300 sf of shaded area, but would provide 38,079 sf, which would equal 45.2 percent of the project site being shaded.

Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and a ***less-than-significant*** impact would occur.

V. CULTURAL RESOURCES. *Would the project:*		Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	✖	☐
b.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	☐	✖	☐	☐
c.	Disturb any human remains, including those interred outside of dedicated cemeteries.	☐	✖	☐	☐

Discussion

a. Historical resources are features that are associated with the lives of historically important persons and/or historically significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics.

A Negative Archaeological Survey Report was prepared for the proposed project by PAR Environmental Services, Inc. (see Appendix C) to determine to what extent historical and archaeological resources could be impacted by the proposed project.[13] The Negative Archaeological Survey Report was based on a Cultural Resource Inventory Report (CRIR), which included a records search conducted by the California Historical Resources Information System's (CHRIS) Northwest Information Center (NWIC) of the project site and a one-eighth-mile buffer around the property. The records search included a review of previous cultural resources studies, recorded resources, and the California Office of Historic Preservation's historic properties data files. Cultural resource reports and records on file at PAR and online sources were also reviewed for the project site. The NWIC record search did not identify any cultural resources within the project site and one-eighth-mile buffer. The Native American Heritage Commission (NAHC) conducted a search of the Sacred Lands File for any information pertaining to the project site. The Sacred Lands File search results were negative. In addition, two PAR archaeologists conducted a field survey of the project site on August 2, 2021 using parallel transects spaced ten meters apart. Wherever soil was exposed (e.g., along the western face of the warehouses, or within ornamental plots), the archaeologists performed intensive pedestrian survey. The field survey concluded that the project site does not include surface evidence of prehistoric or historic resources.

Based on the above, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. Therefore, the project would result in a ***less-than-significant*** impact.

b,c. While known resources do not exist within the project site, the CRIR noted that potential exists for unidentified subsurface deposits to be encountered within the site. CEQA Guidelines Section 15064.6(f) requires the lead agency for a project to ensure that provisions are made for accidentally discovered resources. In addition, California Health

[13] Par Environmental Services, Inc. *Negative Archaeological Survey Report For 2299 Commerce Way, Solano County, California*. August 2011.

and Safety Code Section 7050.5 and PRC Section 5097.98 require that any human remains discovered within the project site be treated with respect and dignity. Upon discovery of human remains, all work in an area must cease immediately within 50 feet of the find, with nothing disturbed and the area secured. The coroner's office of the county where the remains are located must be called, and the coroner has two working days to examine the remains. All parties that discover human remains in California are required to follow a well-defined process. Because previously unknown archaeological resources, including human remains, could exist in the project vicinity, such resources have the potential to be uncovered during ground-disturbing activities at the project site.

Based on the above, the proposed project could cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturb human remains, including those interred outside of dedicated cemeteries, during construction. Therefore, without mitigation, impacts could be considered ***potentially significant***.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

V-1 *If potentially significant archaeological resources are encountered during subsurface excavation activities, the City shall be notified immediately and all construction activities within a 100-foot radius of the resource shall cease until a qualified archaeologist determines whether the resource requires further study. The City shall require that the applicant include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate California Department of Parks and Recreation forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant archaeological resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA, the City and a qualified archaeologist shall determine whether preservation in place is feasible. Such preservation in place is the preferred mitigation. If such preservation is infeasible, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan for the resource. The archaeologist shall also conduct appropriate technical analyses, prepare a comprehensive written report and file it with the appropriate information center (California Historical Resources Information System), and provide for the permanent curation of the recovered materials.*

V-2 *If previously unknown human remains are encountered during construction activities, Section 7050.5 of the California Health and Safety Code applies, and the following procedures shall be followed: In the event of an accidental discovery or recognition of any human remains, Public Resource Code Section 5097.98 must be followed. Once project-related ground*

disturbance begins and if there is accidental discovery of human remains, the following steps shall be taken:

- *The City shall be notified immediately and further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains shall not occur until the Solano County Coroner's Office is contacted to determine if the remains are Native American and if an investigation into cause of death is required. If the coroner determines the remains are Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.*

VI. ENERGY. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	✖	☐

Discussion

a,b. The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards Code (CALGreen Code) and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operations, are provided below.

California Green Building Standards Code

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11) is a portion of the CBSC, which became effective on January 1, 2020.[14] The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen standards regulate the method of use, properties, performance, types of materials used in construction, alteration repair, improvement and rehabilitation of a structure or improvement to property. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of EV charging infrastructure in residential and nonresidential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' MWELO, or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills;
- Mandatory periodic inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 sf to ensure that all are working at their maximum capacity according to their design efficiencies; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

[14] California Building Standards Commission. *California Green Building Standards Code*. Available at: https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen. Accessed June 2021.

Building Energy Efficiency Standards

The 2019 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy efficiency measures from the 2016 Building Energy Efficiency Standards. The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020. The 2019 standards provide for additional efficiency improvements beyond the 2016 standards. Energy reductions relative to previous Building Energy Efficiency Standards are achieved through various regulations, including requirements for the use of high-efficacy lighting, improved water heating system efficiency, and high-performance attics and walls. For nonresidential buildings, the most significant changes in compliance with the 2019 standards are in lighting design, alterations to a development's envelope, mechanical systems, and covered processes.[15] Nonresidential buildings built in compliance with the 2019 standards are anticipated to use approximately 30 percent less energy compared to the 2016 standards, primarily due to lighting upgrades.[16]

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid. Project construction would not involve the use of natural gas appliances or equipment.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the expansion and improvements area would be disturbed at a time, with operation of construction equipment occurring at different locations on the site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. The In-Use Off-Road Diesel Vehicle Regulation would therefore help to improve fuel efficiency for equipment used in construction of the proposed project. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction.

The CARB prepared the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan),[17] which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix

[15] California Energy Commission. *California Energy Commission 2019 Building Energy Efficiency Standards What's New for Nonresidential*. Available at: https://www.energy.ca.gov/media/3455. Accessed June 2021.
[16] California Energy Commission. *Title 24 2019 Building Energy Efficiency Standards FAQ*. November 2018.
[17] California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. Available at: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2030sp_pp_final.pdf. Accessed November 2020.

B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The In-Use Off-Road Diesel Vehicle Regulation and idling restriction regulations described above, with which the proposed project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

Following implementation of the proposed project, PG&E would provide electricity and natural gas to the project site. Energy use associated with operation of the proposed project would be typical of industrial land uses, requiring electricity and natural gas for interior and exterior building lighting, ventilation, and air conditioning (HVAC), electronic equipment, machinery, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by employee commutes and the movement of goods.

The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project by PG&E would comply with the State's Renewables Portfolio Standard, which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent by 2030. Thus, a portion of the energy consumed during the proposed warehouse operations would also originate from renewable sources.

With respect to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, as discussed in Section XVII, Transportation, of this IS/MND, the VMT associated with development of the proposed project would be below the Solano County 85 percent threshold baseline of 32.26 VMT per job.

Based on the above, compliance with the State's latest Energy Efficiency Standards would ensure that the proposed project would implement all necessary energy efficiency regulations.

Conclusion

Based on the above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, a ***less-than-significant*** impact would occur.

VII. GEOLOGY AND SOILS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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 based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	✖	☐
ii. Strong seismic ground shaking?	☐	☐	✖	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	✖	☐
iv. Landslides?	☐	☐	✖	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	✖	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	✖	☐
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	✖	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	✖
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	✖	☐	☐

Discussion

ai-aii. According to the General Plan EIR, seismic activity in the General Plan Planning Area is considered minimal. Alquist-Priolo Earthquake Fault Zones, active faults, or potentially active faults do not underlie the City. However, active faults are located in the broader region that could subject land and structures within the City to ground shaking. The nearest fault lines active in the last 200 years are the Cordelia Fault and the Green Valley Fault system, about 20 miles southwest of the City. An unnamed fault that has been active within the last 10,000 years is located approximately 11 miles north of the City. In addition, the Vaca-Kirby Hills Fault system lies west of the City of Vacaville, but has not been active within the last 10,000 years. The Midland Fault Zone is considered inactive and traverses the Planning Area between I-80 and the intersection of West A Street and Pitt School Road.

In general, fault activity has the potential to result in ground shaking, which can be of varying intensity depending on the magnitude of the event, the epicenter distance, the response of geologic materials, and the design and construction quality of structures. Ground shaking tends to be more severe in softer sediments such as alluvial deposits than in bedrock materials, because in alluvial deposits surface waves can be amplified causing a longer duration of ground shaking. Areas where bedrock is exposed or located at relatively shallow depth tend to experience surface waves from an earthquake as more of a sharp jolt, compared to other areas. As noted in the General Plan EIR, alluvial deposits underlie the City, which combined with the regional proximity of active local faults like the Cordelia Fault, place the City at risk for strong ground shaking.

However, the Seismic Hazards Mapping Act (SHMA) (PRC Sections 2690 to 2699.6) was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. The SHMA requires the State Geologist to delineate various seismic hazard zones and requires local permitting agencies to regulate certain development projects within such zones; however, the Planning Area does not include any seismic hazard zones. Additionally, the proposed project would be required to conform to the current seismic design provisions of the most current version of the California Building Code (CBC) (Title 24, Part 2), adopted by the City per Section 16.03.020 of the Municipal Code. The CBC contains the latest seismic safety requirements to resist ground shaking through modern construction techniques, which are periodically updated to reflect the most recent seismic research. The General Plan includes policies and implementing actions that reduce impacts due to fault rupture. The proposed project would comply with all applicable policies. For example, Policy NE-4.2 ensures that structures intended for human occupancy are designed and constructed to retain structural integrity when subjected to seismic activity, in accordance with the CBC.

Proper engineering of the proposed project would ensure that seismic-related effects would not cause adverse impacts. Based on the above information, the proposed project would not directly or indirectly cause substantial adverse effects involving rupture of a known earthquake fault or strong seismic ground shaking, and a ***less-than-significant*** impact would occur.

aiii,aiv, c. The proposed project's potential effects related to liquefaction, landslides, lateral spreading, and subsidence are discussed in detail below.

Liquefaction and Subsidence

Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. Primary factors that trigger liquefaction are: moderate to strong ground shaking (seismic source), relatively clean, loose granular soils (primarily poorly graded sands and silty sands), and saturated soil conditions (shallow groundwater). Due to the increasing overburden pressure with depth, liquefaction of granular soils is generally limited to the upper 50 feet of a soil profile. However, liquefaction has occurred in soils other than clean sand.

As shown in Figure 3.7-2 of the General Plan EIR, the majority of the General Plan Planning Area, including the project site, is designated as having a moderate level of liquefaction susceptibility. Risks due to seismic-induced liquefaction are legislated for structures intended for human occupation by the SHMA. In areas of liquefaction risk where buildings or roadways would be constructed, impacts from ground failure resulting from liquefaction are addressed through site-specific geotechnical studies prepared in accordance with CBC requirements, as adopted in Chapter 16 of the City's Municipal Code. Chapter 18 of the CBC regulates the preparation of a preliminary soil report, engineering geologic report, geotechnical report, and supplemental ground-response report.

The General Plan EIR concluded that while seismic hazards cannot be eliminated completely, adherence to State and local regulatory requirements and General Plan policies would minimize potential exposure of people and new structures to seismic hazard by requiring incorporation of hazard mitigation measures into project design. As part of compliance with State and local regulatory requirements, a site-specific geotechnical study prepared in accordance with applicable CBC requirements would confirm the extent to which liquefaction poses a risk to the proposed warehouse expansion, and if necessary, identify foundation design techniques to ensure liquefactions does not pose adverse effects to the project.

As detailed in the General Plan EIR, subsidence occurs when a large portion of land is displaced vertically, typically due to the withdrawal of groundwater, oil, or natural gas. Although the Sacramento Valley possesses substantial supplies of surface water, land subsidence has occurred when groundwater levels declined in response to pumping for irrigation and public water supplies during droughts or in areas undersupplied by surface water, especially in the San Joaquin Valley. Substantial areas of land subsidence have occurred in the City of Davis, about eight miles northeast of the City of Dixon, due to groundwater pumping. As part of compliance with State and local regulatory requirements, a site-specific geotechnical study would confirm the extent to which subsidence poses a risk to the proposed warehouse expansion, and if necessary, identify foundation design techniques to ensure subsidence does not pose adverse effects to the project.

Landslides and Lateral Spreading

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The City is small, with relatively flat topography. Furthermore, the General Plan EIR notes that the General Plan Planning Area has slopes of less than two percent. Thus, the proposed project does not include the potential hazard of a landslide.

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. The project site, which is entirely flat, is not located near any open faces that would be considered susceptible to lateral spreading. Therefore, the potential for lateral spreading to pose a risk to the proposed development is relatively low.

Conclusion

Based on the above, the proposed project would not 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. Thus, a ***less-than-significant*** impact could occur.

b. The proposed project would include grading, expansion of the existing warehouse building with 125,712 sf of new warehouse space, new parking lots, and associated improvements. Development would cause ground disturbance of mostly topsoil related to construction activity. The ground disturbance would be limited to the areas proposed for grading and excavation, including building pads; curb and gutter improvement areas; and drainage, sewer, and water infrastructure alignments. After grading and excavation and prior to overlaying the disturbed ground surfaces with impervious surfaces and structures, the

potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

Chapter 16.04 of the City's Municipal Code sets forth rules and regulations to control land disturbances, landfill, soil storage, pollution, and erosion and sedimentation resulting from new development and redevelopment, and establishes procedures for the issuance, administration and enforcement of permits for such activities. New development within the City that disturbs one or more acres of land is required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit. The proposed project would disturb at least 499,730 sf (see Figure 6), equivalent to approximately 11.5 acres. Therefore, the project would be subject to the City's NPDES requirements. As part of NPDES compliance, Section 16.04.040 of the Municipal Code requires an Erosion and Sediment Control (ESC) plan to be submitted prior to issuance of a grading or building permit. The ESC plan would include BMPs or equivalent measures designed to control surface runoff and erosion, retain sediment on a particular site, and prevent pollution of site runoff during the period in which preconstruction and construction related grading and/or soil storage occur, and before final improvements or permanent structures are completed. BMPs include, but are not limited to, treatment facilities to remove pollutants from stormwater; operating and maintenance procedures; facility management practices to control runoff, spillage or leaks of non-stormwater, waste disposal, and drainage from materials storage; erosion and sediment control practices; and the prohibition of specific activities, practices, and procedures and such other provisions as the City determines appropriate for the control of pollutants.

Thus, with implementation of the ESC plan, construction associated with the proposed project would not result in substantial soil erosion or loss of topsoil, and a ***less-than-significant*** impact would occur.

d. Expansive soils change in volume with changes in moisture and can shrink or swell, causing heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. As noted in the General Plan EIR, the General Plan Planning Area consists of several soil types, including Brentwood clay loam; Capay clay; Capay silty clay loam; Yolo loam; Yolo loam, clay substratum; and Yolo silty clay loam, all of which exhibit expansive properties when exposed to varying moisture content. Over time, moisture exposure could result in damage to foundations, walls, or other improvements. The Planning Area consists mostly of soils which are low to moderately corrosive to concrete, and moderately to highly corrosive to steel. Corrosive soils can constrain foundation and utility construction design. As shown in Figure 3.7-1 of the General Plan EIR, the project site consists of Capay clay and Yolo silty clay loam.

The General Plan EIR evaluated the potential for development facilitated by buildout of the General Plan Planning Area to be located on expansive soils and concluded that with compliance with existing regulations, impacts would be reduced to a less-than-significant level. According to the General Plan EIR, development in areas with expansive soils would require compliance with State and local building codes. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls and also includes provisions requiring the preparation of a preliminary soil report, engineering geologic report, geotechnical report, and supplemental ground-response report. Additionally, Chapter 18 regulates analysis of expansive soils and the determination of the depth to groundwater table. Appendix J of the CBC regulates grading activities, including drainage and erosion control and construction on unstable soils, such as expansive soils and areas subject to

liquefaction. Furthermore, Chapters 16.04 through 16.06 of the City's Municipal Code, the City's Grading Control and Stormwater Control Ordinances, also establish administrative procedures, minimum standards of review, and implementation and enforcement procedures for ensuring stable soil conditions. The proposed project would be subject to all of the above applicable regulations. Given that the proposed project would be consistent with the site's General Plan land use designation, buildout of the site with the proposed uses was generally evaluated in the General Plan EIR. As such, through compliance with all applicable regulations and standards, the project would not result in impacts beyond those identified in the General Plan EIR.

Based on the above, the proposed project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, or create substantial direct or indirect risks to life or property. Therefore, the project would result in a ***less-than-significant*** impact.

e. Sewer collection for the proposed project would be provided by connection to the City's sewer system. The construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the project. Therefore, ***no impact*** regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.

f. Paleontological resources are the fossil remains or traces of past life forms, including both vertebrate and invertebrate species, as well as plants. The General Plan EIR evaluated the potential for development facilitated by buildout of the General Plan Planning Area to result in impacts to unique paleontological resources or sites. As noted therein, PRC Sections 5097 to 5097.6 prohibit the unauthorized disturbance or removal of paleontological resources. In addition, the General Plan EIR includes MM-GEO-1, which requires that the City establish a procedure for the management of paleontological materials found on-site during a project's development. As part of such management, if materials are found on-site during grading, MM-GEO-1 requires that work must be halted until a qualified professional evaluates the find to determine if it represents a significant paleontological resource, and, if the resource is determined to be significant, the paleontologist must supervise removal of the material and determine the most appropriate archival storage of the material. Significant resources must be prepared, catalogued, and archived at the applicant's expense and must be retained within the County, if feasible. The proposed project would be subject to PRC Sections 5097 to 5097.6 and the provisions of MM-GEO-1.

Based on the above, without compliance with PRC Sections 5097 to 5097.6 and General Plan Mitigation Measure MM-GEO-1, the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Therefore, the project could result in a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

VII-1. *Pursuant to MM-GEO-1 of the City of Dixon General Plan EIR, the project applicant shall implement the following requirements:*

- *Establish a procedure for the management of paleontological materials found on-site during a development, including the following provisions:*

    - *If materials are found on-site during grading, require that work be halted until a qualified professional evaluates the find to determine if it represents a significant paleontological resource.*
    - *If the resource is determined to be significant, the paleontologist shall supervise removal of the material and determine the most appropriate archival storage of the material.*

    Appropriate materials shall be prepared, catalogued, and archived at the applicant's expense and shall be retained within Solano County if feasible.

The above requirements shall be included in the notes on construction drawings, subject to review and approval by the City of Dixon Community Development Department, prior to initiation of any ground-disturbing activities.

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

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

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. 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) associated with 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).

A number of regulations currently exist related to GHG emissions, predominantly AB 32, Executive Order S-3-05, and SB 32. AB 32 sets forth a statewide GHG emissions reduction target of 1990 levels by 2020. Executive Order S-3-05 sets forth a transitional reduction target of 2000 levels by 2010, the same target as AB 32 of 1990 levels by 2020, and further builds upon the AB 32 target by requiring a reduction to 80 percent below 1990 levels by 2050. SB 32 also builds upon AB 32 and sets forth a transitional reduction target of 40 percent below 1990 levels by 2030. In order to implement the statewide GHG emissions reduction targets, local jurisdictions are encouraged to prepare and adopt area-specific GHG reduction plans and/or thresholds of significance for GHG emissions. As noted in the General Plan EIR, the City of Dixon intends to adopt and begin to implement a Climate Action Plan (CAP) within 18 to 36 months of the adoption of the General Plan. The City does not currently have a CAP.

The proposed project's GHG emissions for both construction and operation were quantified with CalEEMod using the same assumptions as presented in the Air Quality section of this IS/MND, and compared to the applicable thresholds of significance. The proposed project's required compliance with the current California Building Energy Efficiency Standards Code was assumed in the modeling. In addition, the CO_2 intensity factor within the model was adjusted to reflect the PG&E's required progress towards statewide renewable portfolio standard goals. All CalEEMod results are included in Appendix A to this IS/MND.

The YSAQMD, in their *Handbook for Assessing and Mitigating Air Quality Impacts*, acknowledges that new emissions generated by development projects could potentially conflict with existing GHG emissions reductions targets, and thus, a need for development of GHG emissions thresholds exists. However, the YSAQMD has not yet established or adopted any such thresholds. The YSAQMD is currently recommending GHG analysis consistent with the Sacramento Metropolitan Air Quality Management District (SMAQMD) adopted thresholds of significance. While SMAQMD recognizes that emissions from a single project cannot be determined to substantially impact overall GHG emissions levels in the atmosphere, an emissions threshold is useful to trigger further project review and assess mitigation. As such, SMAQMD designed emissions thresholds to ensure that 90 percent of new GHG emissions related to land use projects would be reviewed and assessed for mitigation. Thus, projects exceeding SMAQMD's thresholds would constitute the vast majority of GHG emissions, and exceedance of the thresholds would allow for further project review contributing to the emissions reduction goals of AB 32, SB 32, the Scoping Plan, and relevant Executive Orders. SMAQMD has established a threshold for both construction and operational GHG emissions of 1,100 $MTCO_2e$/yr. It should be noted that the nearby BAAQMD and Placer County Air Pollution Control District have independently adopted operational thresholds of 1,100 $MTCO_2e$/yr, for use in project GHG analysis, while the El Dorado County Air Pollution Control District similarly recommends use of SMAQMD's 1,100 $MTCO_2e$/yr threshold.

Construction-Related 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. However, construction-related GHG emissions have been estimated for the project and such emissions have been compared to the threshold of significance, as presented below in Table 4. Construction-related emissions were modeled using CalEEMod under the assumptions described in Section III, Air Quality, of this IS/MND.

Table 4
Maximum Unmitigated Construction-Related GHG Emissions

Construction Year	Project Emissions ($MTCO_2e$)
2022	315.42
2023	147.10
Applicable Threshold of Significance	**1,100**

Source: CalEEMod, September 2021 (see Appendix A).

As shown in the table, the proposed project's maximum annual construction emissions of 315.42 $MTCO_2e$/yr would be below the YSAQMD-recommended 1,100 $MTCO_2e$/yr threshold. Because the maximum annual and total construction GHG emissions for the project would be below the applicable threshold of significance, the proposed project would not be considered to generate construction-related GHG emissions that would have a significant impact on the environment.

Operational GHG Emissions

The emissions of GHGs resulting from operations of the proposed project were estimated using CalEEMod, and such emissions have been compared to the applicable threshold of significance, as presented in Table 5 below.

Table 5
Maximum Unmitigated Operational GHG Emissions

Operational Emission Source	Annual GHG Emissions ($MTCO_2e$/yr)
Area	0.003
Energy	64.85
Mobile	243.36
Off-road	15.42
Solid Waste	59.43
Water	54.43
Total Annual Operational GHG Emissions[1]	**437.33**
Applicable Threshold of Significance	**1,100**
Exceeds Threshold?	**NO**

[1] Rounding may result in small differences in summation.

Source: CalEEMod, September 2021 (see Appendix A).

As shown in the table, the anticipated GHG emission rate for the first operational year (2023) would be 437.33 MTCO2e/yr, which is below the YSAQMD-recommended 1,100 $MTCO_2e$/yr threshold. Even if the total construction-related GHG emissions were considered together with the project's maximum annual operational GHG emissions, the total GHG emissions would be below the applicable threshold of significance. Therefore, the proposed project would not be considered to generate operational GHG emissions that would have a significant impact on the environment.

Conclusion

Because implementation of the proposed project would result in operational and construction-related GHG emissions below the applied thresholds of significance of 1,100 $MTCO_2e$/yr, the project would not be considered to generate GHG emissions, directly or indirectly, that would have a significant impact on the environment.

Therefore, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts would be considered ***less than significant***.

IX. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☐	☐	✖	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	✖	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	✖
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	✖
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	✖	☐
g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	☐	☐	✖	☐

Discussion

a. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. While the eventual tenant at the project site is not currently known, the proposed warehouse expansion is anticipated to be used for typical warehouse and distribution functions, similar to the current use of the existing warehouse. Operations associated with the proposed project would be typical of other warehouses in the City, and would be governed by the uses permitted for the site as established by the City's Municipal Code and General Plan. In addition, the use, handling, and storage of hazardous materials is regulated by both the Federal Occupational Safety and Health Administration (Fed/OSHA) and the California Occupational Safety and Health Administration (Cal/OSHA). Cal/OSHA is responsible for developing and enforcing workplace safety regulations. At the local level, the Solano County Environmental Health Services Division of the Department of Resource Management regulates hazardous materials within the County, including chemical storage containers, businesses that use hazardous materials, and hazardous waste management.

Section 6.03.040 of the Municipal Code requires businesses that may involve use and/or handling of more than 500 pounds or 55 gallons a month, whichever is lesser, of hazardous material to submit a disclosure form for review by the Dixon Fire Department (DFD). The California Fire Code would serve as the regulatory vehicle by which the DFD would review the form to determine whether all aspects of hazardous materials use and storage would comply with Fire Code requirements. The DFD would review project plans to ensure that the on-site fire suppression system requirements are met, as well as conduct an on-site inspection prior to issuance of a certificate of occupancy to verify

whether the proposed on-site fire suppression system, and any hazardous materials storage and use areas, comply with Fire Code regulations.

Based on the above, any future on-site uses involving the handling, storage, or treatment, in any fashion, of hazardous materials, as defined in Section 6.03.020 of the City of Dixon Municipal Code would be required to comply with all applicable federal, State, and local hazards regulations. Compliance with such would ensure that any toxics are adequately handled and managed and operations of the proposed project would not create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials. Therefore, a ***less-than-significant*** impact would occur.

b. The following discussion provides an analysis of potential hazards and hazardous materials associated with upset or accident conditions related to the proposed construction activities and existing on-site conditions.

Construction activities associated with project implementation would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. However, the contractor would be required to comply with all California Health and Safety Codes and local City ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section 25510(a), except as provided in subdivision (b),[18] the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, the Solano County Department of Resource Management, Environmental Health Services Division) in accordance with the regulations. The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, City, or County fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of the proposed project, the contractor is required to notify the Solano County Department of Resource Management, Environmental Health Services Division in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures.

The property has been heavily disturbed due to the existing warehouse, parking lots, and associated improvements. As such, any hazardous materials within the project site have likely previously been identified and addressed as part of that previous development. Figure 3.8-1 of the General Plan EIR, which identifies hazardous materials sites within the City, does not identify any hazardous materials sites within the proposed expansion area; however, two hazardous materials sites are identified in the project vicinity, west of the project site and east of North First Street/SR 113. According to the State Water Resources Control Board's (SWRCB) GeoTracker website, the nearby sites include a leaking underground storage tank (LUST) cleanup site associated with the Shell fueling station, located at 1900 North First Street, and a Site Cleanup Program (SCP) site associated with

[18] Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.

the John Taylor Fertilizers retail store, located at 1850 North First Street.[19] The LUST cleanup site involves potential gasoline contamination of a well that is used for drinking water supply. The SCP site involves nitrate contamination of groundwater. Both sites have been subject to remediation activities and are required to sample wells as part of ongoing monitoring programs. According to the regulatory activities information from the GeoTracker website, the depth to groundwater in the vicinity of the LUST cleanup site ranges from 34.84 to 37.31 feet below ground surface (BGS). Due to the limited extent of the proposed on-site development and improvements, the project would not be expected to involve any construction-related activities that would require excavation to such depths as to encounter groundwater at the site. Thus, to the extent that groundwater within the project site may have been affected by the nearby LUST cleanup and SCP sites, the project would not exacerbate such conditions, as the project components would not result in disturbance of groundwater. As such, the proposed project would not exacerbate any existing hazardous conditions at the site or in the project vicinity. In addition, the proposed project would connect to existing water supply infrastructure in the project vicinity and would not rely on any groundwater wells for water supply.

Based on the above, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, and a ***less-than-significant*** impact would occur.

c. The project site is not located within one-quarter mile of an existing or proposed school. The nearest existing school to the site, Gretchen Higgins Elementary School, is located approximately 0.5-mile to the west. Therefore, the proposed project would have a ***less-than-significant*** impact related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d. The proposed project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[20] Therefore, the project would not create a significant hazard to the public or the environment, and ***no impact*** would occur.

e. The project site is not located within an airport land use plan. Furthermore, the nearest public-use airport is the University Airport, which is owned by the University of California (UC), operated by Transportation Services of UC Davis, and located approximately 4.5 miles to the northwest of the project site. The nearest private airstrip to the site is Maine Prairie Airport, located approximately 5.4 miles to the south. As such, the project site is not located within two miles of any public airports or private airstrips, and does not fall within an airport land use plan area. Therefore, ***no impact*** would occur.

f. Implementation of the proposed project would not result in any modifications to the City's existing roadway system. While the proposed project would generate an additional 44 total daily truck trips, such trips would not occur at the same time of day and would travel along a designated truck route within the City limits. In the case of the proposed project, trucks would access the project site from I-80 by way of North First Street/SR 113. Considering

[19] California State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=dixon%2C+ca. Accessed October 2021.

[20] California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: https://dtsc.ca.gov/dtscs-cortese-list. Accessed June 2021.

that I-80 is only 0.75-mile to the north of the site, trucks delivering goods to the project site would not substantially affect traffic volumes on North First Street/SR 113 such that the roadway would be compromised as an evacuation route.

The General Plan EIR evaluated the potential for development facilitated by buildout of the General Plan Planning Area to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and concluded that compliance with all applicable General Plan policies and implementing actions would ensure impacts would be reduced to a less-than-significant level. Policy NE-4.5 and Action NE-4.D ensure that the City's Emergency Operation Plan (EOP), which covers potential threats, is continually assessed and revised to maintain adequacy of the plan.[21] The EOP accounts for major earthquakes or liquefaction, fire, flood, dam failure, hazardous materials incidents, drought, and terrorist incidents and is managed by the DFD. Additionally, development resulting from buildout of the General Plan is subject to policies regarding facilitation of efficient transportation and service provision to ensure emergency access, such as Policy M-2.10 and Action M-2.B, which establish performance standards for each street type that include emergency vehicle use. Given that the proposed project would be consistent with the site's General Plan land use designation, buildout of the site with the proposed uses was generally evaluated in the General Plan EIR. The proposed project would be required to comply with all applicable policies set forth by the General Plan. Therefore, the project would not result in impacts beyond those identified in the General Plan EIR.

Based on the above, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and a ***less-than-significant*** impact would occur.

g. Issues related to wildfire hazards are discussed in Section XX, Wildfire, of this IS/MND. As noted therein, according to the California Department of Forestry and Fire Protection's (CAL FIRE) Fire and Resource Assessment Program, the project site is located within a Local Responsibility Area (LRA) – Incorporated.[22] CAL FIRE has determined that the County does not contain Very High Fire Hazard (VHFH) Severity Zones in LRAs. Furthermore, the project site is located in a developed area of the City, the project would be consistent with what was anticipated for the site in the City's General Plan, and the General Plan EIR concludes that compliance with applicable federal, State, and local laws and regulations would ensure impacts related to wildland fire hazards would be less than significant. The project site includes nothing peculiar that would change the conclusion of the General Plan. Therefore, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and a ***less-than-significant*** impact would occur.

[21] City of Dixon. *Emergency Operation Plan*. Available at: http://dixon-ca.granicus.com/MetaViewer.php?view_id=2&clip_id=697&meta_id=52675. Accessed June 2021.

[22] California Department of Forestry and Fire Protection. *Solano County: Fire Hazard Severity Zones In SRA*. Available at: https://osfm.fire.ca.gov/media/6817/fhszs_map48.pdf. Accessed June 2021.

X. HYDROLOGY AND WATER QUALITY. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	✖	☐
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;	☐	☐	✖	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	✖	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	✖	☐
iv. Impede or redirect flood flows?	☐	☐	✖	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	✖
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	✖	☐

Discussion

a. The proposed project's potential to result in water quality impacts during construction and operations is discussed in further detail separately below.

Construction

Project construction activities such as grading, excavation, and trenching for site improvements would result in the disturbance of on-site soils. The exposed soils have the potential to affect water quality in two ways: 1) suspended soil particles and sediments transported through runoff; or 2) sediments transported as dust that eventually reach local water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites also have the potential to enter runoff. Typical pollutants include, but are not limited to, petroleum and heavy metals from equipment and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment or contaminants should enter receiving waters in sufficient quantities. Impacts from construction-related activities would generally be short-term.

Water quality degradation is regulated by the federal NPDES Program, established by the CWA, which controls and reduces pollutants to water bodies from point and non-point discharges. In California, the NPDES permitting program is administered by the SWRCB through nine Regional Water Quality Control Boards (RWQCBs). As discussed in Section VII, Geology and Soils, of this IS/MND, Section 16.04.040 of the Municipal Code requires

new development within the City that disturbs one or more acres of land to comply with the NPDES General Construction Permit and prepare an ESC incorporating BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. The proposed project would disturb more than one acre within the project site, and thus, would be subject to the State NPDES General Permit conditions.

Operation

After project completion, impervious surfaces on the project site could contribute incrementally to the degradation of downstream water quality during storm events. During the dry season, vehicles and other urban activities may release contaminants onto the impervious surfaces, where they would accumulate until the first storm event. During the initial storm event, or first flush, the concentrated pollutants would be transported via stormwater runoff from the site to the stormwater drainage system and eventually a downstream waterway. Typical urban pollutants that would likely be associated with the proposed project include sediment, pesticides, oil and grease, nutrients, metals, bacteria, and trash. In addition, stormwater runoff could cause soil erosion if not properly addressed and provide a more lucrative means of transport for pollutants to enter the waterways.

As detailed in the General Plan EIR, the City of Dixon is listed by the RWQCB as a NPDES Phase II program municipality. As such, permanent stormwater management measures for development in the City must be designed in accordance with the State's Phase II Small MS4 General Permit, the development standards of which have been adopted by reference in Section 16.06.120 of the City's Municipal Code. The Phase II Small MS4 General Permit requires that permanent stormwater control measures be incorporated into the proposed project to ensure that new development does not result in the discharge of polluted water or the increase in sources of polluted runoff. Regulated projects, under the Phase II Small MS4 General Permit, are required to divide the project area into DMAs and implement and direct water to appropriately-sized temporary control measures (TCMs), consistent with the sizing standards in Section E.12.e.(ii)(c) of the Provisions for all Small MS4 Permittees.[23] TCMs are designed after the inclusion of Site Design Measures (SDMs) consistent with the standards of Section E.12.b. and E.12.e.(ii)(d). Baseline Hydromodification Measures are implemented consistent with the prescriptive standards of Section E.12.e.(ii)(f). Regulated projects must additionally include source control BMPs where possible. The proposed project would be required to comply with the applicable standards set forth in Section 16.06.120 of the City's Municipal Code.

In addition, the proposed project would operate in accordance with Section 16.04.040 of the Municipal Code, which requires a Post-Construction ESC plan. The Post-Construction ESC plan must include sufficient engineering analysis to show that the proposed post-construction stormwater management measures are capable of controlling runoff from the project site in compliance with the Clean Water Act (CWA), all applicable standards and regulations set forth by Chapter 16.04 of the Municipal Code, and such standards and specifications as may be adopted by the City pursuant to Chapter 16.04. The Post-Construction ESC plan must include a statement of the proposed BMPs that would be used to secure the project following completion of construction; provisions for maintenance of all permanent stormwater management facilities; and a landscaping plan

[23] California State Water Resources Control Board. *Phase II Small Municipal Separate Storm Sewer System (MS4) Program*. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.html. Accessed October 2021.

for management of vegetation at the site after construction is completed. A Preliminary Grading Plan (see Figure 5) has been prepared for the proposed project. On-site stormwater runoff from impervious surfaces would be collected and transported, by way of gutters and earth swales, into bioretention areas that would treat and detain all on-site runoff prior to discharging to the City's existing stormwater drains located in Vaughn Road and North First Street/SR 113 during large storm events. The storm drainage system is designed to accommodate storage for runoff retention as required by the Central Valley RWQCB. The proposed project's on-site stormwater facilities would be required to be designed in accordance with Section 4 of the City's Engineering Design Standards, which contains the City's requirements for drainage design, including criteria for design runoff, hydraulic grade line, inlets, gutters, streets, manholes, and detention ponds.

Conclusion

Based on the above, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction and operations. Therefore, a ***less-than-significant*** impact would occur.

b,e. The General Plan EIR assessed the potential for buildout of the General Plan Planning Area to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that development would impede sustainable groundwater management of the basin. As noted in the General Plan EIR, groundwater table stability is a balance between how much water infiltrates the aquifer and how much water is drawn out. The City is entirely dependent on groundwater drawn from the Solano Groundwater Subbasin. The groundwater levels of the Solano Groundwater Subbasin have been stable in each year since the 1980s, with low levels in the dry season and high levels in the wet season; however, the State has designated the subbasin as a medium-priority groundwater basin. As such, the subbasin is subject to the Sustainable Groundwater Management Act (SGMA), which requires the formation of local groundwater sustainability agencies that must assess conditions in local water basins and adopt locally based groundwater sustainability plans for at least 10 years for basins that cannot demonstrate sustainable yields. As a result, the City is a participant in the Solano Subbasin Groundwater Sustainability Agency (SSGSA), operating under a Joint Powers Authority (JPA) governance structure. The SSGSA is required to complete and maintain a plan for long-term sustainability of the subbasin. Currently, the Solano Subbasin Groundwater Sustainability Plan is scheduled to be finalized and submitted to the State Department of Water Resources by January 31, 2022. The General Plan EIR concluded that compliance with SGMA legislation, which requires regularly demonstrating that the subbasin is not over-drafted, would ensure that groundwater draws from the Solano Groundwater Subbasin are carefully managed and sustainably used, and that as a result, buildout of the General Plan Planning Area would not substantially deplete groundwater supplies from increased demand.

The General Plan EIR determined that overall infiltration into the aquifer would remain robust through compliance with General Plan policies and existing regulations, such as the incorporation of BMPs and low-impact development (LID) techniques in projects. LID refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration, or use of stormwater in order to protect water quality and associated aquatic habitat. LIDs include biofiltration to capture and infiltrate stormwater runoff consistent with the City's required compliance with NPDES permitting. Through compliance with existing federal, State, and local programs and regulations, the General

Plan EIR concluded buildout of the General Plan Planning Area would result in a less-than-significant impact related to substantial depletion of groundwater supplies or substantial interference with groundwater recharge such that a net deficit in aquifer volume or a lowering of the local groundwater table level would occur.

As previously discussed, the proposed project would be consistent with the project site's General Plan land use designation and zoning districts and would be subject to all applicable Municipal Code requirements, including requirements pertaining to the incorporation of BMPs and LIDs in the project's preliminary drainage plan. As the proposed project would adhere to all applicable standards and regulations and would be consistent with uses anticipated for the site in the General Plan, the proposed project would be consistent with the conclusions of the General Plan EIR. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan and a ***less-than-significant*** impact would occur.

ci-ciii. The proposed expansion area would consist of six on-site DMAs, which would encompass 435,290 sf of impervious surfaces, including the new parking area along the western boundary of the warehouse, the new southern parking lot area, and the expanded portion of the warehouse. As discussed above, the proposed project would be required to comply with Section 16.04.040 of the Municipal Code and the City's Engineering Design Standards, which would ensure BMPs and LIDs are incorporated in the Post-Construction ESC, which would divert on-site stormwater runoff into bioretention areas for on-site retention and treatment prior to discharge to the City's stormwater system. As required by the City's Engineering Design Standards pertaining to drainage design, the proposed stormwater system would be designed not to affect the existing drainage patterns on adjacent properties.

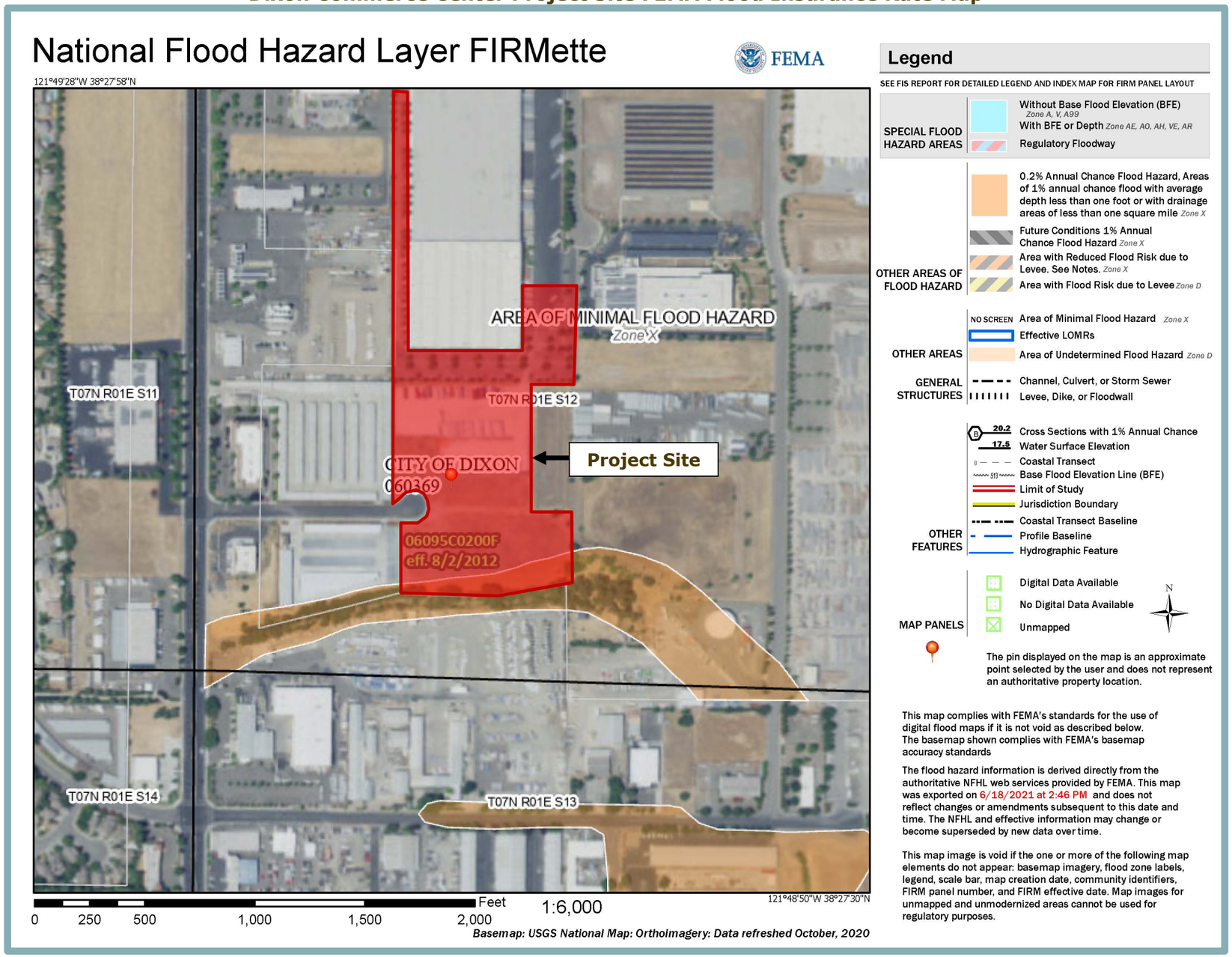
Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion, siltation, or flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. Thus, a ***less-than-significant*** impact would occur.

civ. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map number 06095C0200F, the project site is located within Zone X, Area of Minimal Flood Hazard (see Figure 11).[24] As such, the proposed project would not impede or redirect flood flows, and a ***less-than-significant*** impact would occur.

d. As discussed above, the project site is not located within a flood hazard zone. The project area is located more than 65 miles from the Pacific Ocean and tsunamis typically affect coastlines and areas up to one-quarter mile inland. Therefore, due to the project site's distance from the coast, potential impacts related to a tsunami are minimal. Additionally, the project site is not susceptible to impacts resulting from a seiche because of the site's distance from any enclosed bodies of water.

[24] Federal Emergency Management Agency. *Flood Insurance Rate Maps 06095C0200F, effective August 2, 2012*. Available at: https://msc.fema.gov/portal/home. Accessed June 2021.

Figure 11
Dixon Commerce Center Project Site FEMA Flood Insurance Rate Map



According to the General Plan EIR, the entirety of the City of Dixon and its SOI are in the flood inundation zone of the federally-owned Monticello Dam and have a risk of major loss of life and damage to property if a catastrophic event were to occur. However, the potential for the dam to fail and inundate the City is low, due to oversight from the Bureau of Reclamation, which inspects the dam to ensure that the dam is safe, performing as intended, and not developing problems. Additionally, the dam is subject to the National Dam Safety Act (NDSA), reauthorized in 2014, which aims to reduce risks to life and property arising from dam failure. The U.S. Secretary of the Army is required to maintain a database of all dams in the U.S., including inspection details and jurisdiction, and the NDSA establishes funding and authority for safety oversight and staff safety training. Furthermore, the Interagency Committee of Dams (ICODS) has prepared and approved federal guidelines for dam safety risk management and emergency action planning, which requires federally-owned dam operators to conduct risk assessments and risk reduction measures. Finally, General Plan policies and actions require adequate emergency response procedures to be in place and periodically updated in the case of a dam failure that requires evacuation, including maintaining the City's EOP and collaborating with the Bureau of Reclamation, Solano Irrigation District, Solano County Water Agency (SCWA), and other responsible agencies to ensure the safety of Monticello Dam. Based on the above, the General Plan EIR concluded potential flooding impacts associated with catastrophic flooding, including from the failure of a dam or levee, would be less than significant. As such, the proposed project would not be subject to such risks.

Based on the above, the proposed project would not pose a risk related to the release of pollutants due to project inundation due to flooding, tsunami, or seiche, and ***no impact*** would occur.

XI. LAND USE AND PLANNING. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	✖	☐
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?	☐	☐	✖	☐

Discussion

a. A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community or isolate an existing land use. Given that the proposed project would involve the expansion of an existing warehouse and associated improvements within an urbanized area, the project would generally qualify as infill development. Existing development surrounding the project site is also similar to the proposed uses. The City's existing roadway system would not be modified by the project. Therefore, the proposed project would be a continuation of the surrounding development and would not isolate an existing land use. As such, the project would not physically divide an established community, and a ***less-than-significant*** impact would occur.

b. The proposed project would be generally consistent with Municipal Code regulations and standards and General Plan policies, as well as other applicable policies and regulations adopted for the purpose of avoiding or mitigating environmental effects. For example, with implementation of Mitigation Measures IV-1 through IV-9, the project would not conflict with any applicable policies, regulations, or ordinances related to the protection of biological resources, such as General Plan Policy NE-1.11, which requires the City to ensure that adverse impacts on sensitive biological resources, including special-status species, are avoided or mitigated to the greatest extent feasible. As discussed in Section X, Hydrology and Water Quality, of this IS/MND, the proposed project would incorporate BMPs and LIDs to ensure the project does not result in impacts related to groundwater recharge, consistent with General Plan Policy NE-1.8, which requires that the City facilitate groundwater recharge by encouraging development projects to use LID practices. As discussed in Section XVII, Transportation, of this IS/MND, the project would be below the applicable significance threshold for VMT, consistent with General Plan Goal M-4, which requires that VMT within the City be reduced.

   Based on the above, the proposed project would not cause a substantial adverse 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, and a ***less-than-significant*** impact would result.

XII. MINERAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	☐	✖
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?	☐	☐	☐	✖

Discussion

a,b. According to the General Plan EIR, other than a few existing idle oil wells, mineral resources have not been identified in the General Plan Planning Area. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State or in the loss of availability of a locally important mineral resource recovery site. Therefore, ***no impact*** to mineral resources would occur as a result of the proposed project.

XIII. NOISE. *Would the project result in:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	✖	☐
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?	☐	☐	☐	✖

Discussion

a. The following is a discussion of the existing noise environment of the project site as well as how construction and the operation of the proposed project would impact future noise levels.

Existing Noise Environment

As detailed in the General Plan, the City is an urbanized area with open space and agricultural uses. The major existing sources of noise include vehicle traffic along roadways and agricultural, industrial, and commercial uses. The existing noise environment at the project site is primarily vehicle noise from traffic along Vaughn Road and North First Street/SR 113. Based on the existing noise contours depicted in the Natural Environment Element of the City's General Plan, the day/night average level (DNL) of noise generated by traffic on Vaughn Road and North First Street/SR 113 would range from 55 to 60 decibels (dB) at the project site.

Construction Noise

During the construction of the proposed project, heavy equipment would be used for grading, excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point. Standard construction equipment, such as graders, backhoes, loaders, and trucks, would be used on-site. Table 6 shows maximum noise levels associated with typical construction equipment. Based on the table, activities involved in typical construction would generate maximum noise levels up to 90 dB at a distance of 50 feet.

As one increases the distance between equipment, or increases separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of combining separate noise sources. The noise levels from a source would decrease at a rate of approximately 6 dB per every doubling of distance from the noise source. The nearest sensitive receptors to the project site are the single-family residences located approximately 1,166 feet to the west, as measured from the project site's western boundary to the property line of the nearest residence. Thus, noise levels experienced by the nearest residences from the proposed project's construction would be reduced from

the levels depicted in Table 6 by an estimated 24 dB. Additionally, several existing structures are located between the project site and the single-family residences, which would serve to further attenuate construction noise emanating from the project site.

Table 6
Construction Equipment Noise

Type of Equipment	Maximum Level, dB at 50 feet
Backhoe	80
Cement and Mortar Mixer	79
Compactor	83
Compressor (air)	78
Dozer	82
Dump Truck	76
Excavator	81
Forklift	75
Generator	81
Jackhammer	89
Paver	77
Paving Equipment	90
Pneumatic Tools	85
Roller	80
Surfacing Equipment	85
Vibratory Pile Driver	101

Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.

The General Plan EIR evaluated potential impacts related to the generation of a substantial temporary increase in ambient noise levels as a result of buildout of the General Plan Planning Area and concluded that future construction would result in a less-than-significant noise level impact. As the proposed project would be required to comply with all applicable noise regulations, the project would not generate a substantial increase in ambient noise levels during construction.

Operational Noise

According to the City's Noise Performance Standards established in Section 18.28.030 of the Municipal Code, Industrial zoning districts must not generate sound in excess of 75 dB. Noise generated by the proposed project would in large part be associated with vehicle trips to and from the on-site warehouses, as well as operation of on-site equipment. Vehicles accessing the project site during operation would consist primarily of heavy trucks and warehouse employee vehicles. Noise generated by heavy trucks arriving and departing the project site, backing into the loading bays, and trailer coupling/decoupling, would be the primary noise source associated with operations from the proposed project. Once the trucks are docked at the loading bays, the trucks would be loaded and unloaded from within the buildings, so outside loading/unloading activities would not occur, and noise generated by such activities would be contained within the buildings. Additionally, Section 18.28.050 of the Municipal Code provides an exception to the City's maximum sound pressure levels for transportation equipment used exclusively in the movement of goods and people to and from a given premises. Therefore, on-site noise generated by heavy trucks would be exempt from the City's Noise Performance Standards. Furthermore, the nearest sensitive receptors are located approximately 1,166 feet to the west of the project site. Finally, noise generated by the proposed warehouse expansion

would be consistent with noise levels currently generated by the existing warehouse operations.

With respect to noise generated by warehouse employee vehicles, the General Plan EIR concluded traffic noise is not significantly different when existing noise levels are compared to future roadway noise levels under buildout of the General Plan. For instance, Table 3.11-9 of the General Plan EIR includes traffic noise levels associated with roadway segments under Existing and Future with Proposed General Plan conditions. North First Street/SR 113 has a noise level of 71 dBA (A-weighted decibel) Community Noise Equivalent Level (CNEL) at 50 feet from the centerline of the roadway under Existing conditions. Under Future with Proposed General Plan conditions, the noise level increases to only 71.7 dBA, which would not be a perceivable increase. As such, buildout in accordance with the General Plan would not be expected to generate a substantial permanent increase in ambient noise levels in the vicinity of the aforementioned roadways. The proposed project would be consistent with the project site's General Plan land use designation and would be subject to all applicable Municipal Code requirements. Therefore, the project would be consistent with the conclusions of the General Plan EIR, and warehouse employee vehicles associated with the project would not generate a substantial increase in ambient noise levels in the vicinity of the project in excess of applicable standards.

Conclusion

Based on the above information, construction and operation of the proposed project would not result in the 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 City's General Plan and the Municipal Code. Therefore, the proposed project would result in a ***less-than-significant*** impact.

b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, 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 depends 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.

Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of PPV. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 7, which was developed by Caltrans, shows the vibration levels that would normally be required to result in damage to structures. As shown in the table, the threshold for architectural damage to structures is 0.20 in/sec PPV and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.

The proposed project would only cause elevated vibration levels during construction, as operations associated with the proposed land use do not typically generate appreciable vibration. Specifically, vibration levels that would be generated by the types of equipment

associated with light industrial uses dissipate rapidly with distance and would be well below the Caltrans thresholds for damage to structures and thresholds for annoyance at the nearest existing residences to the west. In addition, the proposed project would not include the use of specific equipment during operations which would produce appreciable vibration. It should be noted that the nearest structures surrounding the site are industrial; due to their design, they would not be impacted by temporary construction vibration.

Table 7
Effects of Vibration on People and Buildings

PPV		Human Reaction	Effect on Buildings
mm/sec	in/sec		
0.15 to 0.30	0.006 to 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10 to 15	0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Caltrans. Transportation Related Earthborne Vibrations. TAV-02-01-R9601. February 20, 2002.

The primary vibration-generating activities associated with the proposed project would occur during grading, placement of utilities, and construction of foundations. Table 8 shows the typical vibration levels produced by construction equipment at various distances.

Table 8
Vibration Levels for Various Construction Equipment

Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)
Large Bulldozer	0.089	0.029
Loaded Trucks	0.076	0.025
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.029
Jackhammer	0.035	0.011
Vibratory Hammer	0.070	0.023
Vibratory Compactor/roller	0.210	0.070

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.

The most substantial source of ground-borne vibrations associated with project construction would be the use of vibratory compactors. As indicated in the table, vibration levels generated from on-site construction activities at the nearest existing residences are predicted to be well below the Caltrans threshold for damage to residential structures (0.30 in/sec PPV) as well as the Caltrans threshold for annoyance (0.1 in/sec PPV). Therefore, on-site construction within the project area would not result in excessive groundborne vibration levels at nearby existing residential uses.

Based on the above, development of the proposed project would not expose people to or generate excessive ground-borne vibration or ground-borne noise levels, and a ***less-than-significant*** impact would occur.

c. The project site is not located within the vicinity of a public airport or private airstrip. The nearest private airstrip to the site is Maine Prairie Airport, located approximately 5.4 miles to the south. The nearest public airport is the University Airport, which is operated by Transportation Services of UC Davis and located approximately 4.5 miles to the northwest of the project site. Therefore, the project would not be located within the vicinity of a private airstrip or airport land use plan, or within two miles of a public airport where the project would expose people residing or working in the project area to excessive noise levels. Thus, ***no impact*** would occur.

XIV. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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 (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	✖	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	✖

Discussion

a. The proposed project would include the development of a warehouse expansion and associated parking on a site that is currently designated for industrial uses. Given that the project would not include any residential development, the project would not directly induce population growth. While the proposed project could include the creation of new jobs, which could potentially result in an increase in the housing demand in the area, such an increase would be minimal due to the relatively small scale of the proposed project. In addition, given that the project is consistent with the site's current land use and zoning designations, potential growth associated with development of the site has been anticipated by the City and analyzed in the General Plan EIR. Therefore, the proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly, and a ***less-than-significant*** impact would occur.

b. The project site does not include existing housing or other habitable structures. As such, the proposed project would not displace a substantial number of existing housing or people and would not necessitate the construction of replacement housing elsewhere. Therefore, ***no impact*** would occur.

XV. PUBLIC SERVICES.

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:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Fire protection?	☐	☐	✖	☐
b. Police protection?	☐	☐	✖	☐
c. Schools?	☐	☐	✖	☐
d. Parks?	☐	☐	✖	☐
e. Other Public Facilities?	☐	☐	✖	☐

Discussion

a,b. The DFD provides emergency fire, rescue, and medical services to the City and the Dixon Fire Protection District, a 320-square-mile area located entirely within the General Plan Planning Area. The fire station is located at 205 Ford Way, only 0.2-mile south of the project site, and is manned by 21 career and 10 volunteer/reserve personnel. The DFD has not set a goal for maximum response time; however, the General Plan EIR notes that response times from 2016 to 2019 were generally lowest in the City center. Based on the relatively short distance between the fire station and project site, the DFD would be able to respond to service calls from the project site well within an acceptable time frame. In addition, the proposed warehouse expansion would require installation of a sprinkler system, as required by the California Fire Code. According to the General Plan, current staffing and equipment levels provide an adequate number of firefighters for smaller fires and common medical or rescue situations. The City also maintains mutual aid agreements with other local municipalities. The City has mechanisms in place to ensure that as the City grows, the level of fire and emergency response service is maintained. General Plan Policy PSF-1.3 calls for the City to maintain police and fire equipment, facilities, and staffing at levels that allow for effective service delivery. Policy PSF-1.5 requires the City to continue to ensure new development pays a fair share funding contribution for the provision of adequate police and fire services. In accordance with Policy PSF-1.5, Section 4.07.070 of the Municipal Code establishes fire facilities impact fees for development within the City, which must be paid as part of the issuance of a building permit. The proposed project would be subject to all applicable impact fees.

The Dixon Police Department (DPD) provides law enforcement service within the City limits and is based at 201 West A Street, only 1.1 miles south of the project site. The DPD is manned by 28 sworn police officers, two administrative staff, and three community service officers, and maintains 21 police vehicles, one K9 unit, two police motorcycles, an off-road utility vehicle and two distinctively marked police vehicles for community service officers. Call-taking and dispatching functions are performed through a contractual relationship with the Solano County Sheriff's Office. The DPD strives to have a response time of less than five minutes to Priority 1 calls, which typically relate to incidents involving an immediate threat to life, danger of serious physical injury, or danger of major property damage. In 2019, the DPD averaged 5.08 minutes in response times to citizen-initiated calls for service. Given the short distance from the police station to the project site, the DPD would be anticipated to respond to service calls from the project site well within the five-minute response time. As previously discussed, General Plan Policies PSF-1.3 and

PSF-1.5 ensure that as the City grows, the level of police services is adequately maintained. Section 4.07.060 of the Municipal Code establishes police facilities impact fees for development within the City, which must be paid as part of the issuance of a building permit. The proposed project would be subject to all applicable impact fees.

Based on the above information, the proposed project would not 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 fire or police protection. Therefore, the project would result in a ***less-than-significant*** impact.

c-e. The Dixon Unified School District (DUSD) provides educational services for students of all grades in elementary, middle, and high school in the General Plan Planning Area, as well as throughout nearby portions of the City of Vacaville and unincorporated portions of the County. The district maintains six schools in addition to operating the Dixon Adult School: three elementary schools, a middle school, and two high schools. According to the General Plan EIR, the DUSD projected an increase in enrollment, with 2020 estimated at 3,483 total students from kindergarten through high school. However, the DUSD's facilities capacity is 5,391, well beyond current enrollment at all school levels within the district. To ensure adequate facilities are available to meet enrollment trends and accommodate potential future growth, the district has impact fees set in place for commercial/industrial development projects. The City manages developer fees for building permits issued within the City limits. New industrial projects must pay a fee of $0.61 per sf. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act involving the planning, use, or development of real property" (see Government Code 65996[b]). Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." Therefore, according to SB 50, the payment of the necessary school impact fees for the project would be full and satisfactory CEQA mitigation.

The City maintains five public parks, representing approximately 96.3 acres of parkland in the General Plan Planning Area, including neighborhood and community parks. Neighborhood parks are intended to provide open space and basic recreational facilities for residents in the vicinity of the park, while community parks provide space for organized sports and major facilities for the broader community, including swimming pools, ball fields, and community centers. About 13.5 acres of neighborhood parks, 80.3 acres of community parks, and 2.4 acres of other parks are included in the Planning Area. The City adopted the Parks and Recreation Master Plan in 2015. Based on the plan, two planned additions will help the City expand park services: Southwest Community Park and Southwest Neighborhood Park.

Parkland dedication requirements and parkland impact fees required in the Municipal Code provide mechanisms to ensure that new parks are built to satisfy future demand. Section 4.07.040 of the Municipal Code establishes park and recreation facilities impact fees for development within the City, which must be paid as part of the issuance of a building permit. The proposed project would be subject to all applicable impact fees. It should be noted that considering that the proposed project primarily involves a warehouse expansion, the project would not directly generate new residents. As such, the project would be expected to generate very little demand for park facilities.

With respect to other public facilities, the Dixon Carnegie Library, located at 230 North 1st Street, serves the General Plan Planning Area and is a community landmark. The library currently has a staff of 21 people, a collection of nearly 50,000 items, and eight computers available for public use and provides programming for both children and adults. Employees associated with the proposed project would be subject to all applicable taxes used to fund library services; however, similar to the project's potential impacts on park facilities, the project would be expected to generate very little demand for library services, as the project would not directly generate new residents, given the primary project component is a warehouse expansion.

Based on the above information, the proposed project would not 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 schools, parks, or other public facilities. Therefore, the project would result in a ***less-than-significant*** impact.

XVI. RECREATION. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	✖	☐

Discussion

a,b. As previously discussed, Section 4.07.040 of the City's Municipal Code establishes park and recreation facilities impact fees for development within the City, which must be paid as part of the issuance of a building permit. The proposed project would be subject to all applicable impact fees. Revenues generated through impact fees on new development would pay for any new park and recreation facilities deemed necessary by the City. The park impact fees imposed by the City would generate revenue to acquire necessary land to develop new parks or rehabilitate existing neighborhood parks and recreation facilities reasonably related to serve the subdivision. In addition, as previously noted, the project would be expected to generate very little demand for park facilities, as the project would not directly generate new residents, given that the primary project component is a warehouse expansion. Based on the above, a ***less-than-significant*** impact would occur with regard to recreational resources.

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

Discussion

a. This section discusses any potential conflict between the proposed project and any applicable programs, plans, ordinances, or policy addressing the circulation system. This includes all modes of transportation, including transit, roadway, bicycle, and pedestrian facilities.

The law has recently changed with respect to how transportation-related impacts may be addressed under CEQA. Traditionally, lead agencies used LOS to assess the significance of such impacts. LOS represents a qualitative description of the traffic operations experienced by the driver at an intersection or along a roadway segment and ranges from LOS A, which represents the absence of congestion and little delay, to LOS F, which signifies excessive congestion and delays. Greater levels of congestion are considered to be more significant than lesser levels. Mitigation measures typically took the form of capacity-increasing improvements, which often had their own environmental impacts (e.g., to biological resources). Depending on circumstances, and an agency's tolerance for congestion (e.g., as reflected in its general plan), LOS D, E, or F often represented significant environmental effects. In 2013, however, the State Legislature passed legislation with the intention of ultimately doing away with LOS in most instances as a basis for environmental analysis under CEQA. Enacted as part of SB 743 (2013), PRC Section 21099, subdivision (b)(1), directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. The office may also establish criteria for models used to analyze transportation impacts to ensure the models are accurate, reliable, and consistent with the intent of this section."

Subdivision (b)(2) of Section 21099 further provides that "[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion *shall not be considered a significant impact on the environment* pursuant to [CEQA], except in locations specifically identified in the guidelines, if any." (Italics added.)

Pursuant to SB 743, the Natural Resources Agency promulgated CEQA Guidelines Section 15064.3 in late 2018, which became effective in early 2019. Subdivision (a) of that section provides that "[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact."[25]

Please refer to Question 'b' for a discussion of VMT.

Transit, Bicycle, and Pedestrian Facilities

As noted in the City's General Plan EIR, the City does not have a standardized metric by which to evaluate the effectiveness of the bicycle circulation system nor the pedestrian circulation system. A project's impact on bicycle and/or pedestrian facilities is considered to occur if the project would adversely affect an existing bicycle or pedestrian facility or preclude the construction of planned facilities.

As previously discussed, the proposed project consists of an expansion of the existing warehouse, from 447,042 sf to 572,754 sf, adding a total of 125,712 sf of new warehouse space to the south of the existing structure. As part of the expansion, the project would include a new point of ingress/egress on Atkinson Court to the west of the project site, modifications to the existing parking lots, construction of new parking lots, and associated utility improvements. The proposed improvements would be designed and constructed in accordance with all applicable standards set forth in the City's Engineering Design Standards, including requirements established by standard DS3-15, Driveways. Currently, pedestrian facilities are located on the south side of Atkinson Court, the south side of Vaughn Road, and on each side of North First Street/SR 113. Bicycle lanes are provided on each side of Vaughn Road and North First Street/SR 113. The project's improvements would be limited to on-site areas and would not impact existing bicycle lanes and/or sidewalks in the project vicinity. In addition, due to the nature of the proposed use, the project is not expected to generate demand for increased pedestrian and bicycle facilities in the area. Therefore, the proposed project would result in a less-than-significant impact to bicycle and pedestrian facilities.

With respect to the public transit system, the City does not have a standardized metric to evaluate transit service within the City limits, according to the General Plan EIR. Transit service is currently provided within the City limits by way of Dixon Readi-Ride, a public dial-a-ride transit system providing curb-to-curb transit service Monday through Friday, from 7:00 AM to 5:00 PM through phone reservations. Implementation of the proposed project would not interfere with Dixon Readi-Ride operations, nor would the project substantially increase demand for transit services. As such the proposed project would result in a less-than-significant impact to existing transit facilities.

[25] Subdivision (b)(2) of Section 15064.3 ("transportation projects") provides that "[t]ransportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

Conclusion

Based on the above information, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and a ***less-than-significant*** impact would occur.

b. Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Although the City of Dixon has not yet established any standards or thresholds regarding VMT, pursuant to Section 15064.3(b)(3), a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc.

To evaluate potential VMT impacts associated with the proposed project, a VMT analysis was prepared by TJKM (see Appendix D).[26] TJKM followed advice contained in the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, published by the OPR in December 2018. It should be noted that an analysis of VMT from heavy truck trips is not required pursuant to SB 743 and the CEQA Guidelines, rather the focus should be on automobile and light truck use. The OPR Guidance provides evidence that movement of goods/materials in heavy trucks was meant to be excluded from the VMT requirement (OPR Guidance, pgs. 11-16). Thus, the VMT analysis for the proposed project focuses on employee trips. Based on the OPR recommendations, VMT impacts attributable to the proposed warehouse expansion may be considered potentially significant if home-based work VMT per employee (VMT per job) exceeds 85 percent of the average rate for the region, which for this project would be Solano County. The VMT analysis used the most recent version of the Solano-Napa Activity Based Model (SNABM), which was adopted by the Solano Transportation Authority in December 2020. Per the analysis, 125,712 sf of warehouse space converts to 103 total employees using a factor of 1,225 sf per employee, derived from the Southern California Council of Governments (SCAG) regional employment density study. The SCAG study is the most recent employment density study completed in the State, and thus, was used for this project to get a reasonably accurate employee number. The project site's associated Traffic Analysis Zone (TAZ) is #950. A Base Year (2015) Plus Project model run was conducted with the land use changes added. The results are summarized in Table 9, Table 10, and Table 11.

Table 9
Base Year (2015) VMT Metrics

Metrics	Home-based Work VMT	Employees	VMT per Job
TAZ 950	4,885	426	11.47
Solano County	4,956,966	130,626	37.95

Source: TJKM. Technical Memorandum: Dixon Commerce Center Expansion VMT Analysis. August 11, 2021.

[26] TJKM. *Technical Memorandum: Dixon Commerce Center Expansion VMT Analysis*. August 11, 2021.

Table 10
Base Year (2015) Plus Project VMT Metrics

Metrics	Home-based Work VMT	Employees	VMT per Job
TAZ 950	5,893	529	11.14
Solano County	4,943,374	130,729	37.81

Source: TJKM. Technical Memorandum: Dixon Commerce Center Expansion VMT Analysis. August 11, 2021.

Table 11
Base Year (2015) Versus Project VMT Metrics Difference

Metrics	Home-based Work VMT	Employees	VMT per Job
TAZ 950	+1,008	+103	-0.33
Solano County	+13,592	+103	-0.14

Source: TJKM. Technical Memorandum: Dixon Commerce Center Expansion VMT Analysis. August 11, 2021.

As shown above, for the base year, the project would decrease the commercial VMT per job in TAZ 950 from 11.47 to 11.14. The project would decrease commercial VMT per job in Solano County from 37.95 to 37.81. On a project level for the base year, the project would generate 5,893 commercial VMT, or 11.14 VMT per job in TAZ 950. Because the value is lower than the Solano County 85 percent threshold baseline of 32.26 VMT per job (15 percent below 37.95 VMT per job = 32.26), the proposed project would be below the significance threshold of VMT analysis for the baseline scenario.

Based on the analysis of potential VMT impacts associated with the proposed project, implementation of the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and a ***less-than-significant*** impact would occur.

c,d. The proposed project does not include substantial changes to existing roadways or the introduction of an incompatible use or any design features that would be considered hazardous. The proposed warehouse expansion would be compatible with the project site's land use and zoning designations. Site access would be provided by way of existing access points along Vaughn Road and Commerce Way, as well as a new access point on Atkinson Court. While Vaughn Road is a principal arterial in the City, the road's ingress/egress which provides access to the property would not be obstructed at any vantage point. Heavy trucks arriving and departing the project site would be by way of established truck routes in accordance with Section 12.06.020 of the Municipal Code. Furthermore, the City's Engineering Design Standards include requirements for industrial driveways, which would be subject to approval by the City Engineer prior to approval of the project's final improvement plans.

Based on the above information, the proposed project would not substantially increase hazards due to design features or incompatible uses, and emergency access to the site would be adequate. However, during construction of the proposed project, the project would generate employee trips and a variety of construction-related vehicle trips. As such, construction activities could include disruptions to the transportation network near the project site. Such disruptions would include the possibility of temporary lane closures, street closures, sidewalk closures, and bikeway closures. Bicycle and transit access could also be disrupted. As a result, the above activities could degrade roadway conditions and result in a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

XVII-1 *Prior to any construction activities at the project site, the project applicant shall prepare a detailed Construction Traffic Control Plan and submit it for review and approval to the City Public Works Department. The applicant and the City shall consult with Caltrans, Readi-Ride, and local emergency service providers for their input prior to approving the plan. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained during construction. At a minimum, the plan shall include:*

- *The number of truck trips and duration of truck activity;*
- *The date and time of lane closures;*
- *Typical daily construction activities schedule;*
- *Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting;*
- *Provision of a truck circulation pattern;*
- *Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas);*
- *Safe and efficient access routes for emergency vehicles;*
- *Manual traffic control, when necessary;*
- *Proper advance warning and posted signage concerning street closures; and*
- *Provisions for pedestrian safety.*

A copy of the Construction Traffic Control Plan shall be submitted to local emergency response agencies at least 14 days prior to the commencement of construction, if construction would partially or fully obstruct roadways.

XVIII. TRIBAL CULTURAL RESOURCES. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. 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).	☐	✖	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of 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 resource to a California Native American tribe.	☐	✖	☐	☐

Discussion

a,b. As discussed in Section V, Cultural Resources, of this IS/MND, the Negative Archaeological Survey Report prepared for the proposed project concluded that the project site does not contain any recorded historic buildings or structures on any lists of historic resources. Additionally, the Negative Archaeological Survey Report determined the project site does not contain any recorded archaeological resources, and the potential for unrecorded archaeological resources to occur on the project site is low. In addition, a search of the NAHC Sacred Lands File indicated that the project site does not contain any known Tribal Cultural Resources.

In compliance with AB 52 (PRC Section 21080.3.1), a project notification letter was distributed to the Cachil Dehe Band of Wintun Indians of the Colusa Indian Community, Cortina Rancheria – Kletsel Dehe Band of Wintun Indians, and the Yocha Dehe Wintun Nation. The letters were distributed on August 5, 2021. The Yocha Dehe Wintun Nation submitted a response on August 18, 2021 requesting formal consultation with the lead agency, and, as such, the City, as the lead agency, initiated consultation with the tribe. Based on the information subsequently provided, the Yocha Dehe Wintun Nation indicated that the tribe is not aware of any known cultural resources near the project site and a cultural monitor is not needed. However, the tribe recommends cultural sensitivity training for any pre-project personnel.

Based on lack of identified cultural resources at the site and the extensive disturbance that has occurred within the project vicinity, known Tribal Cultural Resources do not exist within the site. Nevertheless, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a Tribal Cultural Resource if previously unknown Tribal Cultural Resources are uncovered during grading or other ground-disturbing activities. Thus, a ***potentially significant*** impact to Tribal Cultural Resources could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

XVIII-1 *Prior to commencement of construction activities, the applicant shall arrange for a member of Yocha Dehe Wintun Nation to conduct Cultural Sensitivity Training to the construction crew. Generally, the training would consist of a presentation to the construction crew about types of resources and evidence thereof, role of the Tribe, what to do if resources are uncovered, etc. To schedule Cultural Sensitivity Training prior to commencement of construction, the applicant shall contact the Cultural Resources Department Administrative Staff, Yocha Dehe Wintun Nation, Office (530) 796-3400, Email:* THPO@yochadehe-nsn.gov*. Proof of compliance with this measure shall be provided to the Dixon Community Development Department.*

XIX. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	✖	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	✖	☐
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 project's projected demand in addition to the provider's existing commitments?	☐	☐	✖	☐
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?	☐	☐	✖	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	✖	☐

Discussion

a-c. Brief discussions of the water, wastewater, stormwater drainage, electrical, natural gas, and telecommunications facilities that would serve the proposed project are included below.

Water

The proposed project would be provided water services by the City. According to the General Plan EIR, the City's water service area includes approximately 2,700 service connections, serving a population of approximately 8,400. The City's water service area is divided into three sub-areas: North Zone, Core Zone, and South Zone. Approximately 93 percent of the customers served within the sub-areas are residential, with the remainder a collection of commercial, industrial, government, and landscape customers. The project site is located within the Core Zone and is served by the City. The City relies exclusively on groundwater for water supply, with water pumped from the Solano Subbasin, which is a part of the Sacramento Valley Groundwater Basin.

According to the City's General Plan EIR, the per capita daily water use of Dixon was 104 gallons per capita per day (GPCD) in 2015. Using 104 GPCD as a baseline, the projected additional citywide water demand at buildout of the General Plan, with 9,087 additional residents, would be 1,058 acre-feet (AF) per year, or 0.94 million gallons per day (MGD). The City's water demand as of 2015 was 2.37 MGD. Therefore, the General Plan EIR determined that buildout of the General Plan could result in a water demand increase of up to 40 percent. The City operates a total of five groundwater wells, which have a total capacity of about 12.2 MGD, or 13,700 AF per year (AFY). For planning purposes, the City assumes a firm water supply calculated as the total supply available with the largest well out of service. Based on such conditions, the General Plan EIR found that the existing firm water supply is 6.0 MGD, or 6,800 AFY. The City's 2016 Water System Master Plan recommends four additional wells be constructed to meet the buildout demand

projections.[27] With the recommended new wells, the General Plan EIR determined that total buildout supply capacity (assuming the largest well is out of service) would be 17.3 MGD, or 19,400 AFY. Based on such projections, the General Plan EIR concluded that buildout of the General Plan would not require additional new wells, beyond the existing and planned wells.

Furthermore, the General Plan EIR determined that even in dry and multiple dry years, the Solano Groundwater Subbasin levels have been relatively stable. Since the construction of the Solano Project and the Monticello Dam in the 1950s, groundwater levels have remained consistent throughout the County, with major land subsidence not detected, and well levels dropping and rising seasonally, even during the multi-year drought from 2011 to 2017. Per the General Plan EIR, the relative stability of the subbasin levels indicates that even in dry and multiple dry years, the City is likely to have adequate water supply. As such, the City would have sufficient water supplies to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

City well DW-44 ("Industrial Well") serves the industrial area within which the project site is located; however, the City is in the process of replacing the well. Because the proposed warehouse expansion would rely on water from the replacement well, the project shall be conditioned to pay its fair share toward the replacement costs, similar to other projects in the area.

Based on the above, considering that the proposed project would be consistent with the site's General Plan land use designation, buildout of the site with the proposed uses was generally evaluated in the General Plan EIR, and the project would not result in impacts beyond those identified in the General Plan EIR. Therefore, the project would result in a less-than-significant impact.

Wastewater

The City owns and operates a sewer system and wastewater treatment facility (WWTF), with the City's Public Works Department responsible for providing services in the City. Primary services provided by the City for the wastewater system are collection, treatment, disposal, and maintenance. The sewer system, which includes approximately 5,000 connections, generally flows from the north and west to the south and east, with pipes sized starting at six inches adjacent to I-80, eventually connecting to the 42-inch trunk line at the south edge of town, which transports the influent to the WWTF, located on farmland to the southeast of the City. The system also has two lift stations within the southwest portion of the City limits. In 2016, the City completed an upgrade to the WWTF, replacing 130-acre treatment ponds with an oxidation ditch design. The upgrade implemented an activated sludge treatment process that required much less land than the original aerated pond process. Phase 1 of the WWTF upgrade increased the average annual flow (AAF) capacity of the WWTF to 1.9 MGD and was constructed on four acres in a 14-acre site at the north edge of the original WWTF, which covers 430 acres. The Phase 1 upgrade/expansion was designed so that the WWTF can be further expanded to an AAF capacity of 2.5 MGD. Per the General Plan EIR, the flows to the WWTF were approximately 1.2 MGD in 2014, and the City has additional land (in the 14-acre site) that could be used to further expand the WWTF beyond 2.5 MGD without reducing the area

[27] City of Dixon. *2016 Water System Master Plan and Strategic Asset Management Plan*. Available at: https://www.cityofdixon.us/departments/Water/WaterSystemMasterPlan. Accessed October 2021.

used for land application. Additionally, the City collects wastewater rates and impact fees to fund the operation, maintenance, and expansion of the collection system and WWTF, ensuring the financial capacity to make any necessary improvements in full compliance with any applicable regulations. Impact fees are established by Section 4.07.100 of the City's Municipal Code. Based on the WWTF's ability to be expanded to accommodate treatment and disposal, the General Plan EIR concluded the City would have sufficient capacity to accommodate the projected wastewater flows at buildout of the General Plan Planning Area. Given that the proposed project is consistent with the project site's land use and zoning designations and would comply with all applicable regulations and standards contained in the General Plan and Municipal Code, the proposed project would be consistent with the conclusions of the General Plan EIR. Therefore, the project would result in a less-than-significant impact.

Stormwater

Issues related to stormwater infrastructure are discussed in Section X, Hydrology and Water Quality, of this IS/MND. As noted therein, the proposed project would include on-site bioretention areas to capture, treat, and discharge runoff to the City's storm drain system. Therefore, the project would not significantly increase stormwater flows into the City's existing system. The final drainage system design for the project would be subject to review and approval by the City of Dixon City Engineer to confirm that the proposed drainage system for the project is consistent with the City's Engineering Design Standards. Therefore, the proposed project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and the project would have a less-than-significant impact.

Electricity, Natural Gas, and Telecommunications

Electricity and natural gas would be provided by PG&E by way of existing electrical and natural gas infrastructure in the project vicinity. Internet and telephone services would be provided by AT&T or a similar service provider operating within the City. The project would not require major upgrades to, or extension of, existing infrastructure. Thus, impacts to electricity, natural gas, and telecommunications infrastructure would be less than significant.

Conclusion

Based on the above information, the proposed project would not require or result in the relocation or construction of new or expanded utility facilities, the construction or relocation of which could cause significant environmental effects. Additionally, the City would have sufficient water supplies to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years and adequate capacity to serve the project's projected wastewater services demand in addition to the City's existing commitments with payment of impact fees established by Section 4.07.100 of the City's Municipal Code. Therefore, the project would result in a ***less-than-significant*** impact.

d,e. Solid waste disposal services are provided in the General Plan Planning Area by Recology Dixon, a private company under contract with the City. Recology Dixon provides weekly collection of garbage, recycling, and yard waste, and operates the Dixon Recycle Center, located in the City. Household hazardous waste disposal services are provided by Recology Dixon at the Household Hazardous Waste Facility in the City of Vacaville. Solid waste collected in the Planning Area is transported to the Hay Road Landfill, located eight

miles south of the City and operated by Recology. According to the General Plan EIR, in 2017, the City sent 17,834 tons of waste to the landfill, or an average of about 40 tons per day. The landfill has a permitted capacity of 2,400 tons per day, with an estimated total permitted capacity of 34,697,000 cubic yards. The total estimated capacity used, as of April 2013, was 6,559,000 cubic yards (18.9 percent of total permitted capacity). The estimated closure date of the currently permitted facility is 2068. In 2018, Recology released a Notice of Preparation stating an intent to expand the Hay Road Landfill by 8,800,000 cubic yards and extend the estimated life of the landfill by approximately nine years.

From 2008 to 2017, the average per capita disposal rate for residents was 4.3 pounds per person per day (PPD), and 14.4 PPD for employees in the City. Project growth from buildout of the Planning Area would result in about 7,300 extra tons of waste per year, or combined with the City's average yearly disposal from 2008 to 2017, an average of about 60 tons per day, amounting to only 2.5 percent of the landfill's daily permitted capacity. Based on the projections, the General Plan EIR concluded buildout of the General Plan Planning Area would not result in solid waste generation that exceeds capacity at the Hay Road Landfill. Additionally, the General Plan contains numerous policies aimed at reduction and diversion from landfills of solid waste including by providing recycling receptacles throughout the City, requiring development of a construction waste diversion ordinance, increasing public education around waste reduction and diversion, and facilitating citywide goods donation and garage sale events. All new development must also comply with the CALGreen Code, which requires diversion of at least 65 percent of construction waste from landfills.

Given that the proposed project is consistent with the project site's land use and zoning designations and would comply with all applicable regulations and standards contained in the General Plan and Municipal Code, the proposed project would not 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. The project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, the project would result in a ***less-than-significant*** impact.

XX. WILDFIRE. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	✖	☐
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?	☐	☐	✖	☐
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?	☐	☐	✖	☐
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?	☐	☐	✖	☐

Discussion

a-d. According to CAL FIRE's Fire and Resource Assessment Program, the project site is located within a LRA – Incorporated. CAL FIRE has determined that the County does not contain VHFH Severity Zones in LRAs. Furthermore, the proposed project would not conflict with the City's EOP. The project site is not located on a substantial slope, and the project area does not include any existing features that would substantially increase fire risk. As discussed in Section VII, Geology and Soils, and Section X, Hydrology and Water Quality, of this IS/MND, development of the proposed project would not expose people or structures to significant risks related to flooding or landslides.

Furthermore, the proposed project would be consistent with what was anticipated for the project site in the City's General Plan. Therefore, development of the site has been previously anticipated and analyzed in the General Plan EIR. The General Plan EIR concludes that compliance with the California Fire Code, California Building Code, the California Strategic Fire Plan, and Chapter 16.02 of the City's Municipal Code, as well as the involvement of the DFD in the development review process, would ensure that impacts related to wildfire hazards would be less than significant.

Based on the above, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and a ***less-than-significant*** impact would occur.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	✖	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	✖	☐

Discussion

a. As described throughout this IS/MND, while implementation of the proposed project would have the potential to adversely impact the environment by reducing available habitat for Swainson's hawk, burrowing owl, and migratory birds, Mitigation Measures IV-1 through IV-9 would ensure that impacts to special-status species would be less-than-significant. The project site has been previously disturbed, and does not contain any known historic or prehistoric resources. Thus, implementation of the proposed project is not anticipated to have the potential to result in impacts related to historic or prehistoric resources. Nevertheless, Mitigation Measures V-1 and V-2 would ensure that in the event that historic or prehistoric resources are discovered within the project site, such resources are protected in compliance with the requirements of CEQA. The proposed project would implement and comply with applicable General Plan policies and Municipal Code standards, as discussed throughout this IS/MND. With implementation of the mitigation measures required by this IS/MND, compliance with General Plan policies, Municipal Code standards, and application of standard BMPs during construction, development of the proposed project would not result in any of the following: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Therefore, a ***less-than-significant*** impact would occur.

b. The proposed project in conjunction with other development within the City of Dixon could incrementally contribute to cumulative impacts in the area. However, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level through compliance with the mitigation measures included in this IS/MND, as well as applicable General Plan policies, Municipal Code regulations and standards, and other applicable local and State regulations. In addition, the project would be consistent with the project site's existing land use and zoning designations. The project site is surrounded by existing development and is located in an urbanized setting. Accordingly, buildout of the site with industrial uses was

generally considered in the cumulative analysis of buildout of the General Plan Planning Area within the General Plan EIR.

As noted in Section 21083.3 of the CEQA Guidelines, where a project is consistent with zoning and general plan designations for the site, and an EIR has been certified with respect to that general plan, the analysis of potential environmental impacts resulting from the individual project should focus on those effects that are peculiar to the proposed project. As demonstrated throughout this IS/MND, the proposed project would not result in any significant environmental impacts peculiar to the project, and, thus, the proposed project would not contribute any new or additional impacts not previously analyzed in the General Plan EIR. Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts in the City, and the project's incremental contribution to cumulative impacts would be ***less than significant***.

c. As described in this IS/MND, the proposed project would comply with all applicable General Plan policies, Municipal Code standards, other applicable local and State regulations, and mitigation measures included herein. In addition, as discussed in Section III, Air Quality, Section IX, Hazards and Hazardous Materials, and Section XIII, Noise, of this IS/MND, the proposed project would not cause substantial effects to human beings, including effects related to exposure to air pollutants, hazardous materials and noise. Therefore, the proposed project's impact would be ***less than significant***.

Appendix A

CalEEMod Results

Dixon Commerce Center - Yolo/Solano AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dixon Commerce Center

Yolo/Solano AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	125.71	1000sqft	2.89	125,712.00	0
Parking Lot	40.00	Space	0.50	16,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Phase timing adjusted per AQ Questionnaire.

Grading -

Water Mitigation - Water conservation strategy applied to reflect compliance with MWELO.

Operational Off-Road Equipment - Off-road equipment added pursuant to AQ Questionnaire.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - User Defined -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	20.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	18.00	220.00
tblLandUse	LandUseSquareFeet	125,710.00	125,712.00
tblLandUse	LotAcreage	0.36	0.50
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	150.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	150.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00

2.0 Emissions Summary

Dixon Commerce Center - Yolo/Solano AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.4184	1.8732	1.8435	3.5500e-003	0.3168	0.0915	0.4083	0.1486	0.0858	0.2344	0.0000	312.1769	312.1769	0.0644	5.4800e-003	315.4204
2023	0.2408	0.7117	0.8450	1.6500e-003	0.0288	0.0331	0.0619	7.8000e-003	0.0313	0.0391	0.0000	145.5279	145.5279	0.0245	3.2100e-003	147.0969
Maximum	**0.4184**	**1.8732**	**1.8435**	**3.5500e-003**	**0.3168**	**0.0915**	**0.4083**	**0.1486**	**0.0858**	**0.2344**	**0.0000**	**312.1769**	**312.1769**	**0.0644**	**5.4800e-003**	**315.4204**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.4184	1.8732	1.8435	3.5500e-003	0.3168	0.0915	0.4083	0.1486	0.0858	0.2344	0.0000	312.1766	312.1766	0.0644	5.4800e-003	315.4201
2023	0.2408	0.7117	0.8450	1.6500e-003	0.0288	0.0331	0.0619	7.8000e-003	0.0313	0.0391	0.0000	145.5278	145.5278	0.0245	3.2100e-003	147.0967
Maximum	**0.4184**	**1.8732**	**1.8435**	**3.5500e-003**	**0.3168**	**0.0915**	**0.4083**	**0.1486**	**0.0858**	**0.2344**	**0.0000**	**312.1766**	**312.1766**	**0.0644**	**5.4800e-003**	**315.4201**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**4-1-2022**	**6-30-2022**	0.7458	0.7458
2	**7-1-2022**	**9-30-2022**	0.7680	0.7680
3	**10-1-2022**	**12-31-2022**	0.7835	0.7835
4	**1-1-2023**	**3-31-2023**	0.7119	0.7119
5	**4-1-2023**	**6-30-2023**	0.2372	0.2372
		Highest	0.7835	0.7835

Dixon Commerce Center - Yolo/Solano AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5288	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Energy	2.3300e-003	0.0212	0.0178	1.3000e-004		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	64.3050	64.3050	7.1100e-003	1.2300e-003	64.8498
Mobile	0.1290	0.1993	1.2110	2.5600e-003	0.2426	2.2400e-003	0.2448	0.0649	2.1000e-003	0.0670	0.0000	239.0503	239.0503	0.0158	0.0131	243.3587
Offroad	9.5200e-003	0.0936	0.1266	1.7000e-004		5.0700e-003	5.0700e-003		4.6600e-003	4.6600e-003	0.0000	15.2954	15.2954	4.9500e-003	0.0000	15.4190
Waste						0.0000	0.0000		0.0000	0.0000	23.9874	0.0000	23.9874	1.4176	0.0000	59.4279
Water						0.0000	0.0000		0.0000	0.0000	9.2227	14.5540	23.7767	0.9496	0.0227	54.2675
Total	**0.6696**	**0.3141**	**1.3569**	**2.8600e-003**	**0.2426**	**8.9300e-003**	**0.2515**	**0.0649**	**8.3800e-003**	**0.0733**	**33.2102**	**333.2077**	**366.4178**	**2.3951**	**0.0370**	**437.3260**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5288	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Energy	2.3300e-003	0.0212	0.0178	1.3000e-004		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	64.3050	64.3050	7.1100e-003	1.2300e-003	64.8498
Mobile	0.1290	0.1993	1.2110	2.5600e-003	0.2426	2.2400e-003	0.2448	0.0649	2.1000e-003	0.0670	0.0000	239.0503	239.0503	0.0158	0.0131	243.3587
Offroad	9.5200e-003	0.0936	0.1266	1.7000e-004		5.0700e-003	5.0700e-003		4.6600e-003	4.6600e-003	0.0000	15.2954	15.2954	4.9500e-003	0.0000	15.4190
Waste						0.0000	0.0000		0.0000	0.0000	23.9874	0.0000	23.9874	1.4176	0.0000	59.4279
Water						0.0000	0.0000		0.0000	0.0000	9.2227	14.5540	23.7767	0.9496	0.0227	54.2675
Total	**0.6696**	**0.3141**	**1.3569**	**2.8600e-003**	**0.2426**	**8.9300e-003**	**0.2515**	**0.0649**	**8.3800e-003**	**0.0733**	**33.2102**	**333.2077**	**366.4178**	**2.3951**	**0.0370**	**437.3260**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2022	4/28/2022	5	20	
2	Grading	Grading	4/29/2022	5/26/2022	5	20	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3	Paving	Paving	5/27/2022	6/23/2022	5	20	
4	Building Construction	Building Construction	6/24/2022	4/27/2023	5	220	
5	Architectural Coating	Architectural Coating	7/8/2022	5/11/2023	5	220	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 20

Acres of Paving: 0.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 188,568; Non-Residential Outdoor: 62,856; Striped Parking Area: 960 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	23.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7098
Total	**0.0317**	**0.3308**	**0.1970**	**3.8000e-004**	**0.1966**	**0.0161**	**0.2127**	**0.1010**	**0.0148**	**0.1159**	**0.0000**	**33.4394**	**33.4394**	**0.0108**	**0.0000**	**33.7098**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.5000e-004	4.0900e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1050	1.1050	4.0000e-005	3.0000e-005	1.1155
Total	**5.2000e-004**	**3.5000e-004**	**4.0900e-003**	**1.0000e-005**	**1.3200e-003**	**1.0000e-005**	**1.3300e-003**	**3.5000e-004**	**1.0000e-005**	**3.6000e-004**	**0.0000**	**1.1050**	**1.1050**	**4.0000e-005**	**3.0000e-005**	**1.1155**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7097
Total	**0.0317**	**0.3308**	**0.1970**	**3.8000e-004**	**0.1966**	**0.0161**	**0.2127**	**0.1010**	**0.0148**	**0.1159**	**0.0000**	**33.4394**	**33.4394**	**0.0108**	**0.0000**	**33.7097**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.5000e-004	4.0900e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1050	1.1050	4.0000e-005	3.0000e-005	1.1155
Total	**5.2000e-004**	**3.5000e-004**	**4.0900e-003**	**1.0000e-005**	**1.3200e-003**	**1.0000e-005**	**1.3300e-003**	**3.5000e-004**	**1.0000e-005**	**3.6000e-004**	**0.0000**	**1.1050**	**1.1050**	**4.0000e-005**	**3.0000e-005**	**1.1155**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.2086	0.1527	3.0000e-004		9.4100e-003	9.4100e-003		8.6600e-003	8.6600e-003	0.0000	26.0548	26.0548	8.4300e-003	0.0000	26.2654
Total	**0.0195**	**0.2086**	**0.1527**	**3.0000e-004**	**0.0708**	**9.4100e-003**	**0.0802**	**0.0343**	**8.6600e-003**	**0.0429**	**0.0000**	**26.0548**	**26.0548**	**8.4300e-003**	**0.0000**	**26.2654**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.9000e-004	3.4100e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9208	0.9208	3.0000e-005	3.0000e-005	0.9296
Total	**4.3000e-004**	**2.9000e-004**	**3.4100e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9208**	**0.9208**	**3.0000e-005**	**3.0000e-005**	**0.9296**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.2086	0.1527	3.0000e-004		9.4100e-003	9.4100e-003		8.6600e-003	8.6600e-003	0.0000	26.0547	26.0547	8.4300e-003	0.0000	26.2654
Total	**0.0195**	**0.2086**	**0.1527**	**3.0000e-004**	**0.0708**	**9.4100e-003**	**0.0802**	**0.0343**	**8.6600e-003**	**0.0429**	**0.0000**	**26.0547**	**26.0547**	**8.4300e-003**	**0.0000**	**26.2654**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.9000e-004	3.4100e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9208	0.9208	3.0000e-005	3.0000e-005	0.9296
Total	**4.3000e-004**	**2.9000e-004**	**3.4100e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9208**	**0.9208**	**3.0000e-005**	**3.0000e-005**	**0.9296**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.7700e-003	0.0952	0.1219	1.9000e-004		4.8800e-003	4.8800e-003		4.5000e-003	4.5000e-003	0.0000	16.3759	16.3759	5.1500e-003	0.0000	16.5045
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0104**	**0.0952**	**0.1219**	**1.9000e-004**		**4.8800e-003**	**4.8800e-003**		**4.5000e-003**	**4.5000e-003**	**0.0000**	**16.3759**	**16.3759**	**5.1500e-003**	**0.0000**	**16.5045**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	3.9000e-004	4.5400e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2277	1.2277	4.0000e-005	4.0000e-005	1.2394
Total	**5.7000e-004**	**3.9000e-004**	**4.5400e-003**	**1.0000e-005**	**1.4700e-003**	**1.0000e-005**	**1.4800e-003**	**3.9000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**1.2277**	**1.2277**	**4.0000e-005**	**4.0000e-005**	**1.2394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.7700e-003	0.0952	0.1219	1.9000e-004		4.8800e-003	4.8800e-003		4.5000e-003	4.5000e-003	0.0000	16.3758	16.3758	5.1500e-003	0.0000	16.5045
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0104**	**0.0952**	**0.1219**	**1.9000e-004**		**4.8800e-003**	**4.8800e-003**		**4.5000e-003**	**4.5000e-003**	**0.0000**	**16.3758**	**16.3758**	**5.1500e-003**	**0.0000**	**16.5045**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	3.9000e-004	4.5400e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2277	1.2277	4.0000e-005	4.0000e-005	1.2394
Total	**5.7000e-004**	**3.9000e-004**	**4.5400e-003**	**1.0000e-005**	**1.4700e-003**	**1.0000e-005**	**1.4800e-003**	**3.9000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**1.2277**	**1.2277**	**4.0000e-005**	**4.0000e-005**	**1.2394**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1160	1.0619	1.1127	1.8300e-003		0.0550	0.0550		0.0518	0.0518	0.0000	157.5732	157.5732	0.0378	0.0000	158.5169
Total	**0.1160**	**1.0619**	**1.1127**	**1.8300e-003**		**0.0550**	**0.0550**		**0.0518**	**0.0518**	**0.0000**	**157.5732**	**157.5732**	**0.0378**	**0.0000**	**158.5169**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6700e-003	0.0776	0.0230	3.1000e-004	9.8900e-003	7.1000e-004	0.0106	2.8600e-003	6.8000e-004	3.5400e-003	0.0000	29.7081	29.7081	1.3000e-004	4.5200e-003	31.0582
Worker	0.0117	7.9200e-003	0.0927	2.7000e-004	0.0300	1.7000e-004	0.0302	7.9800e-003	1.5000e-004	8.1400e-003	0.0000	25.0459	25.0459	8.2000e-004	7.3000e-004	25.2844
Total	**0.0144**	**0.0855**	**0.1156**	**5.8000e-004**	**0.0399**	**8.8000e-004**	**0.0408**	**0.0108**	**8.3000e-004**	**0.0117**	**0.0000**	**54.7539**	**54.7539**	**9.5000e-004**	**5.2500e-003**	**56.3426**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1160	1.0619	1.1127	1.8300e-003		0.0550	0.0550		0.0518	0.0518	0.0000	157.5730	157.5730	0.0378	0.0000	158.5167
Total	**0.1160**	**1.0619**	**1.1127**	**1.8300e-003**		**0.0550**	**0.0550**		**0.0518**	**0.0518**	**0.0000**	**157.5730**	**157.5730**	**0.0378**	**0.0000**	**158.5167**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6700e-003	0.0776	0.0230	3.1000e-004	9.8900e-003	7.1000e-004	0.0106	2.8600e-003	6.8000e-004	3.5400e-003	0.0000	29.7081	29.7081	1.3000e-004	4.5200e-003	31.0582
Worker	0.0117	7.9200e-003	0.0927	2.7000e-004	0.0300	1.7000e-004	0.0302	7.9800e-003	1.5000e-004	8.1400e-003	0.0000	25.0459	25.0459	8.2000e-004	7.3000e-004	25.2844
Total	**0.0144**	**0.0855**	**0.1156**	**5.8000e-004**	**0.0399**	**8.8000e-004**	**0.0408**	**0.0108**	**8.3000e-004**	**0.0117**	**0.0000**	**54.7539**	**54.7539**	**9.5000e-004**	**5.2500e-003**	**56.3426**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0661	0.6042	0.6823	1.1300e-003		0.0294	0.0294		0.0277	0.0277	0.0000	97.3580	97.3580	0.0232	0.0000	97.9370
Total	**0.0661**	**0.6042**	**0.6823**	**1.1300e-003**		**0.0294**	**0.0294**		**0.0277**	**0.0277**	**0.0000**	**97.3580**	**97.3580**	**0.0232**	**0.0000**	**97.9370**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0410	0.0128	1.8000e-004	6.1100e-003	2.5000e-004	6.3600e-003	1.7700e-003	2.4000e-004	2.0000e-003	0.0000	17.7339	17.7339	5.0000e-005	2.7000e-003	18.5392
Worker	6.7000e-003	4.3200e-003	0.0530	1.6000e-004	0.0185	1.0000e-004	0.0186	4.9300e-003	9.0000e-005	5.0200e-003	0.0000	15.0642	15.0642	4.6000e-004	4.2000e-004	15.2005
Total	**7.7000e-003**	**0.0453**	**0.0658**	**3.4000e-004**	**0.0247**	**3.5000e-004**	**0.0250**	**6.7000e-003**	**3.3000e-004**	**7.0200e-003**	**0.0000**	**32.7981**	**32.7981**	**5.1000e-004**	**3.1200e-003**	**33.7396**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0661	0.6042	0.6823	1.1300e-003		0.0294	0.0294		0.0277	0.0277	0.0000	97.3579	97.3579	0.0232	0.0000	97.9369
Total	**0.0661**	**0.6042**	**0.6823**	**1.1300e-003**		**0.0294**	**0.0294**		**0.0277**	**0.0277**	**0.0000**	**97.3579**	**97.3579**	**0.0232**	**0.0000**	**97.9369**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0410	0.0128	1.8000e-004	6.1100e-003	2.5000e-004	6.3600e-003	1.7700e-003	2.4000e-004	2.0000e-003	0.0000	17.7339	17.7339	5.0000e-005	2.7000e-003	18.5392
Worker	6.7000e-003	4.3200e-003	0.0530	1.6000e-004	0.0185	1.0000e-004	0.0186	4.9300e-003	9.0000e-005	5.0200e-003	0.0000	15.0642	15.0642	4.6000e-004	4.2000e-004	15.2005
Total	**7.7000e-003**	**0.0453**	**0.0658**	**3.4000e-004**	**0.0247**	**3.5000e-004**	**0.0250**	**6.7000e-003**	**3.3000e-004**	**7.0200e-003**	**0.0000**	**32.7981**	**32.7981**	**5.1000e-004**	**3.1200e-003**	**33.7396**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2099					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0887	0.1143	1.9000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	16.0855	16.0855	1.0500e-003	0.0000	16.1117
Total	**0.2227**	**0.0887**	**0.1143**	**1.9000e-004**		**5.1500e-003**	**5.1500e-003**		**5.1500e-003**	**5.1500e-003**	**0.0000**	**16.0855**	**16.0855**	**1.0500e-003**	**0.0000**	**16.1117**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1700e-003	1.4700e-003	0.0172	5.0000e-005	5.5600e-003	3.0000e-005	5.5900e-003	1.4800e-003	3.0000e-005	1.5100e-003	0.0000	4.6409	4.6409	1.5000e-004	1.4000e-004	4.6851
Total	**2.1700e-003**	**1.4700e-003**	**0.0172**	**5.0000e-005**	**5.5600e-003**	**3.0000e-005**	**5.5900e-003**	**1.4800e-003**	**3.0000e-005**	**1.5100e-003**	**0.0000**	**4.6409**	**4.6409**	**1.5000e-004**	**1.4000e-004**	**4.6851**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2099					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0887	0.1143	1.9000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	16.0855	16.0855	1.0500e-003	0.0000	16.1117
Total	**0.2227**	**0.0887**	**0.1143**	**1.9000e-004**		**5.1500e-003**	**5.1500e-003**		**5.1500e-003**	**5.1500e-003**	**0.0000**	**16.0855**	**16.0855**	**1.0500e-003**	**0.0000**	**16.1117**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1700e-003	1.4700e-003	0.0172	5.0000e-005	5.5600e-003	3.0000e-005	5.5900e-003	1.4800e-003	3.0000e-005	1.5100e-003	0.0000	4.6409	4.6409	1.5000e-004	1.4000e-004	4.6851
Total	**2.1700e-003**	**1.4700e-003**	**0.0172**	**5.0000e-005**	**5.5600e-003**	**3.0000e-005**	**5.5900e-003**	**1.4800e-003**	**3.0000e-005**	**1.5100e-003**	**0.0000**	**4.6409**	**4.6409**	**1.5000e-004**	**1.4000e-004**	**4.6851**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0100e-003	0.0612	0.0851	1.4000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	12.0003	12.0003	7.2000e-004	0.0000	12.0182
Total	**0.1656**	**0.0612**	**0.0851**	**1.4000e-004**		**3.3300e-003**	**3.3300e-003**		**3.3300e-003**	**3.3300e-003**	**0.0000**	**12.0003**	**12.0003**	**7.2000e-004**	**0.0000**	**12.0182**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	9.7000e-004	0.0119	4.0000e-005	4.1500e-003	2.0000e-005	4.1700e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.3715	3.3715	1.0000e-004	9.0000e-005	3.4020
Total	**1.5000e-003**	**9.7000e-004**	**0.0119**	**4.0000e-005**	**4.1500e-003**	**2.0000e-005**	**4.1700e-003**	**1.1000e-003**	**2.0000e-005**	**1.1200e-003**	**0.0000**	**3.3715**	**3.3715**	**1.0000e-004**	**9.0000e-005**	**3.4020**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0100e-003	0.0612	0.0851	1.4000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	12.0003	12.0003	7.2000e-004	0.0000	12.0182
Total	**0.1656**	**0.0612**	**0.0851**	**1.4000e-004**		**3.3300e-003**	**3.3300e-003**		**3.3300e-003**	**3.3300e-003**	**0.0000**	**12.0003**	**12.0003**	**7.2000e-004**	**0.0000**	**12.0182**

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	9.7000e-004	0.0119	4.0000e-005	4.1500e-003	2.0000e-005	4.1700e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.3715	3.3715	1.0000e-004	9.0000e-005	3.4020
Total	**1.5000e-003**	**9.7000e-004**	**0.0119**	**4.0000e-005**	**4.1500e-003**	**2.0000e-005**	**4.1700e-003**	**1.1000e-003**	**2.0000e-005**	**1.1200e-003**	**0.0000**	**3.3715**	**3.3715**	**1.0000e-004**	**9.0000e-005**	**3.4020**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1290	0.1993	1.2110	2.5600e-003	0.2426	2.2400e-003	0.2448	0.0649	2.1000e-003	0.0670	0.0000	239.0503	239.0503	0.0158	0.0131	243.3587
Unmitigated	0.1290	0.1993	1.2110	2.5600e-003	0.2426	2.2400e-003	0.2448	0.0649	2.1000e-003	0.0670	0.0000	239.0503	239.0503	0.0158	0.0131	243.3587

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	218.74	218.74	218.74	651,371	651,371
Total	218.74	218.74	218.74	651,371	651,371

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	10.00	5.00	7.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.504237	0.057028	0.178319	0.145900	0.034359	0.007372	0.018573	0.016766	0.000608	0.000574	0.031445	0.000616	0.004204
Unrefrigerated Warehouse-No Rail	0.504237	0.057028	0.178319	0.145900	0.034359	0.007372	0.018573	0.016766	0.000608	0.000574	0.031445	0.000616	0.004204

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	41.2279	41.2279	6.6700e-003	8.1000e-004	41.6355
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	41.2279	41.2279	6.6700e-003	8.1000e-004	41.6355
NaturalGas Mitigated	2.3300e-003	0.0212	0.0178	1.3000e-004		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	23.0771	23.0771	4.4000e-004	4.2000e-004	23.2143
NaturalGas Unmitigated	2.3300e-003	0.0212	0.0178	1.3000e-004		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	23.0771	23.0771	4.4000e-004	4.2000e-004	23.2143

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	432449	2.3300e-003	0.0212	0.0178	1.3000e-004		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	23.0771	23.0771	4.4000e-004	4.2000e-004	23.2143
Total		**2.3300e-003**	**0.0212**	**0.0178**	**1.3000e-004**		**1.6100e-003**	**1.6100e-003**		**1.6100e-003**	**1.6100e-003**	**0.0000**	**23.0771**	**23.0771**	**4.4000e-004**	**4.2000e-004**	**23.2143**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	432449	2.3300e-003	0.0212	0.0178	1.3000e-004		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	23.0771	23.0771	4.4000e-004	4.2000e-004	23.2143
Total		**2.3300e-003**	**0.0212**	**0.0178**	**1.3000e-004**		**1.6100e-003**	**1.6100e-003**		**1.6100e-003**	**1.6100e-003**	**0.0000**	**23.0771**	**23.0771**	**4.4000e-004**	**4.2000e-004**	**23.2143**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	5600	0.5181	8.0000e-005	1.0000e-005	0.5233
Unrefrigerated Warehouse-No Rail	439992	40.7097	6.5900e-003	8.0000e-004	41.1123
Total		**41.2279**	**6.6700e-003**	**8.1000e-004**	**41.6355**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	5600	0.5181	8.0000e-005	1.0000e-005	0.5233
Unrefrigerated Warehouse-No Rail	439992	40.7097	6.5900e-003	8.0000e-004	41.1123
Total		**41.2279**	**6.6700e-003**	**8.1000e-004**	**41.6355**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5288	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Unmitigated	0.5288	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0366					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4920					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Total	**0.5288**	**1.0000e-005**	**1.5200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0366					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4920					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Total	**0.5288**	**1.0000e-005**	**1.5200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	23.7767	0.9496	0.0227	54.2675
Unmitigated	23.7767	0.9496	0.0227	54.2675

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	29.0704 / 0	23.7767	0.9496	0.0227	54.2675
Total		**23.7767**	**0.9496**	**0.0227**	**54.2675**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	29.0704 / 0	23.7767	0.9496	0.0227	54.2675
Total		**23.7767**	**0.9496**	**0.0227**	**54.2675**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.9874	1.4176	0.0000	59.4279
Unmitigated	23.9874	1.4176	0.0000	59.4279

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	118.17	23.9874	1.4176	0.0000	59.4279
Total		**23.9874**	**1.4176**	**0.0000**	**59.4279**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	118.17	23.9874	1.4176	0.0000	59.4279
Total		**23.9874**	**1.4176**	**0.0000**	**59.4279**

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	1	4.00	150	89	0.20	Diesel
Tractors/Loaders/Backhoes	1	4.00	150	97	0.37	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	3.8500e-003	0.0360	0.0429	6.0000e-005		2.2200e-003	2.2200e-003		2.0500e-003	2.0500e-003	0.0000	5.0359	5.0359	1.6300e-003	0.0000	5.0766
Tractors/Loaders/Backhoes	5.6800e-003	0.0576	0.0837	1.2000e-004		2.8400e-003	2.8400e-003		2.6200e-003	2.6200e-003	0.0000	10.2595	10.2595	3.3200e-003	0.0000	10.3424
Total	**9.5300e-003**	**0.0936**	**0.1266**	**1.8000e-004**		**5.0600e-003**	**5.0600e-003**		**4.6700e-003**	**4.6700e-003**	**0.0000**	**15.2954**	**15.2954**	**4.9500e-003**	**0.0000**	**15.4190**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	0	0	0	0	0.73	

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dixon Commerce Center

Yolo/Solano AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	125.71	1000sqft	2.89	125,712.00	0
Parking Lot	40.00	Space	0.50	16,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Phase timing adjusted per AQ Questionnaire.

Grading -

Water Mitigation - Water conservation strategy applied to reflect compliance with MWELO.

Operational Off-Road Equipment - Off-road equipment added pursuant to AQ Questionnaire.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - User Defined -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	20.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	18.00	220.00
tblLandUse	LandUseSquareFeet	125,710.00	125,712.00
tblLandUse	LotAcreage	0.36	0.50
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	150.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	150.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00

2.0 Emissions Summary

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.5199	33.1150	20.3731	0.0397	19.7939	1.6133	21.4072	10.1388	1.4843	11.6230	0.0000	3,847.4702	3,847.4702	1.1959	0.0865	3,889.4316
2023	5.3404	16.7257	20.0755	0.0394	0.6971	0.7793	1.4764	0.1883	0.7375	0.9258	0.0000	3,817.9974	3,817.9974	0.6396	0.0830	3,858.7334
Maximum	**5.5199**	**33.1150**	**20.3731**	**0.0397**	**19.7939**	**1.6133**	**21.4072**	**10.1388**	**1.4843**	**11.6230**	**0.0000**	**3,847.4702**	**3,847.4702**	**1.1959**	**0.0865**	**3,889.4316**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.5199	33.1150	20.3731	0.0397	19.7939	1.6133	21.4072	10.1388	1.4843	11.6230	0.0000	3,847.4702	3,847.4702	1.1959	0.0865	3,889.4316
2023	5.3404	16.7257	20.0755	0.0394	0.6971	0.7793	1.4764	0.1883	0.7375	0.9258	0.0000	3,817.9974	3,817.9974	0.6396	0.0830	3,858.7334
Maximum	**5.5199**	**33.1150**	**20.3731**	**0.0397**	**19.7939**	**1.6133**	**21.4072**	**10.1388**	**1.4843**	**11.6230**	**0.0000**	**3,847.4702**	**3,847.4702**	**1.1959**	**0.0865**	**3,889.4316**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8982	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Energy	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
Mobile	0.8283	1.0082	6.9977	0.0150	1.3775	0.0123	1.3898	0.3677	0.0116	0.3793		1,540.5077	1,540.5077	0.0911	0.0765	1,565.5866
Offroad	0.1270	1.2477	1.6881	2.3200e-003		0.0676	0.0676		0.0622	0.0622	0.0000	224.8037	224.8037	0.0727		226.6213
Total	**3.8663**	**2.3721**	**8.8002**	**0.0180**	**1.3775**	**0.0888**	**1.4663**	**0.3677**	**0.0826**	**0.4503**	**0.0000**	**1,904.7350**	**1,904.7350**	**0.1666**	**0.0791**	**1,932.4623**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8982	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Energy	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
Mobile	0.8283	1.0082	6.9977	0.0150	1.3775	0.0123	1.3898	0.3677	0.0116	0.3793		1,540.5077	1,540.5077	0.0911	0.0765	1,565.5866
Offroad	0.1270	1.2477	1.6881	2.3200e-003		0.0676	0.0676		0.0622	0.0622	0.0000	224.8037	224.8037	0.0727		226.6213
Total	**3.8663**	**2.3721**	**8.8002**	**0.0180**	**1.3775**	**0.0888**	**1.4663**	**0.3677**	**0.0826**	**0.4503**	**0.0000**	**1,904.7350**	**1,904.7350**	**0.1666**	**0.0791**	**1,932.4623**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2022	4/28/2022	5	20	
2	Grading	Grading	4/29/2022	5/26/2022	5	20	
3	Paving	Paving	5/27/2022	6/23/2022	5	20	
4	Building Construction	Building Construction	6/24/2022	4/27/2023	5	220	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Architectural Coating	Architectural Coating	7/8/2022	5/11/2023	5	220	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 20

Acres of Paving: 0.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 188,568; Non-Residential Outdoor: 62,856; Striped Parking Area: 960 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	23.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0595	0.0315	0.4659	1.3000e-003	0.1369	7.3000e-004	0.1377	0.0363	6.8000e-004	0.0370		132.5860	132.5860	3.7600e-003	3.3200e-003	133.6707
Total	**0.0595**	**0.0315**	**0.4659**	**1.3000e-003**	**0.1369**	**7.3000e-004**	**0.1377**	**0.0363**	**6.8000e-004**	**0.0370**		**132.5860**	**132.5860**	**3.7600e-003**	**3.3200e-003**	**133.6707**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0595	0.0315	0.4659	1.3000e-003	0.1369	7.3000e-004	0.1377	0.0363	6.8000e-004	0.0370		132.5860	132.5860	3.7600e-003	3.3200e-003	133.6707
Total	**0.0595**	**0.0315**	**0.4659**	**1.3000e-003**	**0.1369**	**7.3000e-004**	**0.1377**	**0.0363**	**6.8000e-004**	**0.0370**		**132.5860**	**132.5860**	**3.7600e-003**	**3.3200e-003**	**133.6707**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**7.0826**	**0.9409**	**8.0234**	**3.4247**	**0.8656**	**4.2903**		**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0496	0.0262	0.3882	1.0900e-003	0.1141	6.1000e-004	0.1147	0.0303	5.6000e-004	0.0308		110.4883	110.4883	3.1300e-003	2.7700e-003	111.3922
Total	**0.0496**	**0.0262**	**0.3882**	**1.0900e-003**	**0.1141**	**6.1000e-004**	**0.1147**	**0.0303**	**5.6000e-004**	**0.0308**		**110.4883**	**110.4883**	**3.1300e-003**	**2.7700e-003**	**111.3922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**7.0826**	**0.9409**	**8.0234**	**3.4247**	**0.8656**	**4.2903**	**0.0000**	**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0496	0.0262	0.3882	1.0900e-003	0.1141	6.1000e-004	0.1147	0.0303	5.6000e-004	0.0308		110.4883	110.4883	3.1300e-003	2.7700e-003	111.3922
Total	**0.0496**	**0.0262**	**0.3882**	**1.0900e-003**	**0.1141**	**6.1000e-004**	**0.1147**	**0.0303**	**5.6000e-004**	**0.0308**		**110.4883**	**110.4883**	**3.1300e-003**	**2.7700e-003**	**111.3922**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.0655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0420**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**		**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0662	0.0350	0.5176	1.4500e-003	0.1521	8.2000e-004	0.1530	0.0404	7.5000e-004	0.0411		147.3178	147.3178	4.1700e-003	3.6900e-003	148.5230
Total	**0.0662**	**0.0350**	**0.5176**	**1.4500e-003**	**0.1521**	**8.2000e-004**	**0.1530**	**0.0404**	**7.5000e-004**	**0.0411**		**147.3178**	**147.3178**	**4.1700e-003**	**3.6900e-003**	**148.5230**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.0655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0420**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**	**0.0000**	**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0662	0.0350	0.5176	1.4500e-003	0.1521	8.2000e-004	0.1530	0.0404	7.5000e-004	0.0411		147.3178	147.3178	4.1700e-003	3.6900e-003	148.5230
Total	**0.0662**	**0.0350**	**0.5176**	**1.4500e-003**	**0.1521**	**8.2000e-004**	**0.1530**	**0.0404**	**7.5000e-004**	**0.0411**		**147.3178**	**147.3178**	**4.1700e-003**	**3.6900e-003**	**148.5230**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0401	1.0838	0.3326	4.5600e-003	0.1494	0.0105	0.1599	0.0430	0.0101	0.0531		481.3446	481.3446	2.1100e-003	0.0732	503.2105
Worker	0.1985	0.1049	1.5529	4.3400e-003	0.4564	2.4500e-003	0.4589	0.1211	2.2500e-003	0.1233		441.9533	441.9533	0.0125	0.0111	445.5689
Total	**0.2385**	**1.1887**	**1.8856**	**8.9000e-003**	**0.6059**	**0.0130**	**0.6188**	**0.1641**	**0.0123**	**0.1764**		**923.2979**	**923.2979**	**0.0146**	**0.0843**	**948.7795**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0401	1.0838	0.3326	4.5600e-003	0.1494	0.0105	0.1599	0.0430	0.0101	0.0531		481.3446	481.3446	2.1100e-003	0.0732	503.2105
Worker	0.1985	0.1049	1.5529	4.3400e-003	0.4564	2.4500e-003	0.4589	0.1211	2.2500e-003	0.1233		441.9533	441.9533	0.0125	0.0111	445.5689
Total	**0.2385**	**1.1887**	**1.8856**	**8.9000e-003**	**0.6059**	**0.0130**	**0.6188**	**0.1641**	**0.0123**	**0.1764**		**923.2979**	**923.2979**	**0.0146**	**0.0843**	**948.7795**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0248	0.9265	0.3015	4.4000e-003	0.1494	5.9500e-003	0.1554	0.0430	5.6900e-003	0.0487		465.0090	465.0090	1.3600e-003	0.0707	486.1162
Worker	0.1836	0.0928	1.4323	4.2000e-003	0.4564	2.3200e-003	0.4587	0.1211	2.1400e-003	0.1232		430.2753	430.2753	0.0113	0.0103	433.6184
Total	**0.2084**	**1.0193**	**1.7339**	**8.6000e-003**	**0.6058**	**8.2700e-003**	**0.6141**	**0.1641**	**7.8300e-003**	**0.1719**		**895.2843**	**895.2843**	**0.0126**	**0.0810**	**919.7346**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0248	0.9265	0.3015	4.4000e-003	0.1494	5.9500e-003	0.1554	0.0430	5.6900e-003	0.0487		465.0090	465.0090	1.3600e-003	0.0707	486.1162
Worker	0.1836	0.0928	1.4323	4.2000e-003	0.4564	2.3200e-003	0.4587	0.1211	2.1400e-003	0.1232		430.2753	430.2753	0.0113	0.0103	433.6184
Total	**0.2084**	**1.0193**	**1.7339**	**8.6000e-003**	**0.6058**	**8.2700e-003**	**0.6141**	**0.1641**	**7.8300e-003**	**0.1719**		**895.2843**	**895.2843**	**0.0126**	**0.0810**	**919.7346**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**3.5354**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0397	0.0210	0.3106	8.7000e-004	0.0913	4.9000e-004	0.0918	0.0242	4.5000e-004	0.0247		88.3907	88.3907	2.5000e-003	2.2200e-003	89.1138
Total	**0.0397**	**0.0210**	**0.3106**	**8.7000e-004**	**0.0913**	**4.9000e-004**	**0.0918**	**0.0242**	**4.5000e-004**	**0.0247**		**88.3907**	**88.3907**	**2.5000e-003**	**2.2200e-003**	**89.1138**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**3.5354**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0397	0.0210	0.3106	8.7000e-004	0.0913	4.9000e-004	0.0918	0.0242	4.5000e-004	0.0247		88.3907	88.3907	2.5000e-003	2.2200e-003	89.1138
Total	**0.0397**	**0.0210**	**0.3106**	**8.7000e-004**	**0.0913**	**4.9000e-004**	**0.0918**	**0.0242**	**4.5000e-004**	**0.0247**		**88.3907**	**88.3907**	**2.5000e-003**	**2.2200e-003**	**89.1138**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**3.5225**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0367	0.0186	0.2865	8.4000e-004	0.0913	4.6000e-004	0.0918	0.0242	4.3000e-004	0.0246		86.0551	86.0551	2.2600e-003	2.0500e-003	86.7237
Total	**0.0367**	**0.0186**	**0.2865**	**8.4000e-004**	**0.0913**	**4.6000e-004**	**0.0918**	**0.0242**	**4.3000e-004**	**0.0246**		**86.0551**	**86.0551**	**2.2600e-003**	**2.0500e-003**	**86.7237**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**3.5225**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0367	0.0186	0.2865	8.4000e-004	0.0913	4.6000e-004	0.0918	0.0242	4.3000e-004	0.0246		86.0551	86.0551	2.2600e-003	2.0500e-003	86.7237
Total	**0.0367**	**0.0186**	**0.2865**	**8.4000e-004**	**0.0913**	**4.6000e-004**	**0.0918**	**0.0242**	**4.3000e-004**	**0.0246**		**86.0551**	**86.0551**	**2.2600e-003**	**2.0500e-003**	**86.7237**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8283	1.0082	6.9977	0.0150	1.3775	0.0123	1.3898	0.3677	0.0116	0.3793		1,540.5077	1,540.5077	0.0911	0.0765	1,565.5866
Unmitigated	0.8283	1.0082	6.9977	0.0150	1.3775	0.0123	1.3898	0.3677	0.0116	0.3793		1,540.5077	1,540.5077	0.0911	0.0765	1,565.5866

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	218.74	218.74	218.74	651,371	651,371
Total	218.74	218.74	218.74	651,371	651,371

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	10.00	5.00	7.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.504237	0.057028	0.178319	0.145900	0.034359	0.007372	0.018573	0.016766	0.000608	0.000574	0.031445	0.000616	0.004204
Unrefrigerated Warehouse-No Rail	0.504237	0.057028	0.178319	0.145900	0.034359	0.007372	0.018573	0.016766	0.000608	0.000574	0.031445	0.000616	0.004204

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
NaturalGas Unmitigated	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1184.79	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
Total		**0.0128**	**0.1162**	**0.0976**	**7.0000e-004**		**8.8300e-003**	**8.8300e-003**		**8.8300e-003**	**8.8300e-003**		**139.3874**	**139.3874**	**2.6700e-003**	**2.5600e-003**	**140.2157**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.18479	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
Total		**0.0128**	**0.1162**	**0.0976**	**7.0000e-004**		**8.8300e-003**	**8.8300e-003**		**8.8300e-003**	**8.8300e-003**		**139.3874**	**139.3874**	**2.6700e-003**	**2.5600e-003**	**140.2157**

6.0 Area Detail

Dixon Commerce Center - Yolo/Solano AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8982	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Unmitigated	2.8982	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5700e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Total	**2.8982**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0363**	**0.0363**	**1.0000e-004**		**0.0386**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5700e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Total	**2.8982**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0363**	**0.0363**	**1.0000e-004**		**0.0386**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	1	4.00	150	89	0.20	Diesel
Tractors/Loaders/Backhoes	1	4.00	150	97	0.37	Diesel

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.0513	0.4798	0.5724	7.6000e-004		0.0297	0.0297		0.0273	0.0273	0.0000	74.0154	74.0154	0.0239		74.6139
Tractors/Loaders/ Backhoes	0.0757	0.7678	1.1157	1.5600e-003		0.0379	0.0379		0.0349	0.0349	0.0000	150.7883	150.7883	0.0488		152.0075
Total	**0.1270**	**1.2477**	**1.6881**	**2.3200e-003**		**0.0676**	**0.0676**		**0.0622**	**0.0622**	**0.0000**	**224.8037**	**224.8037**	**0.0727**		**226.6213**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	0	0	0	0	0.73	

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dixon Commerce Center

Yolo/Solano AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	125.71	1000sqft	2.89	125,712.00	0
Parking Lot	40.00	Space	0.50	16,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Phase timing adjusted per AQ Questionnaire.

Grading -

Water Mitigation - Water conservation strategy applied to reflect compliance with MWELO.

Operational Off-Road Equipment - Off-road equipment added pursuant to AQ Questionnaire.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - User Defined -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	20.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	18.00	220.00
tblLandUse	LandUseSquareFeet	125,710.00	125,712.00
tblLandUse	LotAcreage	0.36	0.50
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	150.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	150.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00

2.0 Emissions Summary

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.4967	33.1229	20.2091	0.0392	19.7939	1.6133	21.4072	10.1388	1.4843	11.6230	0.0000	3,805.1317	3,805.1317	1.1965	0.0888	3,836.6750
2023	5.3190	16.8282	19.9312	0.0389	0.6971	0.7793	1.4764	0.1883	0.7375	0.9258	0.0000	3,766.5088	3,766.5088	0.6418	0.0852	3,807.9519
Maximum	**5.4967**	**33.1229**	**20.2091**	**0.0392**	**19.7939**	**1.6133**	**21.4072**	**10.1388**	**1.4843**	**11.6230**	**0.0000**	**3,805.1317**	**3,805.1317**	**1.1965**	**0.0888**	**3,836.6750**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.4967	33.1229	20.2091	0.0392	19.7939	1.6133	21.4072	10.1388	1.4843	11.6230	0.0000	3,805.1317	3,805.1317	1.1965	0.0888	3,836.6750
2023	5.3190	16.8282	19.9312	0.0389	0.6971	0.7793	1.4764	0.1883	0.7375	0.9258	0.0000	3,766.5088	3,766.5088	0.6418	0.0852	3,807.9519
Maximum	**5.4967**	**33.1229**	**20.2091**	**0.0392**	**19.7939**	**1.6133**	**21.4072**	**10.1388**	**1.4843**	**11.6230**	**0.0000**	**3,805.1317**	**3,805.1317**	**1.1965**	**0.0888**	**3,836.6750**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8982	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Energy	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
Mobile	0.7008	1.1646	7.2006	0.0139	1.3775	0.0123	1.3898	0.3677	0.0116	0.3793		1,427.3980	1,427.3980	0.1029	0.0830	1,454.7075
Offroad	0.1270	1.2477	1.6881	2.3200e-003		0.0676	0.0676		0.0622	0.0622	0.0000	224.8037	224.8037	0.0727		226.6213
Total	**3.7388**	**2.5286**	**9.0032**	**0.0169**	**1.3775**	**0.0888**	**1.4663**	**0.3677**	**0.0826**	**0.4503**	**0.0000**	**1,791.6253**	**1,791.6253**	**0.1784**	**0.0856**	**1,821.5831**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8982	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Energy	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
Mobile	0.7008	1.1646	7.2006	0.0139	1.3775	0.0123	1.3898	0.3677	0.0116	0.3793		1,427.3980	1,427.3980	0.1029	0.0830	1,454.7075
Offroad	0.1270	1.2477	1.6881	2.3200e-003		0.0676	0.0676		0.0622	0.0622	0.0000	224.8037	224.8037	0.0727		226.6213
Total	**3.7388**	**2.5286**	**9.0032**	**0.0169**	**1.3775**	**0.0888**	**1.4663**	**0.3677**	**0.0826**	**0.4503**	**0.0000**	**1,791.6253**	**1,791.6253**	**0.1784**	**0.0856**	**1,821.5831**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2022	4/28/2022	5	20	
2	Grading	Grading	4/29/2022	5/26/2022	5	20	
3	Paving	Paving	5/27/2022	6/23/2022	5	20	
4	Building Construction	Building Construction	6/24/2022	4/27/2023	5	220	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Architectural Coating	Architectural Coating	7/8/2022	5/11/2023	5	220	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 20

Acres of Paving: 0.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 188,568; Non-Residential Outdoor: 62,856; Striped Parking Area: 960 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	23.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0541	0.0394	0.4219	1.1700e-003	0.1369	7.3000e-004	0.1377	0.0363	6.8000e-004	0.0370		119.0698	119.0698	4.3700e-003	3.8600e-003	120.3297
Total	**0.0541**	**0.0394**	**0.4219**	**1.1700e-003**	**0.1369**	**7.3000e-004**	**0.1377**	**0.0363**	**6.8000e-004**	**0.0370**		**119.0698**	**119.0698**	**4.3700e-003**	**3.8600e-003**	**120.3297**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0541	0.0394	0.4219	1.1700e-003	0.1369	7.3000e-004	0.1377	0.0363	6.8000e-004	0.0370		119.0698	119.0698	4.3700e-003	3.8600e-003	120.3297
Total	**0.0541**	**0.0394**	**0.4219**	**1.1700e-003**	**0.1369**	**7.3000e-004**	**0.1377**	**0.0363**	**6.8000e-004**	**0.0370**		**119.0698**	**119.0698**	**4.3700e-003**	**3.8600e-003**	**120.3297**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**7.0826**	**0.9409**	**8.0234**	**3.4247**	**0.8656**	**4.2903**		**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0451	0.0328	0.3516	9.8000e-004	0.1141	6.1000e-004	0.1147	0.0303	5.6000e-004	0.0308		99.2249	99.2249	3.6400e-003	3.2200e-003	100.2747
Total	**0.0451**	**0.0328**	**0.3516**	**9.8000e-004**	**0.1141**	**6.1000e-004**	**0.1147**	**0.0303**	**5.6000e-004**	**0.0308**		**99.2249**	**99.2249**	**3.6400e-003**	**3.2200e-003**	**100.2747**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**7.0826**	**0.9409**	**8.0234**	**3.4247**	**0.8656**	**4.2903**	**0.0000**	**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0451	0.0328	0.3516	9.8000e-004	0.1141	6.1000e-004	0.1147	0.0303	5.6000e-004	0.0308		99.2249	99.2249	3.6400e-003	3.2200e-003	100.2747
Total	**0.0451**	**0.0328**	**0.3516**	**9.8000e-004**	**0.1141**	**6.1000e-004**	**0.1147**	**0.0303**	**5.6000e-004**	**0.0308**		**99.2249**	**99.2249**	**3.6400e-003**	**3.2200e-003**	**100.2747**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.0655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0420**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**		**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0601	0.0438	0.4687	1.3000e-003	0.1521	8.2000e-004	0.1530	0.0404	7.5000e-004	0.0411		132.2998	132.2998	4.8500e-003	4.2900e-003	133.6996
Total	**0.0601**	**0.0438**	**0.4687**	**1.3000e-003**	**0.1521**	**8.2000e-004**	**0.1530**	**0.0404**	**7.5000e-004**	**0.0411**		**132.2998**	**132.2998**	**4.8500e-003**	**4.2900e-003**	**133.6996**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.0655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0420**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**	**0.0000**	**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0601	0.0438	0.4687	1.3000e-003	0.1521	8.2000e-004	0.1530	0.0404	7.5000e-004	0.0411		132.2998	132.2998	4.8500e-003	4.2900e-003	133.6996
Total	**0.0601**	**0.0438**	**0.4687**	**1.3000e-003**	**0.1521**	**8.2000e-004**	**0.1530**	**0.0404**	**7.5000e-004**	**0.0411**		**132.2998**	**132.2998**	**4.8500e-003**	**4.2900e-003**	**133.6996**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0385	1.1681	0.3447	4.5600e-003	0.1494	0.0105	0.1600	0.0430	0.0101	0.0531		481.9100	481.9100	2.0400e-003	0.0734	503.8179
Worker	0.1804	0.1313	1.4062	3.9000e-003	0.4564	2.4500e-003	0.4589	0.1211	2.2500e-003	0.1233		396.8994	396.8994	0.0146	0.0129	401.0989
Total	**0.2189**	**1.2994**	**1.7509**	**8.4600e-003**	**0.6059**	**0.0130**	**0.6188**	**0.1641**	**0.0123**	**0.1764**		**878.8094**	**878.8094**	**0.0166**	**0.0862**	**904.9168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0385	1.1681	0.3447	4.5600e-003	0.1494	0.0105	0.1600	0.0430	0.0101	0.0531		481.9100	481.9100	2.0400e-003	0.0734	503.8179
Worker	0.1804	0.1313	1.4062	3.9000e-003	0.4564	2.4500e-003	0.4589	0.1211	2.2500e-003	0.1233		396.8994	396.8994	0.0146	0.0129	401.0989
Total	**0.2189**	**1.2994**	**1.7509**	**8.4600e-003**	**0.6059**	**0.0130**	**0.6188**	**0.1641**	**0.0123**	**0.1764**		**878.8094**	**878.8094**	**0.0166**	**0.0862**	**904.9168**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0229	1.0011	0.3114	4.4100e-003	0.1494	5.9700e-003	0.1554	0.0430	5.7100e-003	0.0487		466.0249	466.0249	1.2800e-003	0.0709	487.1925
Worker	0.1673	0.1161	1.3039	3.7800e-003	0.4564	2.3200e-003	0.4587	0.1211	2.1400e-003	0.1232		386.5216	386.5216	0.0132	0.0119	390.4036
Total	**0.1902**	**1.1171**	**1.6153**	**8.1900e-003**	**0.6058**	**8.2900e-003**	**0.6141**	**0.1641**	**7.8500e-003**	**0.1719**		**852.5465**	**852.5465**	**0.0145**	**0.0828**	**877.5961**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0229	1.0011	0.3114	4.4100e-003	0.1494	5.9700e-003	0.1554	0.0430	5.7100e-003	0.0487		466.0249	466.0249	1.2800e-003	0.0709	487.1925
Worker	0.1673	0.1161	1.3039	3.7800e-003	0.4564	2.3200e-003	0.4587	0.1211	2.1400e-003	0.1232		386.5216	386.5216	0.0132	0.0119	390.4036
Total	**0.1902**	**1.1171**	**1.6153**	**8.1900e-003**	**0.6058**	**8.2900e-003**	**0.6141**	**0.1641**	**7.8500e-003**	**0.1719**		**852.5465**	**852.5465**	**0.0145**	**0.0828**	**877.5961**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**3.5354**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0361	0.0263	0.2813	7.8000e-004	0.0913	4.9000e-004	0.0918	0.0242	4.5000e-004	0.0247		79.3799	79.3799	2.9100e-003	2.5700e-003	80.2198
Total	**0.0361**	**0.0263**	**0.2813**	**7.8000e-004**	**0.0913**	**4.9000e-004**	**0.0918**	**0.0242**	**4.5000e-004**	**0.0247**		**79.3799**	**79.3799**	**2.9100e-003**	**2.5700e-003**	**80.2198**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**3.5354**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0361	0.0263	0.2813	7.8000e-004	0.0913	4.9000e-004	0.0918	0.0242	4.5000e-004	0.0247		79.3799	79.3799	2.9100e-003	2.5700e-003	80.2198
Total	**0.0361**	**0.0263**	**0.2813**	**7.8000e-004**	**0.0913**	**4.9000e-004**	**0.0918**	**0.0242**	**4.5000e-004**	**0.0247**		**79.3799**	**79.3799**	**2.9100e-003**	**2.5700e-003**	**80.2198**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**3.5225**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0335	0.0232	0.2608	7.6000e-004	0.0913	4.6000e-004	0.0918	0.0242	4.3000e-004	0.0246		77.3043	77.3043	2.6400e-003	2.3800e-003	78.0807
Total	**0.0335**	**0.0232**	**0.2608**	**7.6000e-004**	**0.0913**	**4.6000e-004**	**0.0918**	**0.0242**	**4.3000e-004**	**0.0246**		**77.3043**	**77.3043**	**2.6400e-003**	**2.3800e-003**	**78.0807**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**3.5225**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0335	0.0232	0.2608	7.6000e-004	0.0913	4.6000e-004	0.0918	0.0242	4.3000e-004	0.0246		77.3043	77.3043	2.6400e-003	2.3800e-003	78.0807
Total	**0.0335**	**0.0232**	**0.2608**	**7.6000e-004**	**0.0913**	**4.6000e-004**	**0.0918**	**0.0242**	**4.3000e-004**	**0.0246**		**77.3043**	**77.3043**	**2.6400e-003**	**2.3800e-003**	**78.0807**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Dixon Commerce Center - Yolo/Solano AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7008	1.1646	7.2006	0.0139	1.3775	0.0123	1.3898	0.3677	0.0116	0.3793		1,427.3980	1,427.3980	0.1029	0.0830	1,454.7075
Unmitigated	0.7008	1.1646	7.2006	0.0139	1.3775	0.0123	1.3898	0.3677	0.0116	0.3793		1,427.3980	1,427.3980	0.1029	0.0830	1,454.7075

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	218.74	218.74	218.74	651,371	651,371
Total	218.74	218.74	218.74	651,371	651,371

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	10.00	5.00	7.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.504237	0.057028	0.178319	0.145900	0.034359	0.007372	0.018573	0.016766	0.000608	0.000574	0.031445	0.000616	0.004204
Unrefrigerated Warehouse-No Rail	0.504237	0.057028	0.178319	0.145900	0.034359	0.007372	0.018573	0.016766	0.000608	0.000574	0.031445	0.000616	0.004204

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
NaturalGas Unmitigated	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1184.79	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
Total		**0.0128**	**0.1162**	**0.0976**	**7.0000e-004**		**8.8300e-003**	**8.8300e-003**		**8.8300e-003**	**8.8300e-003**		**139.3874**	**139.3874**	**2.6700e-003**	**2.5600e-003**	**140.2157**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.18479	0.0128	0.1162	0.0976	7.0000e-004		8.8300e-003	8.8300e-003		8.8300e-003	8.8300e-003		139.3874	139.3874	2.6700e-003	2.5600e-003	140.2157
Total		**0.0128**	**0.1162**	**0.0976**	**7.0000e-004**		**8.8300e-003**	**8.8300e-003**		**8.8300e-003**	**8.8300e-003**		**139.3874**	**139.3874**	**2.6700e-003**	**2.5600e-003**	**140.2157**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8982	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Unmitigated	2.8982	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5700e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Total	**2.8982**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0363**	**0.0363**	**1.0000e-004**		**0.0386**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5700e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0386
Total	**2.8982**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0363**	**0.0363**	**1.0000e-004**		**0.0386**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	1	4.00	150	89	0.20	Diesel
Tractors/Loaders/Backhoes	1	4.00	150	97	0.37	Diesel

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.0513	0.4798	0.5724	7.6000e-004		0.0297	0.0297		0.0273	0.0273	0.0000	74.0154	74.0154	0.0239		74.6139
Tractors/Loaders/ Backhoes	0.0757	0.7678	1.1157	1.5600e-003		0.0379	0.0379		0.0349	0.0349	0.0000	150.7883	150.7883	0.0488		152.0075
Total	**0.1270**	**1.2477**	**1.6881**	**2.3200e-003**		**0.0676**	**0.0676**		**0.0622**	**0.0622**	**0.0000**	**224.8037**	**224.8037**	**0.0727**		**226.6213**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	0	0	0	0	0.73	

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Yolo/Solano AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	2	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	11	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	2.18900E-002	1.49970E-001	1.99380E-001	3.30000E-004	8.48000E-003	8.48000E-003	0.00000E+000	2.80858E+001	2.80858E+001	1.77000E-003	0.00000E+000	2.81299E+001
Cement and Mortar Mixers	8.80000E-004	5.52000E-003	4.63000E-003	1.00000E-005	2.10000E-004	2.10000E-004	0.00000E+000	6.87410E-001	6.87410E-001	7.00000E-005	0.00000E+000	6.89200E-001
Cranes	3.51100E-002	3.89180E-001	1.80010E-001	5.60000E-004	1.61900E-002	1.49000E-002	0.00000E+000	4.87948E+001	4.87948E+001	1.57800E-002	0.00000E+000	4.91893E+001
Excavators	2.02000E-003	1.77700E-002	3.25500E-002	5.00000E-005	8.60000E-004	7.90000E-004	0.00000E+000	4.53606E+000	4.53606E+000	1.47000E-003	0.00000E+000	4.57274E+000
Forklifts	3.60900E-002	3.36120E-001	3.79610E-001	5.00000E-004	2.17300E-002	1.99900E-002	0.00000E+000	4.43161E+001	4.43161E+001	1.43300E-002	0.00000E+000	4.46745E+001
Generator Sets	3.52900E-002	3.13180E-001	4.04080E-001	7.20000E-004	1.53800E-002	1.53800E-002	0.00000E+000	6.21728E+001	6.21728E+001	2.87000E-003	0.00000E+000	6.22446E+001
Graders	4.15000E-003	5.25800E-002	1.72200E-002	7.00000E-005	1.67000E-003	1.54000E-003	0.00000E+000	5.81758E+000	5.81758E+000	1.88000E-003	0.00000E+000	5.86462E+000
Pavers	2.07000E-003	2.09900E-002	2.88400E-002	5.00000E-005	1.00000E-003	9.20000E-004	0.00000E+000	4.13003E+000	4.13003E+000	1.34000E-003	0.00000E+000	4.16342E+000
Paving Equipment	2.67000E-003	2.60600E-002	3.81900E-002	6.00000E-005	1.27000E-003	1.17000E-003	0.00000E+000	5.36784E+000	5.36784E+000	1.74000E-003	0.00000E+000	5.41124E+000
Rollers	2.49000E-003	2.58900E-002	2.79100E-002	4.00000E-005	1.49000E-003	1.37000E-003	0.00000E+000	3.45779E+000	3.45779E+000	1.12000E-003	0.00000E+000	3.48574E+000
Rubber Tired Dozers	3.34800E-002	3.51750E-001	1.43280E-001	3.40000E-004	1.66900E-002	1.53600E-002	0.00000E+000	3.00110E+001	3.00110E+001	9.71000E-003	0.00000E+000	3.02536E+001
Tractors/Loaders/ Backhoes	5.92600E-002	6.02460E-001	8.24510E-001	1.15000E-003	3.16500E-002	2.91200E-002	0.00000E+000	1.00806E+002	1.00806E+002	3.26000E-002	0.00000E+000	1.01621E+002
Welders	2.95100E-002	1.59140E-001	1.85790E-001	2.80000E-004	6.66000E-003	6.66000E-003	0.00000E+000	2.07043E+001	2.07043E+001	2.39000E-003	0.00000E+000	2.07641E+001

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	2.18900E-002	1.49970E-001	1.99380E-001	3.30000E-004	8.48000E-003	8.48000E-003	0.00000E+000	2.80858E+001	2.80858E+001	1.77000E-003	0.00000E+000	2.81299E+001
Cement and Mortar Mixers	8.80000E-004	5.52000E-003	4.63000E-003	1.00000E-005	2.10000E-004	2.10000E-004	0.00000E+000	6.87410E-001	6.87410E-001	7.00000E-005	0.00000E+000	6.89200E-001
Cranes	3.51100E-002	3.89180E-001	1.80010E-001	5.60000E-004	1.61900E-002	1.49000E-002	0.00000E+000	4.87947E+001	4.87947E+001	1.57800E-002	0.00000E+000	4.91892E+001
Excavators	2.02000E-003	1.77700E-002	3.25500E-002	5.00000E-005	8.60000E-004	7.90000E-004	0.00000E+000	4.53606E+000	4.53606E+000	1.47000E-003	0.00000E+000	4.57273E+000
Forklifts	3.60900E-002	3.36120E-001	3.79610E-001	5.00000E-004	2.17300E-002	1.99900E-002	0.00000E+000	4.43161E+001	4.43161E+001	1.43300E-002	0.00000E+000	4.46744E+001
Generator Sets	3.52900E-002	3.13180E-001	4.04080E-001	7.20000E-004	1.53800E-002	1.53800E-002	0.00000E+000	6.21728E+001	6.21728E+001	2.87000E-003	0.00000E+000	6.22445E+001
Graders	4.15000E-003	5.25800E-002	1.72200E-002	7.00000E-005	1.67000E-003	1.54000E-003	0.00000E+000	5.81758E+000	5.81758E+000	1.88000E-003	0.00000E+000	5.86462E+000
Pavers	2.07000E-003	2.09900E-002	2.88400E-002	5.00000E-005	1.00000E-003	9.20000E-004	0.00000E+000	4.13003E+000	4.13003E+000	1.34000E-003	0.00000E+000	4.16342E+000
Paving Equipment	2.67000E-003	2.60600E-002	3.81900E-002	6.00000E-005	1.27000E-003	1.17000E-003	0.00000E+000	5.36783E+000	5.36783E+000	1.74000E-003	0.00000E+000	5.41123E+000
Rollers	2.49000E-003	2.58900E-002	2.79100E-002	4.00000E-005	1.49000E-003	1.37000E-003	0.00000E+000	3.45778E+000	3.45778E+000	1.12000E-003	0.00000E+000	3.48574E+000
Rubber Tired Dozers	3.34800E-002	3.51750E-001	1.43280E-001	3.40000E-004	1.66900E-002	1.53600E-002	0.00000E+000	3.00109E+001	3.00109E+001	9.71000E-003	0.00000E+000	3.02536E+001
Tractors/Loaders/Backhoes	5.92600E-002	6.02460E-001	8.24510E-001	1.15000E-003	3.16500E-002	2.91200E-002	0.00000E+000	1.00805E+002	1.00805E+002	3.26000E-002	0.00000E+000	1.01620E+002
Welders	2.95100E-002	1.59140E-001	1.85790E-001	2.80000E-004	6.66000E-003	6.66000E-003	0.00000E+000	2.07042E+001	2.07042E+001	2.39000E-003	0.00000E+000	2.07641E+001

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06816E-006	1.06816E-006	0.00000E+000	0.00000E+000	1.06648E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22964E-006	1.22964E-006	0.00000E+000	0.00000E+000	1.21978E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.18687E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12826E-006	1.12826E-006	0.00000E+000	0.00000E+000	1.11921E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12589E-006	1.12589E-006	0.00000E+000	0.00000E+000	1.28525E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.86295E-006	1.86295E-006	0.00000E+000	0.00000E+000	1.84801E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.89202E-006	2.89202E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.99635E-007	9.99635E-007	0.00000E+000	0.00000E+000	1.32216E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19041E-006	1.19041E-006	0.00000E+000	0.00000E+000	1.18086E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.44898E-006	1.44898E-006	0.00000E+000	0.00000E+000	1.44480E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.06	0.02	0.06	0.02	0.00	0.00
Grading	Fugitive Dust	0.07	0.03	0.07	0.03	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.20	0.10	0.20	0.10	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.02	0.19		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	50.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy		20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Dixon Commerce Center

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Appendix B

Biological Evaluation Report

LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

DIXON COMMERCE CENTER EXPANSION PROJECT
BIOLOGICAL EVALUATION REPORT

Prepared by

LIVE OAK ASSOCIATES, INC.

Rick Hopkins, Ph.D., Principal and Senior Wildlife Ecologist
Arren Allegretti, Ph.D., Senior Project Manager and Ecologist

Prepared for

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October 7, 2021 PN 2586-01

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1 INTRODUCTION

1.1 PURPOSE AND OBJECTIVES

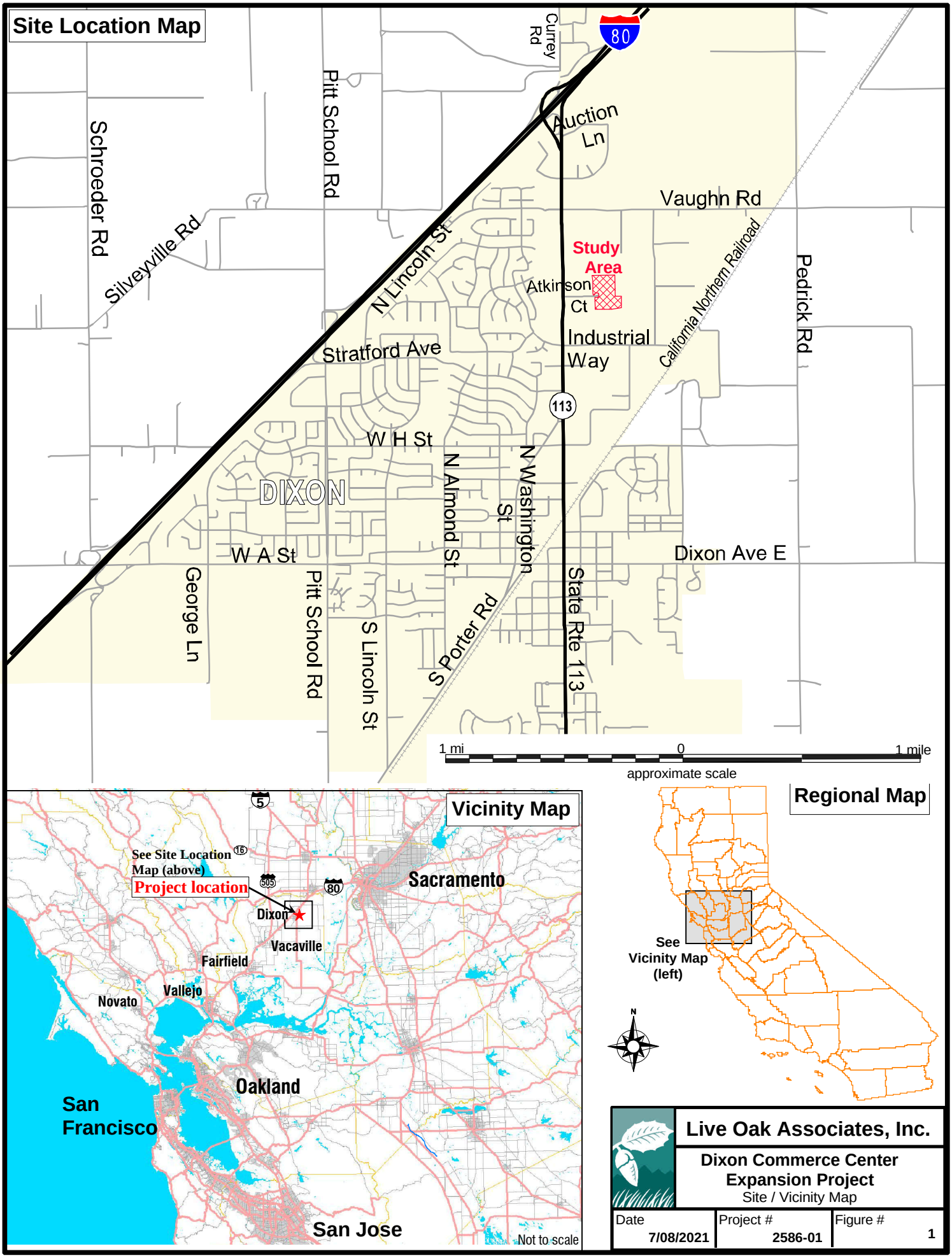
Live Oak Associates, Inc. (LOA) has completed a biological evaluation of an approximately 2.8-acre (126,000 ft^2) expansion of the existing Dixon Commerce Center ("study area" or "site") in the City of Dixon, Solano County, California (Figure 1). The purpose of this analysis is to describe the biological resources of the site and evaluate likely impacts to these resources resulting from the construction/expansion of the existing Dixon Commerce Center.

The building expansion of the Dixon Commerce Center could potentially damage or modify habitats used by sensitive plant and wildlife species. In such cases, these activities may be regulated by state or federal agencies, subject to provisions of the California Environmental Quality Act (CEQA), and/or covered by policies and ordinances of the City of Dixon and the Solano County Habitat Conservation Plan. Therefore, this report addresses: 1) sensitive biotic resources potentially occurring in the study area; 2) the federal, state, and local laws regulating such resources, 3) possible significant impacts to these resources that could result from the project; and 4) mitigation measures that would reduce these impacts to a less-than-significant level as defined by CEQA. As such, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources
- Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range
- Summarize all state and federal natural resource protection laws that may be relevant to possible future site development
- Identify and discuss project impacts to biological resources likely to occur on the site within the context of CEQA or any state or federal laws
- Identify avoidance and mitigation measures that would reduce impacts to a less-than-significant level as identified by CEQA and are consistent with recommendations of the resource agencies for affected biological resources.

The analysis of impacts, as discussed in Section 3.0 of this report, was based on the known and potential biotic resources of the study area discussed in Section 2.0. Sources of information for this analysis included: 1) the California Natural Diversity Data Base (CDFW 2021); 2) the Online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2021); 3) manuals and references related to plants and animals of the Solano County region; 4) the City of Dixon policies and ordinances; and 5) Solano Multispecies Habitat Conservation Plan (HCP) (LSA 2012).

LOA ecologist Arren Allegretti conducted a field survey of the study area on June 21, 2021. The field survey entailed identifying the principal habitats and land uses of the site and their constituent plants and animals. In addition, the survey also involved the assessment of the suitability of the site's habitats/land uses for special status species.



Live Oak Associates, Inc.	
Dixon Commerce Center Expansion Project Site / Vicinity Map	
Date 7/08/2021	Project # 2586-01
Figure # 1	

1.2 PROJECT LOCATION

The site is located at 2299 Commerce Way, just east of Atkinson Court and south of Vaugh Road. It may be found within the Dixon 7.5' U.S. Geological Survey (USGS) quadrangle in section 12, township 7 north, range 1 east. The site is generally surrounded by industrial and commercial development; however, several vegetated detention basins lie to the east and an ephemeral channel borders the site on the south.

1.3 PROJECT DESCRIPTION

As we understand it, the project involves the approximately 2.8-acre (126,000 ft^2) expansion of the existing Dixon Commerce Center. The proposed building expansion will extend just north of Atkinson Court and associated trailer parking will extend to site's southern boundary.

2 EXISTING CONDITIONS

2.1 REGIONAL SETTING

The site is situated in an area dominated by residential and commercial development and, to a lesser extent, agriculture. Several large transportation corridors pass within a mile of the project site, including Interstate 80 to the northwest and the Union Pacific Railroad to the southeast. Less than ½ mile northeast of the site is the City of Dixon's Priority Conservation Area (PCA) consisting of irrigated agricultural fields.

Like much of California, the project site experiences a Mediterranean climate with dry, hot summers and cool, wet winters. Annual precipitation in the general vicinity of the site is highly variable, but averages approximately 23 inches, most of which occurs from October to May (WRCC 2021). The site is situated within the Sacramento River watershed.

The site's topography is relatively level, ranging in elevations from 65 ft to 70 ft National Geodetic Vertical Datum.

2.2 SOILS

One soil type—Yolo silty clay loam, 0 to 2% slopes—occurs on the site. The Yolo series consists of very deep, well drained soils that are on alluvial fans and flood plains (NRCS 2021).

Yolo soils are not considered hydric, although hydric inclusions may occur within the study area. Hydric soils are those that form under conditions of saturation, flooding, or ponding long enough to form unoxygenated conditions in the soil's upper horizon (NRCS 2021) The Yolo series has a neutral pH in its upper horizon and is mildly alkaline in the lower horizons of its soil profile (NRCS 2021). Because Yolo soils are not strongly alkaline, this soil type would preclude plant species adapted to alkaline soils from successfully maintaining populations on the site. Serpentine soils are also absent from the site, and plants adapted to such soils would not have colonized the site in the past or under current conditions.

2.3 HABITATS AND LAND USES

LOA biologists identified one habitat, an urban/ruderal field, on the site (Figure 2). This habitat is situated within the Urban Growth Boundary and the industrial land use designation under the Dixon General Plan and Solano HCP (LSA 2012). Furthermore, the site is also within the Irrigated Agriculture Conservation Areas for the Swainson's hawk and burrowing owl under the Solano HCP (LSA 2012). The ruderal field's constituent plant and animal species are described in the following subsections. A list of the vascular plant species observed on the site is provided in Appendix A.

Live Oak Associates, Inc.

Dixon Commerce Center Expansion Project
Biotic Habitats

Date	Project #	Figure #
7/08/2021	2586-01	2

2.3.2 Urban/Ruderal Field

A ruderal field occurs just south of the gravel parking lot associated with the Dixon Commerce Building. The ruderal field appeared to be routinely mowed and disked at the time of the June 21, 2021 site visit. A gravel road bisects the field and extends east from Atkinson Road. An approximately eight-foot-wide ditch traverses the field just east of the gravel road before extending southwards and stopping short of the site's southeastern boundary.

Vegetation within this field primarily consisted of non-native grasses and forbs, including bromes (*Bromus* spp.), oats (*Avena* spp.), and short pod mustard (*Hirchfeldia incana*). Noxious weeds such as yellow star thistle (*Centaurea solstitialis*) dominated particular areas of the field, including those areas directly adjacent to the gravel road. Some native species such as the California poppy (*Eschscholzia californica*) occurred sparingly throughout the field's eastern boundary. Orchard trees and shrubs such as English walnut (*Juglans regia*) and Prunus species dominated the vegetation that occurred along the southern boundary of the ruderal field, just above the banks of the off-site ephemeral channel. A California Buckeye (*Aesculus californica*) also occurred along the top of-bank of the offsite ephemeral channel.

Wildlife observed in and around the ruderal field during the reconnaissance-level survey included violet-green swallows (*Tachycineta thalassina*), turkeys (*Meleagris gallopavo*), American crow (*Corvus brachyrhynchos*), mockingbirds (*Mimus polyglottus*), and mourning dove (*Zenaida macrour*a). Raptors, including turkey vultures (*Cathartes aura*), red-tailed hawks (*Buteo jamaicensis*), and the Swainson's hawk, a California Threatened species, were observed soaring over the site's ruderal field. A previously documented Swainson's hawk nest (CDFW 2021) is located approximately 50 feet to the southeast of the onsite ruderal field. Although the onsite ruderal field does not contain trees that could be used for nesting by Swainson's hawks, the field serves as foraging habitat for this species.

Other migratory bird species are likely to occur, forage, and nest in the site's ruderal field. Typical urban mammals such as raccoon (*Procyon lotor)*, opossum (*Didelphis virginiana*), and feral and domestic cats (*Felis catus*) and dogs (*Canis lupus familiaris*) are also expected to use or pass through the onsite field from time to time.

2.4 SPECIAL STATUS PLANTS AND ANIMALS

Many plant and animal species in California have limited distributions and are vulnerable to extirpation as these species' habitats are converted to urban, agricultural, industrial, and residential land uses. Plant and wildlife species have also experienced a decline in population numbers due to habitat loss and degradation, climate change, the introduction of non-native competitors, hunting, and other anthropogenic factors.

Federal and state endangered species legislation provides a legal mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. As described more fully in Section 3.2, state and federal laws provide the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. Many native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as "species of special concern" by the CDFW. The

California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2021). Collectively, these plants and animals are referred to as "special status species."

The California Natural Diversity Database (CDFW 2021) and the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2021) were queried for special status species occurrences in the Dixon USGS 7.5-minute quadrangle in which the project site occurs and for the eight surrounding quadrangles (Winters, Merritt, Davis, Allendale, Saxon, Elmira, Liberty Island, and Dozier). These species and their potential to occur on the project site are summarized in Tables 1 and 2. Other factors considered in this evaluation include the capacity of the onsite habitats to support the species, geographical distance of the project site from known populations or occurrences of the species, and ability of the species to travel from areas of known occurrences to the project site. Figure 3 displays the location of special status species reported in the California Natural Diversity Data Base (CNDDB) (CDFW 2021).

Because serpentine and alkaline soils are absent from the site, those species that are uniquely adapted to these soil conditions are also considered to be absent. These include the hispid salty birds-beak (*Chloropyron molle ssp. rudis*), recurved larkspur (*Delphinium recurvatum*) and alkali sink goldfield (*Lasthenia chrysantha*). Other plant species restricted to specific habitats that are not present on the site (e.g., vernal pools, marshes, chaparral, dunes, etc.) are also considered absent from the site. These species include the vernal pool smallscale (*Atriplex persistens*), Suisun marsh aster (*Symphyotrichum lentum*), Sanford's arrowhead (*Sagittaria sanfordii*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), wooly rose mallow (*Hibiscus lasiocarpos var. occidentalis*), delta tule pea (*Lathyrus jepsonii var. jepsonii*), legenere (*Legenere limosa*), Mason's lilaeopsis (*Lilaeopsis masonii*), Colusa grass (*Neostapfia colusana*), San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*), Ferris' goldfields *(Lasthenia ferrisiae*), Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*), Delta mudwort (*Limosella australis*), and Bolander's water-hemlock (*Cicuta maculata var. bolanderi*). Special status plant species occurring in multiple habitats, including those in found in valley and foothill grassland, are retained in Tables 1A and 1B.

Wildlife that would be treated as absent from the site due to unsuitable habitat conditions include the Bay checkerspot butterfly (*Euphydryas editha bayensis*), which is restricted to outcrops of serpentine soil as well as species restricted to aquatic and estuarine habitats. These include the California black rail (*Laterallus jamaicensis coturniculus*), Delta smelt (*Hypomesus transpacificus*), Longfin smelt (*Spirinchus thaleichthys*), and Steelhead – Central Valley DPS (*Oncorhynchus mykiss irideus*).

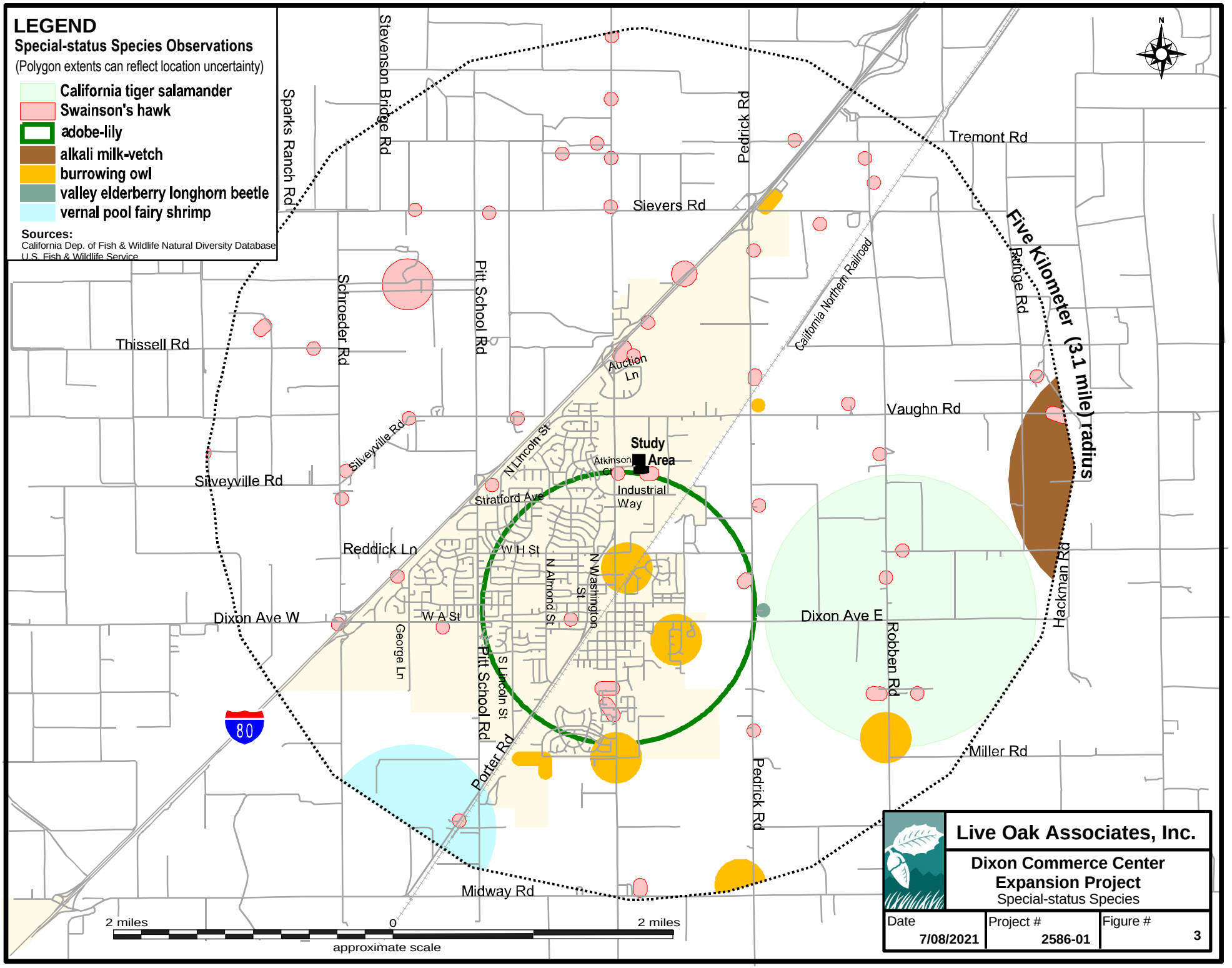

LEGEND
Special-status Species Observations
(Polygon extents can reflect location uncertainty)
California tiger salamander
Swainson's hawk
adobe-lily
alkali milk-vetch
burrowing owl
valley elderberry longhorn beetle
vernal pool fairy shrimp
Sources:
California Dep. of Fish & Wildlife Natural Diversity Database
U.S. Fish & Wildlife Service
Five Kilometer (3.1 mile) radius
Study Area
Sparks Ranch Rd
Stevenson Bridge Rd
Pedrick Rd
Tremont Rd
Sievers Rd
Schroeder Rd
Pitt School Rd
California Northern Railroad
Ratinge Rd
Thissell Rd
Auction Ln
Vaughn Rd
Silveyville Rd
N Lincoln St
Atkinson Cir
Industrial Way
Stratford Ave
Reddick Ln
W H St
N Almond St
N Washington St
Dixon Ave W
W A St
George Ln
S Lincoln St
Dixon Ave E
Robben Rd
Hackman Rd
80
Porter Rd
Miller Rd
Midway Rd
2 miles
0
2 miles
approximate scale
Live Oak Associates, Inc.
Dixon Commerce Center Expansion Project
Special-status Species
Date 7/08/2021
Project # 2586-01
Figure # 3

TABLE 1A. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFW 2021 and CNPS 2021)
Plant Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	Occurrence in the Study Area*
Contra Costa goldfields *Lasthenia conjugens*	FE, CRPR 1B	Habitat: cismontane woodlands, playas, mesic areas of valley and foothill grassland, and vernal pools Elevation: 0-1,540 ft Blooms: March-June Life form: annual herb	**Absent**. The site's ruderal field does not serve as suitable habitat for this species. Vernal pools, playas, and other features with the potential to support this species are also absent from the site. The closest documented occurrence is 12 miles southwest of the site, near Vanden, CA (CDFW 2021). The population associated with this occurrence is potentially extirpated due to habitat conversion of vernal pools.
Keck's checkerbloom *Sidalcea keckii*	FE, CRPR 1B	Habitat: Cismontane woodland, valley and foothill grassland Elevation: 650-2,135 ft Blooms: April-May Life form: annual herb	**Absent**. The site's ruderal field does not serve as suitable habitat for this species. The closest documented occurrence is 7 miles northwest of the site, near the University of California, Davis (CDFW 2021).
Crampton's tuctoria or Solano grass *Tuctoria mucronata*	FE, CE, CRPR 1B	Habitat: valley and foothill grassland, vernal pools Elevation: 15-35 ft Blooms: April-August Life form: annual grass	**Absent**. The site's ruderal field does not serve as habitat for this species. Vernal pools are absent from the site. The nearest known occurrence is 7 miles northeast of the site, occurring in created vernal pools within the Yolo Grasslands Regional Park (CDFW 2021).
Two-fork clover *Trifolium amoenum*	FE, CRPR 1B	Habitat: coastal bluff scrub, valley and foothill grassland Elevation: 15-1,360 ft Blooms: April-June Life form: annual herb	**Absent**. The site's ruderal field does not serve as habitat for this species. The nearest known occurrence is approximately 7.5 miles southwest of the site in Vacaville (CDFW 2021).

TABLE 1B. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFW 2021 and CNPS 2021)
Other special status plants listed by CNPS

Species	Status	Habitat	Occurrence in the Study Area*
Ferris's Milk-vetch *Astragalus tener var. ferriseae*	CRPR 1B	Habitat: meadows and seeps, valley and foothill grassland Elevation: 5-245 ft Blooms: April-May Life form: annual herb	**Absent**. The site's ruderal field does not serve as habitat for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Alkali Milk-vetch *Astragalus tener var. tener*	CRPR 1B, Solano HCP covered species	Habitat: playas, valley and foothill grassland, vernal pools Elevation: 5-195 ft Blooms: March-June Life form: annual herb	**Absent**: The site does not contain vernal pools or any other suitable habitat for this species. This species is potentially extirpated, and the nearest known occurrence is based on a 1959 collection located approximately three miles east of the site (CDFW 2021).
Heartscale *Atriplex cordulata var. cordulata*	CRPR 1B, Solano HCP covered species	Habitat: chenopod scrub, meadows and seeps, valley and foothill grassland Elevation: 0-1,835 ft Blooms: April-October Life form: annual herb	**Absent**: The site's ruderal field does not serve as habitat for this species. During the June 2021 site visit, there was no *Atriplex* species observed on the site. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Brittlescale *Atriplex depressa*	CRPR 1B, Solano HCP covered species	Habitat: chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools Elevation: 5-1,050 ft Blooms: April-October Life form: annual herb	**Absent.** The site's ruderal field does not serve as habitat for this species. Suitable habitat such as vernal pools, playas, seeps, and chenopod scrub are absent from the site. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Pappose tarplant *Centromadia parryi ssp. parryi*	CRPR 1B, Solano HCP covered species	Habitats: Often alkaline soils within chaparral, coastal prairie, meadows, seeps, marshes, swamps, and mesic valley and foothill grasslands. Elevation: 0-420 meters. Blooms: May-November.	**Absent.** The site does not contain alkaline soils or suitable habitat for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Parry's rough tarplant *Centromadia parryi ssp. rudis*	CRPR 4.2	Habitat: valley and foothill grassland, vernal pools Elevation: 0-330 ft Blooms: May- October Life form: annual herb	**Absent.** The site does not contain suitable habitat for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Dwarf Downingia *Downingia pusilla*	CRPR 2B, Solano HCP covered species	Habitats: mesic areas within valley and foothill grassland and in vernal pools Elevation: 5-1,460 ft Blooms: March-May Life form: annual herb	**Absent.** The site does not contain suitable habitat for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Jepson's coyote-thistle *Eryngium jepsonii*	CRPR 1B	Habitat: valley and foothill grassland, vernal pools Elevation: 10-985 ft Blooms: April-August Life form: perennial herb	**Absent**. The site does not contain vernal pools or any other suitable habitat for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
San Joaquin Spearscale *Extriplex joaquinana*	CRPR 1B, Solano HCP	Habitat: Occurs in chenopod scrub, meadows and seeps, playas, and valley and	**Absent.** Suitable habitat and alkaline soils are absent from the site. The nearest documented occurrence is more than three miles from the site (CDFW 2021).

	covered species	foothill grasslands on alkaline soils. Elevation: 5-2,750 ft Blooms: April-October.	
Stinkbells *Fritillaria agrestis*	CRPR 4.2	Habitats: chaparral, valley grassland, foothill woodland, wetland, and riparian habitats, and can be associated with serpentine soils. Elevation: 10-1555 meters. Blooms: March-June Life form: perennial bulbiferous herb	**Absent.** The site does not contain suitable habitat for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Fragrant Fritillary *Fritillaria liliacea*	CRPR 1B, Solano HCP covered species	Habitat: coastal prairie, and scrub, and valley and foothill grasslands, often on serpentine soils. Elevation: 10-1,345 ft Blooms: February-April Life form: perennial bulbiferous herb	**Absent.** The site does not contain suitable habitat or soils for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Adobe-lily *Fritillaria pluriflora*	CRPR 1B	Habitat: chaparral, cismontane woodland and valley and foothill grassland, often on adobe soils Elevation: 195-2,315 ft Blooms: February-April Life form: perennial bulbiferous herb	**Absent.** The site's ruderal field does not serve as habitat for this species. Elevations of the site are also well below the range for this species. The nearest occurrence was documented in 1929, approximately half a mile southwest of the site (CDFW 2021).
Hogwallow star fish *Hesperevax caulescens*	CRPR 4.2, Solano HCP covered species	Habitat: valley and foothill grassland, vernal pools Elevation: 0-1,655 ft Blooms: March-June Life form: annual herb	**Absent**. The site lacks vernal pools and other suitable habitat for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Carquinez Goldenbush *Isocoma arguta*	CRPR 1B, Solano HCP covered species	Habitat: alkaline soils within valley and foothill grasslands Elevation: 5-65 ft Blooms: August-December Life form: perennial shrub	**Absent.** Alkaline soils and suitable habitat are absent from the site. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Hecker's pepper-grass *Lepidium latipes var. heckardii*	CRPR 1B	Habitat: valley and foothill grassland Elevation: 5-655 ft Blooms: March-May Life form: annual herb	**Absent.** The sites routinely mowed ruderal field does not serve as suitable habitat for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Little mousetail *Myosurus minimus spp. apus*	CRPR 3.1	Habitat: valley and foothill grassland Elevation: 65-2,100 ft Blooms: March-June Life form: annual herb	**Absent.** The sites routinely mowed ruderal field does not serve as suitable habitat for this species. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Baker's Navarretia *Navarretia leucocephala ssp. bakeri*	CRPR 1B, Solano HCP covered species	Habitat: cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools	**Absent.** Vernal pools and other suitable habitat for this species are absent from the site. The nearest documented occurrence is more than three miles from the site (CDFW 2021).

		Elevation: 15-5,710ft Blooms: April-July Life form: annual herb	
Gairdner's yampah *Perideridia gairdneri ssp. gairdneri*	CRPR 4.2	Habitat: broadleaved upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools Elevation: 0-2,000 ft Blooms: June-October Life form: perennial herb	**Absent.** Vernal pools and other suitable habitat for this species are absent from the site. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
Bearded popcornflower *Plagiobothrys hystriculus*	CRPR 1B, Solano HCP covered species	Habitat: valley and foothill grassland, vernal pools Elevation: 0-900 ft Blooms: April-May Life form: annual herb	**Absent**. The site's routinely mowed ruderal field does not offer suitable habitat for this species. Vernal pools that serve as suitable habitat are absent from the site. The nearest documented occurrence is more than three miles from the site (CDFW 2021).
California alkali grass *Puccinellia simplex*	CRPR 1B	Habitat: chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools Elevation: 5-3,050 ft Blooms: March-May Life form: annual herb	**Absent.** Suitable habitat is absent from the site.
Saline Clover *Trifolium hydrophilum*	CRPR 1B, Solano HCP covered species	Habitat: marshes and swamps, valley and foothill grassland, vernal pools Elevation: 0-985 ft Blooms: April-June Life form: annual herb	**Absent.** Suitable habitat is absent from the site. The nearest documented occurrence is more than three miles from the site (CDFW 2021).

TABLE 2A. LIST OF SPECIAL STATUS ANIMAL SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

***Animal Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act* (CDFW 2021 and USFWS 2021)**

Species	Status	Habitat	Occurrence in the Study Area*
Conservancy fairy shrimp *Branchinecta conservatio*	FE, Solano HCP covered species	Occurs in large, deep vernal pools and lakes of California with water into June at elevations from 5 to 145 meters.	**Absent**. Vernal pools are absent from the site and surrounding lands. Additionally, the site is not within any vernal pool conservation areas identified in Figure 4-8 of the Solano HCP.
Vernal pool fairy shrimp *Branchinecta lynchi*	FT, Solano HCP covered species	Occurs in vernal pools of California.	**Absent**. Vernal pools are absent from the site and surrounding lands. Additionally, the site is not within any vernal pool conservation areas identified in Figure 4-8 of the Solano HCP (Appendix B). The nearest recorded observation of this species is approximately three miles from the site (CDFW 2021, LSA, 2012).
Vernal pool tadpole shrimp (VPTS) *Lepidurus packardi*	FE, Solano HCP covered species	Occurs in vernal pools of California. Vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.	**Absent.** Vernal pools are absent from the site and surrounding lands. The nearest recorded observation of VPTS is approximately 6.5 miles to the northeast in Davis. Additionally, the site is not within any Solna HCP vernal pool conservation areas (LSA 2012)
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT, Solano HCP covered species	Lives in mature elderberry shrubs of California's Central Valley and Sierra Foothills.	**Absent**. There are no elderberry shrubs onsite. Therefore, this species would not occur on the site.
Delta green ground beetle *Elaphrus viridis*	FT, Solano HCP covered species	Occurs on the margins of vernal pools and bare areas along trails and roads in Solano County, CA	**Unlikely**. Vernal pools are absent from the site and surrounding lands. While there are bare areas along the site's dirt road by Atkinson Court, these areas serve as marginal habitat due to the routine mowing and disturbance. The site is not within any vernal pool conservation areas identified in Figure 4-8 of the Solano HCP. Furthermore, the site is more than five miles from the Solano HCP Potential Outlier Reserve Areas and more than 10 miles from Conservation Areas with High Preservation Potential and known occurrences of this species (Appendix B of the Solano HCP, LSA 2012).
California tiger salamander *Ambystoma californiense*	FT, CT, Solano HCP covered species	Breeds in stagnant pools with continuous inundation for a minimum of three months, which may include vernal pools and stock ponds of central California. Adults	**Absent**. Potential breeding habitat for this species is absent from the project site and surrounding lands. The site's routinely mowed and disked ruderal field does not provide suitable upland habitat for this

		oversummer in grassland habitats adjacent to the breeding sites. Orloff (2011) found that CTS are capable of migrating up to 1.3 miles from their breeding sites to aestivate.	species due to intensive ongoing disturbance and an absence of suitable burrows. The nearest recorded observation is approximately two miles to the southeast of the site which is an extirpated occurrence. Figure 4-6 of the Solano HCP shows a documented potential range to be a more than five miles from the site and core breeding areas to be more than 10 miles from the site (LSA 2012). Therefore, this species is considered to be absent from the site.
Foothill yellow-legged frog *Rana boylii*	CE	Occurs in swiftly flowing streams and rivers with rocky substrate with open, sunny banks in forest, chaparral, and woodland habitats, and can sometimes be found in isolated pools and ponds.	**Absent**. Suitable aquatic and upland habitats for this species are absent from the site and surrounding lands. The ephemeral channel adjacent to the site does not provide swift flows to support this species. The nearest documented observation of this species is approximately 12 miles to the southwest of the site (CDFW 2021).
Giant gartersnake *Thamnophis gigas*	FT, CT, Solano HCP covered species	Habitat requirements consist of (1) adequate water during the snake's active season (early-spring through mid-fall) to provide food and cover; (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat during the active season; (3) grassy banks and openings in waterside vegetation for basking; and (4) higher elevation uplands for cover and refuge from flood waters during the snake's dormant season in the winter. This species has adapted to irrigation ditches and canals.	**Absent**. Suitable breeding habitat for the giant gartersnake, including canal systems, are absent from the site and surrounding lands. The nearest irrigation canal is approximately 1.5 miles to the northeast and the nearest recorded observation of giant garter snake is about 8.5 miles to the southwest. Additionally, the site is not within or adjacent to the Solano HCP conservation area for giant gartersnake (LSA 2012).
Swainson's hawk *Buteo swainsoni*	CT, Solano HCP covered species	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	**Present**. This species was observed over the site during the June 2021 site visit. The nest occurrence documented in 2005 was observed approximately 50 feet from the site's southeastern boundary (CDFW 2021). A second nest documented in 2004 occurs approximately 550 feet just west of the site (CDFW 2021). Although nesting habitat is absent within the site's boundaries, suitable nesting habitat is adjacent to the site. The site's ruderal field serves as

			foraging habitat for this species. The site is also within the Solano HCP Swainson's Hawk Conservation Area and Agricultural Potential Reserve (LSA 2012).
Western yellow billed cuckoo *Coccyzus americanus occidentalis*	FT, CE	Nests in dense riparian forests. Inhabits broad, lower flood bottoms of larger river systems.	**Absent**. Suitable habitat for this species is absent from the site and surrounding lands. This species has not been observed in the area since 1950. It may be extirpated from the region.
Tricolored blackbird *Agelaius tricolor*	CT, Solano HCP covered species	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in grassland and cropland habitats.	**Unlikely**. Suitable nesting habitat is absent from the site. The adjacent off-site ephemeral channel does not serve as suitable breeding habitat. It is highly unlikely that this species would forage on the site's ruderal field, particularly since there is higher quality foraging habitat proximal to their breeding habitat. The closest documented occurrence is approximately five miles to the north, near Putah Creek (CDFW 2021).
Western snowy plover *Charadrius nivosus nivosus*	FT, CSC	Uses man-made agricultural wastewater ponds and reservoir margins. Breeds on barren to sparsely vegetated ground at alkaline or saline lakes, reservoirs, ponds, and riverine sand bar.	**Absent**. Suitable nesting habitat for this species is absent from the site. Marginal breeding and foraging habitat may occur along the vegetated stormwater detention basins adjacent to the site's eastern boundary. The nearest recorded observation is approximately 12 miles to the northeast, near the Davis Sewage Treatment Plants (CDFW 2021).

TABLE 2B LIST OF SPECIAL STATUS ANIMAL SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

***Animal Species Considered State Species of Special Concern or Fully Protected* (CDFW and USFWS 2021)**

Species	Status	Habitat	Occurrence in the Study Area*
Western spadefoot *Scaphoipus hammondii*	CSC	Primarily occurs in grasslands, but also occurs in valley and foothill hardwood woodlands. Requires vernal pools or other temporary wetlands for breeding.	**Absent.** Suitable breeding habitat for this species is absent from the site and adjacent lands, and the site lacks suitable burrows for spadefoot aestivation. Therefore, the western spadefoot is considered to be absent from the site.
Burrowing owl *Athene cunicularia*	CSC, Solano HCP covered species	Frequents open, dry annual or perennial grasslands, deserts, and scrublands characterized by low growing vegetation. This species is dependent upon burrowing mammals, most notably the California ground squirrel, for nest burrows.	**Unlikely.** The ruderal field is not presently suitable as nesting/roosting habitat for the burrowing owl due to routine mowing and disking and an absence of suitable burrows as observed during the June 2021 site visit. Therefore, the site does not provide suitable breeding habitat for this species. Should ground squirrels colonize the site in the future, it is possible that burrowing owls may occur on the site. The site supports marginal foraging habitat for this species. The closest recorded observation of this species is approximately half a mile south of the site (CDFW 2021). Additionally, the site is within the Solano HCP Irrigated Agriculture Conservation Area for burrowing owls (LSA 2012).
Northern harrier *Circus cyaneus*	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Unlikely.** The industrial and commercial development surrounding the site limits this species potential to occur on the site. Additionally, the site's ruderal field offers marginal foraging and breeding habitat. The closest recorded observation of this species is approximately 9.5 miles to the northeast near Davis (CDFW 2021).
Grasshopper sparrow *Ammodramus savannarum*	CSC	Occurs in California during spring and summer in open grasslands with scattered shrubs.	**Unlikely.** The site's routinely mowed and disked ruderal field provides marginal foraging and breeding habitat. The closest recorded observation of this species is approximately seven miles to the east (CDFW 2021).
Song sparrow ("Modesto" population) *Melospiza melodia*	CSC	Nests in riparian and dense vegetation fairly near water and along sparsely vegetated irrigation canals.	**Unlikely.** Suitable habitat for this species is absent from the site. The ephemeral channel just south of the site is infrequently inundated and dominated by cultivated non-riparian species; as such, it does not represent suitable nesting habitat for this species. The closest recorded observation of this species is approximately 15 miles to the southwest near Miner's Slough (CDFW 2021).

Western red bat *Lasiurus blossevillii*	CSC	Roosts in tree or shrub foliage, although will occasionally use caves. Favored roosting trees include walnuts, sycamores, cottonwoods and older willows. Foraging habitats include oak woodlands, coniferous forests at low elevations, riparian corridors, mature orchards, and non-native trees in urban and residential areas (Pacific Coast Conservation Alliance 2020)	**Possible.** Although suitable roost trees are absent from the site, western red bats could forage over the site. Off-site trees occurring along the ephemeral channel adjacent to the site may support suitable roosting habitat. The closest recorded observation is approximately nine miles northwest of the site (CDFW 2021).
Pallid bat *Antrozous pallidus*	CSC	Occurs in grasslands, chaparral, woodlands, and forests; most common in dry rocky open areas providing roosting opportunities. Roost sites include caves, mines, rock crevices, and large cavities of trees.	**Possible.** Although suitable roost trees are absent from the site, pallid bats could forage over the site. Off-site trees occurring along the off-site ephemeral channel may support suitable roosting habitat. The closest recorded observation is approximately seven miles to the northeast (CDFW 2021).
American badger *Taxidea taxus*	CSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils, specifically grassland environments. Natal dens occur on slopes.	**Unlikely.** The site's routine disked and mowed ruderal field does not offer suitable foraging or breeding habitat for this species. Additionally, badger burrows were not observed during the site visit. The surrounding development in the immediate vicinity of the site would make it unlikely a badger would move onto the site. The nearest documented observation is approximately seven miles to the north in Davis (CDFW 2021).

*Present: Species observed on the site at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the site, but it could occur there from time to time.
Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient
Absent: Species not observed on the site and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CR	California Rare
FC	Federal Candidate	CSC	California Species of Special Concern
CRPR	California Rare Plant Rank of California Native Plant Society	CFP	California Fully Protected

2.5 DESIGNATED CRITICAL HABITAT

The USFWS often designates areas of critical habitat when it lists species as threatened or endangered. Critical habitat is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

There is no USFWS designated critical habitat for any species on or adjacent to the project site (Figure 2).

2.6 SENSITIVE NATURAL COMMUNITIES

California contains a wide range of natural communities, or unique assemblages of plants and animals. These communities have largely been classified and mapped by CDFW as part of its natural heritage program. Natural communities are assigned state and global ranks according to their rarity and the magnitude and trend of the threats they face. Natural communities with a state rank of 1-3 (on a 1-5 scale) are considered sensitive and must be considered in CEQA review. Examples of sensitive natural communities include various types of wetlands and riparian habitat.

Riparian woodlands are a considered a rare and sensitive natural community by CDFW based on their range, limited distribution, rarity, and threats from development (CDFW 2021). The site does not support riparian dominated woodlands and onsite vegetation associated with an adjacent, off-site ephemeral channel consists of remnant orchard species (e.g., Prunus spp., Juglans regia). Most of the species on the site are highly ruderal in nature consisting of non-native grasses and forbs (Figure 2, Section 2.3.1)

2.7 WILDLIFE MOVEMENT CORRIDORS

Wildlife movement corridors are areas where regional wildlife populations regularly and predictably move during dispersal or migration. Landscape linkages refer to areas that allow for the movement of wildlife and plant species from a specific area of suitable habitat to another (Ament et al. 2014). A linkage can vary from a narrow strip of habitat that functions as a conduit for movement (i.e., a corridor) or a large area of intact habitat that can allow for daily travel by animals throughout their home ranges, accommodate migration to support life history needs (e.g., breeding or foraging), support genetic diversity, and provide ability for species to adapt to climate change (Nathan et al. 2008). Many landscape linkages are broad areas of regional movement corridors for wildlife that generally include a wide swath of land used for movement between two or more core areas for multiple regional species (Bastille-Rousseau and Wittemyer 2020).

Landscape linkages are vital to terrestrial animals for connectivity between core habitat areas (i.e., larger intact habitat areas where species carry out their life cycle). Connections between two or more core habitat areas help ensure that genetic diversity is maintained, thereby diminishing the probability of inbreeding depression and geographic extinctions. Linkages between core habitat areas allow wildlife to access diverse biological resources essential for survival and maintenance of their life cycles.

In California, movement corridors are typically associated with valleys, rivers and creeks supporting riparian vegetation and ridgelines. Corridors containing higher-quality habitat have

minimal human footprints (e.g., roads and buildings) and contain sufficient cover to sustain wildlife movements.

The importance of an area as a movement corridor depends on the wildlife species being considered and their consistent use patterns. Animal movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

Lands surrounding the site have been intensively altered with agricultural and urban development. Two major transportation corridors, Interstate 80 and the Union Pacific Railroad, pass within a mile to the northwest and southeast of the site, respectively. Furthermore, the nearest wildlife corridor is North Vacaville (Corridor 1 in Solano HCP, LSA 2012) located east of Interstate 505 and approximately 8.5 miles northwest of the site. Surrounding land uses and highway barriers greatly constrain the movement of wildlife between the site and more open lands.

The approximately quarter-mile long channel of Dudley Creek is adjacent to the site's southern boundary. This off-site ephemeral channel could serve as a marginal movement corridor for local wildlife species that persist in nearby lands, particularly for wildlife that are adapted to urban environments. However, wildlife occurring in open lands and protected areas would have to travel through several disconnected creeks and corridors to access this portion of Dudley Creek. The lack of a continuous wildlife corridor makes it highly unlikely for wildlife, particularly larger mammals, to utilize the off-site channel and access the site.

Movements on and across the site are expected to consist of typical movements associated with an individual animal's home range**.** There are no unique features on the site that would facilitate significant wildlife movements.

2.8 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include, but are not limited to, lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), and the California Regional Water Quality Control Board (RWQCB).

An approximately eight-foot-wide ditch exists near the southeastern corner of the site. This man-made ditch appeared to be isolated from other aquatic features and did not replace a tributary. The USACE and CDFW do not regulate ditches that do not replace tributaries (Section 3.2.5). Therefore, this ditch would not be subject to the jurisdiction of the USACE and other regulatory agencies.

An off-site ephemeral channel is adjacent to the site's southern boundary. USGS quadrangle maps identify this off-site channel as a remnant of Dudley Creek. In its current state, the dry channel appears to be isolated or disconnected from any other hydrological feature. The limit of USACE jurisdiction, as well as that of the RWQCB, over the creek is the ordinary high water mark (OHWM),

which is outside of the site's boundaries. Thus, portions of Dudley Creek subject to the jurisdiction of USACE and RWQCB do not occur on the site.

Traditionally, CDFW has considered the limits of their jurisdiction over aquatic resources to extend to the top of bank or edge of riparian vegetation, whichever is greater. Onsite vegetation associated with the ephemeral channel (i.e., Dudley Creek) were mostly remnant orchard species (e.g., Prunus spp., Juglans regia) and would not be considered a riparian-dominated community. However, the southern section of the site is within a portion of the 100-year floodplain of the ephemeral channel (FEMA 2021). The CDFW has recently adopted a practice of asserting jurisdiction over the 100-year floodplain of creek channels extending beyond the riparian limits of that channel. Therefore, the CDFW may claim jurisdiction over any portion of the 100-year floodplain that occurs on the site.

The City of Dixon's General Plan and Water Resources Map do not reference Dudley Creek and do not identify riparian habitat associated with this channel.

No other jurisdictional waters or wetlands are present on the site.

3 IMPACTS AND MITIGATIONS

3.1 SIGNIFICANCE CRITERIA

General plans, area plans, and specific projects are subject to the provisions of the California Environmental Quality Act. The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are constructed. For example, site development may require the removal of some or all existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc., may replace those species formerly occurring on a site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. These impacts may be considered significant. According to 2021 CEQA Status and Guidelines (2021), "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest. Specific project impacts to biological resources may be considered "significant" if they will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- 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 Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 Threatened and Endangered Species

As discussed, state and federal endangered species legislation has provided CDFW and the USFWS with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as "species of special status." Permits may be required from both the

CDFW and USFWS if activities associated with a proposed project will result in the "take" of a species listed under the state or federal Endangered Species Acts. "Take" is defined by the state of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFW and the USFWS are responding agencies under CEQA. Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 Migratory Birds

The Federal Migratory Bird Treaty Act (FMBTA: 16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it actually covers almost all birds native to the United States, even those that are non-migratory. The FMBTA encompasses whole birds, parts of birds, and bird nests and eggs.

Native birds are also protected under California state law. The California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities. Moreover, the California Migratory Bird Protection Act, enacted in September 2019, clarifies native bird protection and increases protections where California law previously deferred to federal law.

3.2.3 Birds of Prey

Birds of prey are protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFW.

Additionally, the Bald and Golden Eagle Protection Act (16 U.S.C., scc. 668-668c) prohibits anyone from taking bald or golden eagles, including their parts, nests, or eggs, unless authorized under a federal permit. The act prohibits any disturbance that directly affects an eagle or an active eagle nest as well as any disturbance caused by humans around a previously used nest site during a time when eagles are not present such that it agitates or bothers an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

3.2.4 Bats

Section 2000 and 4150 of the California Fish and Game Code states that it is unlawful to take or possess a number of species, including bats, without a license or permit, as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as "an intentional act which

disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering." For these reasons, bat colonies in particular are considered to be sensitive and therefore, disturbances that cause harm to bat colonies are unlawful.

3.2.5 Wetlands and Other Jurisdictional Waters

Jurisdictional waters include waters of the United States subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE) and waters of the State of California subject to the regulatory authority of the California Department of Fish and Wildlife (CDFW) and the California Regional Water Quality Control Board (RWQCB).

3.2.5.1 Clean Water Act, Section 404

The USACE regulates the filling or grading of Waters of the U.S. under the authority of Section 404 of the Clean Water Act. Drainage channels and adjacent wetlands may be considered "waters of the United States" or "jurisdictional waters" subject to the jurisdiction of the USACE. The extent of jurisdiction has been defined in the Code of Federal Regulations and clarified in federal courts.

The definition of waters of the U.S. have changed several times in recent years. In January 2020, the Environmental Protection Agency (EPA) and USACE jointly issued the Navigable Waters Protection Rule. The new rule was published in the Federal Register on April 21, 2020, and took effect on June 22, 2020.

The Navigable Waters Protection Rule (33 CFR §328.3(a)) defines waters of the U.S. as:

<u>Territorial Seas and Traditional Navigable Waters (TNWs)</u>

- The territorial seas and traditional navigable waters include large rivers and lakes and tidally influenced waterbodies used in interstate or foreign commerce.

<u>Tributaries</u>

- Tributaries include perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year. These naturally occurring surface water channels must flow more often than just after a single precipitation event—that is, tributaries must be perennial or intermittent.

- Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other "waters of the United States," through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

- Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.

<u>Lakes, Ponds, and Impoundments of Jurisdictional Waters</u>

- Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical

year either directly or through other waters of the United States, through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

- Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a water of the United States in a typical year, such as certain oxbow lakes that lie along the Mississippi River.

Adjacent Wetlands

- Wetlands that physically touch other jurisdictional waters are "adjacent wetlands."
- Wetlands separated from a water of the United States by only a natural berm, bank or dune are also "adjacent."
- Wetlands inundated by flooding from a water of the United States in a typical year are "adjacent."
- Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are "adjacent" so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.
- An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The Navigable Waters Protection Rule also outlines what do not constitute waters of the United States. The following waters/features are not jurisdictional under the rule:

- Waterbodies that are not included in the four categories of waters of the United States listed above.
- Groundwater, including groundwater drained through subsurface drainage systems, such as drains in agricultural lands.
- Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools.
- Diffuse stormwater run-off and directional sheet flow over upland.
- Many farm and roadside ditches.
- Prior converted cropland retains its longstanding exclusion, but is defined for the first time in the final rule. The agencies are clarifying that this exclusion will cease to apply when cropland is abandoned (i.e., not used for, or in support of, agricultural purposes in the immediately preceding five years) and has reverted to wetlands.

- Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease.

- Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters.

- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel.

- Stormwater control features excavated or constructed in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off.

- Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention and infiltration basins and ponds, that are constructed in upland or in non-jurisdictional waters.

- Waste treatment systems have been excluded from the definition of waters of the United States since 1979 and will continue to be excluded under the final rule. Waste treatment systems include all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater or stormwater prior to discharge (or eliminating any such discharge).

All activities that involve the discharge of dredge or fill material into waters of the U.S. are subject to the permit requirements of the USACE under Section 404 of the Clean Water Act. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued without a CWA Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards (Section 3.6.2).

3.2.5.2 Porter-Cologne Water Quality Act/Clean Water Act, Section 401

There are nine Regional Water Quality Control Boards statewide; collectively, they oversee regional and local water quality in California. The RWQCB administers Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. The RWQCB for a given region regulates discharges of fill or pollutants into waters of the State through the issuance of various permits and orders.

Pursuant to Section 401 of the Clean Water Act, the RWQCB regulates waters of the State that are also waters of the U.S. Discharges into such waters require a Section 401 Water Quality Certification from the RWQCB as a condition to obtaining certain federal permits, such as a Clean Water Act Section 404 permit (Section 3.6.1). Discharges into all Waters of the State, even those that are not also Waters of the U.S., require Waste Discharge Requirements (WDRs), or a waiver of WDRs, from the RWQCB.

The Porter-Cologne Water Quality Control Act, Water Code Section 13260, requires that "any person discharging waste, or proposing to discharge waste, within any region that could affect the 'waters of the State' to file a report of discharge" with the RWQCB. Waters of the State as defined in the Porter-Cologne Act (Water Code Section 13050[e]) are "any surface water or groundwater, including saline waters, within the boundaries of the state." This gives the RWQCB authority to regulate a broader set of waters than the Clean Water Act alone. In addition to regulating waters of the U.S. through the Section 401 Water Quality Certification process, the RWQCB also claims jurisdiction and exercises discretionary authority over "isolated waters," or waters that are not themselves waters of the U.S. and are not hydrologically connected to waters of the U.S.

The RWQCB also administers the Construction Stormwater Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one or more acres of soil must obtain a Construction General Permit under the Construction Stormwater Program. A prerequisite for this permit is the development of a Stormwater Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, stormwater, or other pollutants into a Water of the U.S. may require a NPDES permit.

3.2.5.3 California Fish and Game Code, Section 1602

The CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1602 of the California Fish and Game Code. Activities that may substantially modify such waters through the diversion or obstruction of their natural flow, change or use of any material from their bed or bank, or the deposition of debris require a Notification of Lake or Streambed Alteration. If the CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the lake or drainage in question.

3.2.6 City of Dixon Tree Ordinance

A tree removal permit is required for any street trees to be removed. Per the Street Tree Ordinance, Part III Chapter 18 Article 1 of the Dixon City Code, or as amended, a Street Tree is any tree within that area between public street right-of-way lines plus five feet beyond the right-of-way on each side thereof. Encroachment permits are required for removal, placement, and/or maintenance of street trees or other landscaping within the public right-of-way (Ord. 15-001 § 4; Ord. 13-002 § 1). The permit also requires the applicant to obtain a liability insurance coverage, at the discretion of the City Engineer or Public Works Director.

The City of Dixon does not require tree removal permits for trees that are not considered street trees. Since there are no street trees on the site, a tree removal permit would not be required.

3.2.7 City of Dixon 2040 Updated General Plan

The project site is located within the City of Dixon, and as such, is subject to the goals, policies, and land use designations of the 2040 Dixon General Plan. The 2040 General Plan, recently updated in May 2021, is a policy document that guides the growth and development of the City of Dixon, while providing for the protection of natural and agricultural resources. The project site is situated within the General Plan's Industrial land use designation, which provides for large and small scale industrial manufacturing and commercial uses. The site is also within the Designated

Plan Development and within the Dixon Urban Growth Boundary (Zone 1) specified in the General Plan and Solano HCP.

The 2040 General Plan specifies measures that aim to protect biological resources when properties are developed. Goal NE-1 of the Plan's Natural Environment chapter specifies the protection and enhancement of natural resources, habitats, and watersheds in Dixon, as well as the promotion of responsible management practices. Although the project must be consistent with all conservation policies in the 2040 General Plan, the following policies for the protection of biological resources are particularly relevant to the project site.

Wildlife and Habitat Policies

NE-1.10 Support regional habitat conservation efforts, including implementation of the Solano Countywide Multispecies Habitat Conservation Plan.

NE-1.11 Ensure that adverse impacts on sensitive biological resources, including special-status species, sensitive natural communities, sensitive habitat, and wetlands are avoided or mitigated to the greatest extent feasible as development takes place.

NE-1.12 In areas where development (including trails or other improvements) has the potential for adverse effects on special-status species, require project proponents to submit a study conducted by a qualified professional that identifies the presence or absence of special-status species at the proposed development site. If special-status species are determined by the City to be present, require incorporation of appropriate mitigation measures as part of the proposed development prior to final approval.

NE-1.13 Protect the nests of raptors and other birds when in active use, as required by State and federal regulations. In new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season or by conducting a pre-construction survey by a qualified biologist to confirm nests are absent or to define appropriate buffers until any young have successfully fledged the nest.

3.2.8 Solano Multispecies Habitat Conservation Plan (HCP)

The City of Dixon is one of 13 plan participants of the draft Solano Multispecies Habitat Conservation Plan (i.e., Solano HCP). Although the Solano HCP is currently in draft form, and is slated to be finalized in early 2022, the City of Dixon has voluntarily chosen to participate in the HCP and will be responsible for its implementation within the City boundaries (Dixon 2040 General Plan EIR, 2020). Moreover, policies within the General Plan are consistent with the Solano HCP.

The Solano HCP provides a framework for complying with State and Federal endangered species regulations while allowing for covered activities such as new development/conversion of covered specific habitat for urban uses and flood control (i.e., flood control facilities, irrigation channel operations and maintenance). Covered activities also include habitat restoration, monitoring, and relocation of covered species. Covered species under the plan include a total of 36 species, including the Swainson's hawk and burrowing owl. Further details on conservation goals and mitigation measures for these species are described in sections below (LSA 2012).

3.2.8.1 Solano HCP Swainson's Hawk Conservation Goals and Mitigation Measures

The Swainson's hawk is a threatened species under the California Endangered Species Act. The site is within the Swainson's Hawk Irrigated Conservation Area and Agricultural Potential Reserve Area (Figure 4-21, 4-27 of Solano HCP, LSA 2012). Swainson's hawk conservation goals include the following:

Goal SH 1: Contribute to the maintenance of the existing population of Swainson's hawk (estimated to be between 120 and 130 pairs) by preserving 21,210 ac of Swainson's hawk habitat in Swainson's Hawk Potential Reserve Areas.

Goal SH 2: Provide sufficient nesting habitat in proximity to suitable foraging habitat to support the current Swainson's hawk population within the Plan Area.

Mitigation Measures for Impacts to Swainson's Hawk Foraging Habitat

Mitigation measures for impacts to Swainson's hawk are relevant to most Covered Activities in the Plan Area. Mitigation for loss of foraging habitat may be addressed concurrently with habitat preservation and management requirements specified for other natural communities (LSA 2012). The following are Solano HCP mitigation measures for impacts to Swainson's hawk foraging habitat within the Irrigated Agricultural Conservation Areas and Agricultural Potential Reserve Area in which the project site is situated.

Mitigation Measure SH 1: Irrigated Agriculture Foraging Habitat Conservation. Long-term impacts to Swainson's hawk foraging habitat in the Irrigated Agriculture Conservation Area (Solano HCP Figure 4-21, LSA 2012) shall be mitigated through the preservation and management of foraging habitat at a ratio of 1:1 (mitigation-to-impact) and subject to species management requirements specified in Objective SH 1.2 and Sections 7.3 and 10.5.3. Mitigation shall be provided in the Irrigated Agriculture Potential Reserve Area (Solano HCP Figure 4-27, LSA 2012).

Exceptions: Covered Activities that are likely to have minimal effects on the extent and quality of Swainson's hawk foraging habitat are exempt from Swainson's hawk foraging habitat mitigation requirements. Such activities include: projects affecting less than one year of forage production, activities related to establishment of natural habitats (e.g., aquatic, riparian, and grassland habitats), construction of in-fill developments that are *less than 5 ac in size*, and surrounded by urban development at the time the HCP is adopted, and other minor public and private facilities accessed via existing roads or that impact less than *0.5 ac of potential Swainson's hawk foraging habitat* (e.g., pump stations, antennae sites, new irrigation canals, buried pipelines, or utilities).

Mitigation Measures for Impacts to Swainson's Hawk Nesting Habitat

The following measures are designed to meet Goal SH 2 by providing nesting habitat in proximity to suitable foraging habitat to support the current Swainson's hawk population in the Plan Area. It applies to activities throughout the Plan Area, including in Zone 1 (Urban Zone), where the project site is situated.

Mitigation Measure SH 4: Known Nest Trees. Covered Activities resulting in the take of a Swainson's hawk known or active nest site shall preserve an active nest site. Preservation of an active nest site may be achieved through purchase of occupied nest credits from an HCP-certified mitigation bank or approved project-specific reserve. If preserved active nest sites are unavailable,

project proponents will provide funding to the HCP's Interim Nest Protection Program. Take of a known or active nest tree will occur if one of the following conditions is met:

1. The Covered Activity directly removes the nest tree or involves soil compaction or grading (excavation or fill) within more than 25 percent of the root zone of the nest tree. The root zone may be determined by a qualified arborist but shall, at a minimum, be the greater of the horizontal distance from the tree at least equal to the tree's height or the outer edge of the tree canopy.
2. The Covered Activity indirectly affects the nest such that active, Swainson's hawks are disturbed to a degree that causes, or is likely to cause: (a) injury to the nesting birds; (b) a decrease in productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (c) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. Covered Activities within *250 ft* of an active nest are presumed to have a long-term indirect effect on the nest. Applicants indirectly affecting nests shall:

    a. Directly comply with Mitigation Measure SH 4 nest preservation requirements (e.g., purchase of occupied nest credits from an HCP-certified mitigation bank or approved project-specific reserve); or
    b. Upon approval from Solano County Water Resource Agency (SCWA) and Resource Agencies (see Section 10.4.2), the applicant will pay the current nest-protection impact fee and monitor the nest tree for a minimum of two nesting seasons following completion and occupancy of the project. If the nest remains active or is affected by a subsequent project, the fee, with applicable interest, will be returned to the applicant; or
    c. Demonstrate to and receive concurrence from SCWA and the Resource Agencies that the Covered Activity will not substantially increase disturbance to the nest site.

Mitigation Measure SH 4 will be accomplished through payment of fees and will be managed by SCWA through targeted acquisition and conservation easements of suitable nesting habitat. Alternatively, project proponents may preserve known nest sites in Solano County subject to the requirements and approvals as specified in Solano HCP Section 10.5 (LSA 2012).

Mitigation Measure SH 5: Preservation of Important Nesting Habitat. Covered Activities in Zone 1 (Urban Zone) will provide funding (see Section 11.1.2 of Solano HCP) to contribute to targeted preservation of the Swainson's hawk. The funds will contribute to the direct acquisition or purchase of a conservation easement of 1,000 ac of nesting habitat for Swainson's hawk and burrowing owl in the Swainson's Hawk Irrigated Agriculture Potential Reserve Area (Figure 4-27).

3.2.8.2 Solano HCP Burrowing Owl Conservation Goals and Mitigation Measures

The burrowing owl is a California Species of Special Concern and a covered species under the Solano HCP. The site is located within the Irrigated Agriculture Conservation Area for burrowing owls in the Solano HCP. Conservation goals for the burrowing owl include the following:

Goal BO 1: Preserve and manage suitable foraging habitat to mitigate for lost foraging habitat in the Plan Area.

Goal BO 2: Preserve the existing nesting areas outside the developed urban areas and promote the expansion of nesting habitat/burrows in the grassland and agricultural regions of the Plan Area.

Applicable project mitigation measures for the burrowing owl include the following:

Mitigation Measure BO 1: Permanent Loss or Conversion of Foraging Habitat. Mitigation for the permanent (more than one season) disturbance, destruction, or conversion of burrowing owl habitat1 for urban development or other permanent facilities shall be provided at a 1:1 ratio. Project sites that have been occupied during the nesting season at any time during the past 3 years or found to be nesting at the time of pre-construction surveys will be considered occupied by owls and require additional nesting habitat mitigation (see Mitigation Measure BO 2). All burrowing owl habitat affected either directly, indirectly, or cumulatively by the project will be subject to the compensation requirement. Mitigation lands used to satisfy mitigation measures for other Natural Communities and/or Covered Species (i.e., Valley Floor Grassland and Vernal Pool Natural Community [excluding the wetland restoration/construction component], Coastal Marsh Natural Community, Swainson's hawk, California red-legged frog, and callippe silverspot butterfly) can be used to satisfy burrowing owl conservation if the reserve area meets the basic burrowing owl reserve management standards (Sections 7.3 and 10.5.3) and criteria specified in Objective BO 1.2 (Section 5.10.1).

Exemptions: In-fill projects less than 5 ac in size and surrounded by urban development (based on conditions at the time the HCP is adopted) would have minimal effects on the extent and quality of burrowing owl habitat and are exempt from burrowing owl foraging habitat mitigation requirements unless a known or active nest is present. Additionally, project proponents are obligated to avoid destruction of active burrowing owl nests and take of burrowing owls in compliance with the Federal MBTA and California Fish and Game Code Section 3503.5 and to meet the requirements specified in Avoidance and Minimization Measures BO 1, BO 2, and BO 3, and Mitigation Measure BO 3.

Mitigation Measure BO 2: Known Nest Sites. Covered Activities resulting in the take of a known or active burrowing owl nest site shall preserve an active nest site. Preservation of an active nest site may be achieved through purchase of occupied nest credits from an HCP-certified mitigation bank or approved project-specific reserve. If preserved active nest sites are unavailable, project proponents will provide funding ($12,000 per nest at 2011 costs) to the SCWA Interim Nest Protection Program (see Section 10.2).

Mitigation Measure BO 2 will be accomplished through payment of fees and will be managed by SCWA through a process similar to that described under Objective SH 2.2, through targeted acquisition and conservation easements of suitable nesting habitat. Alternatively, project proponents may preserve known nest sites in Solano County subject to the requirements and approvals specified in Section 10.5.

Mitigation Measure BO 3: Preservation of Important Nesting Habitat. Covered Activities in Zone 1 will provide funding (to be implemented in conjunction with Mitigation Measure SH 5 and Section 11.1.2) to contribute to targeted preservation through direct acquisition or conservation easement of 1,000 ac of nesting and associated nest buffer for burrowing owl and Swainson's

hawk in the Swainson's Hawk Irrigated Agriculture Potential Reserve Area (Figure 4-27 of Solano HCP).

The Solano HCP also specifies mitigation measures for temporary impacts associated with construction of pump stations, antennae sites, new irrigation canals, buried pipelines, or utilities. For further information, see Mitigation Measure BO 4 of Chapter 6 in the Solano HCP (LSA, 2012).

3.2.8.3 Solano HCP Fees for Impacts to Swainson's Hawks and Burrowing Owl Habitat

Funding sources for the Solano HCP include development fees based on the occurrence of covered species and sensitive habitats present in the project site. Fees are also based on the land use designations and zones occurring within the project site. The site is within the Zone 1 (Urban Growth Boundary) as well as Swainson's hawk and burrowing owl conservation areas. These fees will be used to purchase conservation easements to preserve habitat of covered species and sensitive natural communities. The following include development fees relevant to the project.

Swainson's Hawk and Burrowing Owl Nesting Habitat Acquisition: The extent of nesting habitat preserved for each species will be based on need, land availability, long-term suitability of nesting habitat, etc., as determined by the Solano County Water Resources Agency (SCWA) and Resource Agencies (see Section 10.2.6 of Solano HCP, LSA 2012). Lands will be preserved through direct acquisition and/or conservation easements from public and private landowners. Costs for acquisition and management are based on an assumed conservation cost of $10,000 per acre. Costs include acquisition (fee title or conservation easement), administrative and management costs, and compliance monitoring costs.

Swainson's Hawk, Burrowing Owl, and Tricolored Blackbird Active Nest Protection: The SCWA has established an initial fee of $12,000 per active Swainson's hawk or burrowing owl nest or tricolored blackbird breeding colony directly or indirectly lost as a result of development. The $12,000 fee is based on $10,000 for nest protection plus an additional $2,000 for added administration and compliance costs for an interim program. The $10,000 nest protection fee will be used as a direct payment for protection of nests/breeding colonies where the nest/colony can be protected in perpetuity (e.g., at an approved mitigation bank or other HCP approved reserve) or in cases when such preserved nest sites are not available, the full fee will be placed in an endowment-type account and the resulting net interest (gross yield minus inflation and management fees) used to provide payment ($350 per nest site per year)

3.2.8.4 Solano HCP Stream Setbacks

The Solano HCP specifies avoidance and minimization measures for stream setbacks and buffer zones. These measures specify that native vegetated buffer zones shall be established between development and stream corridors to protect riparian and stream habitats. For projects in the urban expansion areas along avoided first and second order streams lacking riparian vegetation such as the project site, stream setbacks shall be at least 25 ft from the top of the bank.

3.2.8.5 Solano HCP Landscape Corridors

The Solano HCP identifies six major potential landscape corridors or wildlife linkage within the Plan Area. Prioritized corridors include the Suisun Marsh to Jepson Pirie and Jepson Prairie to Vac Mountains/Inner Coast Range. Further information can be found in Sections 4.3.1 and Figure 4-2 of the Solano HCP (LSA 2012).

3.2.9 Solano County General Plan

The Solano County General Plan is a guide for both land development and conservation in the unincorporated portions of Solano County. Adjacent and east of the site includes incorporated portions of Solano County, such as the City of Dixon . Similar to the Dixon General Plan, the Solano General Plan is consistent with policies specified in the Solano Multispecies HCP. Conservation goals consistent with the Solano HCP include but are not limited to, the preservation of existing nesting areas of special status species and the promotion of nesting habitat/burrows in the grassland and agricultural regions of the Plan Area. The Solano County General Plan currently applies to Dixon's Sphere of Influence (Dixon 2040 General Plan EIR 2020).

3.3 IMPACTS AND MITIGATIONS SPECIFIC TO THE PROJECT SITE

3.3.1 Impacts to Special Status Plants

Potential Impacts. Forty-one special status vascular plant species are known to occur in the general project vicinity (Section 2, Tables 1A and 1B). The proposed building expansion would have no effect on habitat or regional populations of these species since the site does not provide habitat for these special status plants. Therefore, the project would not adversely affect any of these species, and impacts would be less than significant as defined by CEQA.

Mitigation. Mitigation measures are not warranted.

3.3.2 Impacts to Special Status Animals

Potential Impacts. Of the 32 special status animal species known to occur in the region (Tables 2a and 2b), 30 would be absent from or unlikely to occur on the site due to the absence of suitable habitat and/or project location (e.g., outside of the current range for the species). For 28 of the 30 species, the project does not have the potential to affect individuals or populations, or to result in loss or degradation of habitat, because there is little to no potential that they occur on site. Project impacts to these 28 species are considered less than significant under CEQA. For one species presently unlikely to occur on site, the burrowing owl, there is some potential for future site occupation should site conditions change. Project-related impacts to the burrowing owl are considered potentially significant and are discussed below in Section 3.3.4.

Three special status species known from the region have some potential to occur on site under existing conditions. These are the Swainson's hawk (observed during June 2021 field visit), western red bat, and pallid bat. Project-related impacts to the Swainson's hawk are considered potentially significant and are discussed below in Section 3.3.3. The western red bat and pallid bat have the potential to forage on or over the site but would not roost on site or near enough to the site to be disturbed by project activities. Bats are highly mobile while foraging and would be expected to simply fly away from project-related disturbance; therefore, the project does not have the potential to result in injury or mortality of these two bat species. The expansion of an existing building surrounded by urban land uses will not result in a significant loss of habitat for the pallid bat and western red bat. The site's urban setting likely limits its foraging value for special status bats, and similar or higher quality habitat is regionally abundant. For these reasons, potential project impacts to the western red bat and pallid bat are considered less than significant.

Mitigation. Except for the Swainson's hawk, mitigation measures to compensate for impacts to special status animals are not warranted. Mitigation measures to specifically avoid and minimize potential impacts to Swainson's hawks and their habitat are discussed in Section 3.3.3

3.3.3 Impacts to Swainson's Hawks

Foraging and breeding habitat for the Swainson's hawk occurs throughout the project vicinity and a Swainson's hawk was observed over the site during the June 2021 site visit. This species is state listed as threatened, protected by the federal Migratory Bird Treaty Act and California Fish and Game Code, and a covered species under the Solano HCP. The following sections describe these impacts to Swainson's hawks in more detail.

Impacts to Swainson's Hawk Foraging Habitat. Project construction will be permanently impacting approximately 5.6 acres of Swainson's Hawk foraging habitat within the project boundaries. The site's ruderal field is marginally suitable and does not serve as primary foraging habitat for this species. Given the marginal quality of onsite foraging habitat and the availability of primary foraging habitat within the vicinity of the site, impacts to Swainson's hawk foraging habitat are considered to be a less than significant impact under CEQA. However, the site is within the Solano HCP Swainson's Hawk Irrigated Conservation Area and Agricultural Potential Reserve and construction activities in these areas require mitigation measures for impacts to Swainson's hawk foraging habitat (LSA 2012).

Impacts to Swainson's Hawk Breeding Habitat. Project construction will not be impacting any known nest trees on the site. The are no trees on the site that could serve as Swainson's hawk nest trees. Therefore, impacts to breeding habitat is considered to be a less than significant impact under CEQA. However, the project will need to comply with the Solano HCP mitigation measures for impacts to breeding habitat since there are two known nest trees within 50 feet and 550 feet from the site (CDFW 2021). Further information on these nest trees is discussed below.

Potential Impacts to Individual Swainson's Hawk. Project construction has the potential to impact individual Swainson's hawks utilizing nest trees in the immediate vicinity of the site. The closest nest was documented approximately 50 feet south of the site's southern boundary and a second nest was documented approximately 550 feet west of the site and surrounded by commercial development (CDFW 2021). There have been no records of nesting activity at these two locations since 2005 and 2006 respectively (CDFW 2021; eBIRD 2021). Should these nests become active, individuals using the nest closest to the site have a higher potential to be impacted than individuals using the nest furthest away from the site due to the difference in existing conditions, ambient noise levels, and nest distance from construction activities. The Solano HCP states that construction within 250 ft of an active nest is presumed to have a long-term indirect effect on the nest (LSA 2012). The second nest is substantially more than 250 ft from the site and has not been documented as active since 2006 (CDFW 2021). Therefore, construction on the site is presumed to likely have no long-term indirect impacts to this second nest.

Should any these or other nest trees become active prior to or during construction activities, construction activities may cause (a) injury to the nesting birds; (b) a decrease in productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (c) nest abandonment (LSA 2012). Such impacts would be considered a long-term indirect impact under

Mitigation. The project falls within the jurisdiction of the Solano HCP and must comply with its mitigation measures for the Swainson's hawk (Section 3.2.8). The following mitigation measures are adapted from the Solano HCP and from the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (SHTAC 2000). These mitigation measures will reduce project-related impacts to this species to a less than significant level under CEQA.

3.3.3a Mitigation for Impacts to Swainson's Hawk Foraging Habitat. Local impacts to foraging habitat in the Solano HCP Irrigated Conservation Area, where the site is situated in, shall be mitigated through the preservation and management of foraging habitat at a ratio of 1:1 (mitigation-to-impact). In addition, mitigation for foraging habitat will be subject to species management requirements specified in the Solano HCP (LSA 2012).

3.3.3b Mitigation for Impacts to Swainson's Hawk Breeding Habitat. Mitigation for indirect impacts to Swainson's hawks breeding habitat (Section 3.2.8), including known or active nests will consist of the following (LSA 2012):

- the project applicant shall preserve an active nest site through purchase of occupied nest credits from an HCP-certified mitigation bank or approved project-specific reserve. If preserved active nest sites are unavailable, project proponents will provide funding to the HCP's Interim Nest Protection Program. or
- pay current nest-protection impact fee (the fee schedule for the Solano HCP has yet to be determined) and monitor the nest tree for a minimum of two nesting seasons following completion and occupancy of the project upon approval from SCWA and Resource Agencies. If the nest remains active or is affected by a subsequent project, the fee, with applicable interest, will be returned to the applicant; or
- Demonstrate to and receive concurrence from SCWA and the Resource Agencies that the covered activity will not substantially increase disturbance to the nest site.

3.3.3c Mitigation for Potential Impacts to Individual Swainson's Hawk.

Avoidance. To avoid project-related "take" of Swainson's hawk, project-related activities will occur, where possible, outside of the Swainson's hawk nesting season, or between September 16th and the end of February.

Pre-construction Nest Surveys. Prior to the start of construction activities, a qualified biologist will conduct protocol-level Swainson's hawk nesting surveys for active Swainson's hawk nests within ½ mile of the site in accordance with guidelines set by the Swainson's Hawk Technical Advisory Committee (SHTAC 2000). The SHTAC (2000) guidelines define five survey periods for Swainson's hawk: Period I: January 1-March 20; Period II: March 20-April 5; Period III: April 5-April 20; Period IV: April 21-June 10; and Period V: June 10-July 30. The guidelines prescribe a minimum of three surveys per survey period and recommend at least the two survey periods immediately prior to a project's initiation. These guidelines specifically recommend that surveys be completed in Periods II, III, and V. Note that Swainson's hawks in the Solano County Region is typically incubating during June and active nests can be difficult to find (SHTAC 2000). Therefore, the Solano HCP states that June surveys may not be acceptable for determining the absence of Swainson's

hawk nests (LSA 2012). The purpose of these surveys will be to establish a base understanding of the location and activity of nesting Swainson's hawks within the vicinity of the site.

Establish Buffers. Should any active Swainson's hawk nests be discovered within ½ mile of the site, construction work (including grading, earthmoving, and any operation of construction equipment) shall not occur within a 0.25 mi buffer zone around an active Swainson's hawk nest except as provided below (LSA 2012). Construction-free buffers will be identified on the ground with flagging, fencing, or by other easily visible means, and will be maintained until the biologist has determined that the young have fledged.

The size of nest site buffer zones may be reduced only under the following conditions:

- A site-specific analysis prepared by an Approved Biologist indicates that the nesting pair under consideration are not likely to be adversely affected by construction activities1 (e.g., the nest is located in an area where the hawks are habituated to human activity and noise levels comparable to anticipated construction work). SCWA, in consultation with the HCP Technical Review Committee, must approve this analysis before construction may begin within 0.25 mi of a nest.
- Monitoring by an Approved Biologist is conducted for a sufficient time (during all construction activities for a minimum of 10 consecutive days following the initiation of construction), and the nesting pair does not exhibit adverse reactions to construction activities (e.g., changes in behavioral patterns, reactions to construction noise).
- Monitoring is continued at least once a week through the nesting cycle at that nest. This longer-term monitoring may be reduced to a minimum of 2 hours in the morning and 2 hours in the afternoon during construction activities. However, additional and more frequent monitoring may be required if any adverse reactions are noted.
- Monitoring reports are submitted to Solano County Water Agency (SCWA).

3.3.4 Impacts to Burrowing Owls

Impact. Although the site is within the Irrigated Agriculture Area Conservation Area for burrowing owls in the Solano HCP (LSA 2012), the site does not provide suitable breeding habitat for this species due to the lack of ground squirrel burrows noted during the June 2021 site visited. The site's routinely mowed and disked ruderal field supports marginal foraging habitat for this species. If ground squirrels colonize the site in the future, burrowing owls could move onto the site and construction activities could result in the mortality of burrowing owls, particularly since they are known to retreat into their burrows. Mortality of individual burrowing owls would constitute a violation of state law and a significant project-related impact as defined by CEQA.

Mitigation. No mitigation is required for burrowing owls that are currently absent from the site. Should burrowing owls move on the site prior to construction, the following measures will be required and implemented for the protection of the burrowing owl.

Mitigation Measure 3.3.4a Take Avoidance Survey. A take avoidance survey for burrowing owls will be conducted by a qualified biologist between 14 and 30 days prior to the start of future residential construction. This take avoidance survey will be conducted according to methods described in the Staff Report on Burrowing Owl Mitigation (CDFG 2012). The survey area will include all suitable habitat on and within 200 meters of project impact areas, where accessible.

Mitigation Measure 3.3.4b Avoidance of Active Nests and Roosts. If project activities are undertaken during the breeding season (February 1-August 31) and active nest burrows are identified within or near project impact areas, a 200-meter disturbance-free buffer will be established around these burrows. During the non-breeding season (September 1-January 31), resident owls occupying burrows in or near project impact areas will be avoided through the establishment of a 50-meter disturbance-free buffer or passively relocated to alternative habitat as described below. Smaller buffer areas during the non-breeding season may be implemented with the presence of a qualified biological monitor during all activities occurring within 50 meters of occupied burrows. Buffers will remain in place for the duration of project activities occurring within the vicinity of burrowing owl activity.

Mitigation Measure 3.3.4c Passive Relocation of Resident Owls. During the non-breeding season (September 1-January 31), resident owls occupying burrows in project impact areas may be passively relocated to alternative habitat in accordance with a relocation plan prepared by a qualified biologist.

In addition to these measures, compliance with the Solano HCP avoidance and mitigation measures are warranted if burrowing owls move on to the site prior to construction. These measures may be addressed concurrently with other habitat preservation and management requirements specified for other natural communities and covered species (LSA 2012). The following are Solano HCP mitigation measures for the conservation of the burrowing owl.[1]

Mitigation Measure 3.3.4d Permanent Loss or Conversion of Foraging Habitat. Mitigation for the permanent (more than one season) disturbance, destruction, or conversion of burrowing owl habitat for urban development or other permanent facilities shall be provided at a 1:1 ratio. Project sites that have been occupied during the nesting season at any time during the past 3 years or found to be nesting at the time of pre-construction surveys will be considered occupied by owls and require additional nesting habitat mitigation (see Mitigation Measure 3.3.4e). All burrowing owl habitat affected either directly, indirectly, or cumulatively by the project will be subject to the compensation requirement. Mitigation lands used to satisfy mitigation measures for other covered species (i.e., Swainson's hawk) can be used to satisfy burrowing owl conservation if the reserve area meets the basic burrowing owl reserve management standards (Sections 7.3 and 10.5.3) and criteria specified in Objective BO 1.2 (Section 5.10.1) (LSA 2012).

Mitigation Measure 3.3.4e Known Nest Sites. Covered Activities resulting in the take of a known or active burrowing owl nest site shall preserve an active nest site. Preservation of an active nest site may be achieved through purchase of occupied nest credits from an HCP-certified mitigation bank or approved project-specific reserve. If preserved active nest sites are unavailable, project proponents will provide funding ($12,000 per nest at 2011 costs) to the SCWA Interim Nest Protection Program (see Section 10.2 of Solano HCP).

Mitigation Measure 3.3.4e will be accomplished through payment of fees and will be managed by SCWA through a process similar to that described under Objective SH 2.2, through targeted acquisition and conservation easements of suitable nesting habitat. Alternatively, project

[1] Mitigation Measures 3.3.4d,3.3.4e, and 3.3.4f are known as Mitigation Measures BO1, BO2, and BO3 respectively in the Solano HCP.

proponents may preserve known nest sites in Solano County subject to the requirements and approvals specified in Section 10.5 of the Solano HCP (LSA 2012).

Mitigation Measure 3.3.4f Preservation of Important Nesting Habitat. Covered Activities in Zone 1 will provide funding (to be implemented in conjunction with Mitigation Measure SH 5[2] of Solano HCP) to preserve 1,000 ac of nesting and associated nest buffer areas for the burrowing owl and Swainson's hawk in the Swainson's Hawk Irrigated Agriculture Potential Reserve Area (LSA 2012).

Compliance with the above mitigation measures will reduce impacts to burrowing owls to a less than significant level and ensure compliance with state laws protecting this species.

3.3.5 Impacts to Migratory Birds and Other Birds of Prey

Potential Impacts. Trees and other vegetation adjacent to the site provide potential nesting habitat for migratory birds and birds of prey protected under the MBTA and related state laws. If a migratory bird or other bird of prey were to nest on or adjacent to the site prior to or during proposed construction activities, such activities could result in the abandonment of active nests or direct mortality or other harm to these birds. Project construction that adversely affect the nesting success of migratory birds and other birds of prey or result in mortality, injury, or other harm of individual birds would be considered a significant impact.

Mitigation. The following measures will reduce impacts on nesting migratory birds and raptors to a less-than-significant level under CEQA and will ensure compliance with state and federal laws.

Mitigation Measure 3.3.5a Preconstruction survey. To the maximum extent practicable, vegetation planned for removal should be removed during the non-breeding season (September 1 through January 31). If it is not possible to avoid vegetation removal during the breeding season (February 1 through August 31), preconstruction surveys will be conducted by a qualified biologist no more than 14 days prior to the start of any such activities occurring during the breeding season.

The preconstruction survey will include all trees, shrubs, or other areas of potential nesting habitat within the project footprint and within 250 feet for raptors and 50 feet for other birds where practicable and legal access allows. If the target species are deemed absent from the area, then no mitigations are required, and construction could commence within 14 days following the survey.

Mitigation Measure 3.3.5b Disturbance-free buffers. If nesting raptors or migratory birds are detected during the survey, a suitable disturbance-free buffer will be established around all active nests. The precise dimension of the buffer would be determined at that time and may vary depending on factors such as location, species, topography, and line of sight to the construction area, and may be up to 250 feet. The buffer area(s) will be enclosed with temporary fencing, and equipment and workers will not enter the enclosed buffer areas. Buffers will remain in place until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents.

[2] In the Solano HCP, mitigation measure SH 5 will provide funding to preserve Swainson's hawk nesting habitat

3.3.6 Impacts to Jurisdictional Waters or Riparian Habitat

Potential Impacts. Jurisdictional waters, wetlands, and riparian-dominated vegetation do not occur on the site and will not be impacted by the project.

Mitigation. Mitigation measures are not warranted.

3.3.7 Loss of Habitat for Native Wildlife

Potential Impacts. The expansion of an existing building on the site's urban/ruderal field may impact foraging and nesting habitat for a variety of common native wildlife species. However, the routinely-mowed field would be of relatively low value for native wildlife due to its proximity to urban development and exposure to high levels of ambient noise. Similar or higher quality habitat is regionally abundant. Although the site's ruderal field would no longer be available as foraging or nesting habitat following project buildout, it is expected that displaced species would be able to utilize similar habitats in the vicinity. Populations of common native wildlife species associated with the site's ruderal field would not be substantially affected by future buildout of the site. With the exception of the Swainson's hawk, which was separately discussed in Section 3.3.3, project-related impacts to native wildlife habitat are considered less than significant under CEQA.

Mitigation. Mitigation measures are not warranted.

3.3.8 Interference with the Movement of Native Wildlife

Potential Impacts. Although this site is not within any defined wildlife corridor or landscape linkage, native wildlife is expected to use the site for foraging habitat as well as for their daily movements and migration or dispersal. The expansion of an existing building may increase human-wildlife interaction and/or may impact how or when native wildlife use this area. However, the site is currently surrounded by urban development and wildlife presently utilizing this area are expected to continue moving through the site post-construction. Therefore, the proposed project would have a less-than-significant impact on movements of native wildlife within the region.

Mitigation. Mitigation measures are not warranted.

3.3.9 Degradation of Water Quality in Seasonal Drainages, Stock Ponds, and Downstream Waters

Potential Impacts. Project construction will require grading that leaves the soil barren of vegetation and, therefore, vulnerable to sheet, rill, or gully erosion. Eroded soil is generally carried as sediment in surface runoff to be deposited in natural creek beds, canals, and adjacent wetlands. Furthermore, urban runoff is often polluted with grease, oil, pesticide and herbicide residues, heavy metals, etc. These pollutants may eventually be carried to sensitive wetland habitats used by a diversity of native wildlife species. The deposition of pollutants and sediments in sensitive riparian and wetland habitats would be considered a potentially significant adverse environmental impact.

The project proponent is expected to comply with the provisions of applicable permits, including standard erosion control measures that employ best management practices (BMPs). Projects involving the grading of large tracts of land must also be in compliance with provisions of a General Construction permit (a type of NPDES permit) available from the California Regional Water Quality Control Board. Compliance with the above permit(s) should result in no impact to water quality in

seasonal creeks, reservoirs, and downstream waters from the proposed project and should not result in the deposition of pollutants and sediments in sensitive riparian and wetland habitats.

Mitigation. Mitigation measures are not warranted.

3.3.10 Designated Critical Habitat and Sensitive Natural Communities.

Potential Impacts. Designated critical habitat and sensitive natural communities are absent from the project site and adjacent lands. The project will have no impact on such habitats.

Mitigation. Mitigation measures are not warranted.

3.3.11 Local Ordinance: Trees

Potential Impacts. Current plans do not include removal of street trees regulated by the City of Dixon. Should street trees require removal, the project shall obtain an encroachment permit and follow conditions of that permit. Therefore, the project is not expected to conflict with the Town's tree ordinance.

Although street tree removal is not currently planned for this project, grading of the trail may impact potentially impact tree roots and we advise that an arborist review the grading plan prior to trail construction.

Mitigation. Mitigation measures are not warranted.

3.3.12 Solano Multispecies Habitat Conservation Plan (HCP)

Potential Impacts. The project would be considered a covered project under the Draft Solano HCP (Section 3.2.8). As such, the project would be subject to conditions and fees of the Solano HCP. The project applicant will not be required to submit an HCP application to the Solano Water Resources Agency (SCWA) (C. Williams, SCWA, pers .comm., 11 August 2021). However, the applicant will be required to consult with the Dixon Planning Department to ensure that goals, policies, and measures within the Solano HCP and Dixon General Plan are complied with.

Fees. Funding sources for the Solano HCP include development fees based on the occurrence of covered species, sensitive habitats, and land use designations and zones occurring within the project site. The site is within the Zone 1 (Urban Zone) as well as Swainson's hawk and burrowing owl conservation areas. The SCWA has established an initial fee of $12,000 per active Swainson's hawk or burrowing owl nest or tricolored blackbird breeding colony directly or indirectly lost as a result of development. Further details on the basis of these costs are discussed in Section 3.2.8.3.

Mitigation. In addition to the fees, the project would be required to comply with applicable avoidance and mitigation measures of the Solano HCP. Applicable avoidance and mitigation measures include those for the Swainson's hawk specified under Section 3.3.3. Possible mitigation measures for the burrowing owl are required if burrowing owls move on to the site prior to construction (Section 3.3.4). Other applicable measures also include those that protect riparian and stream habitats (Section 3.2.8.4).

Solano HCP Stream Setbacks. Since the project is within the urban expansion area (Zone 1) and lacks onsite riparian dominated vegetation, the Solano HCP specifies a stream set-back at least 25 feet from the top of bank of the off-site ephemeral channel. No mitigation is required if the project complies with the Solano HCP stream setback.

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APPENDIX A: LIST OF VASCULAR PLANT SPECIES

The plants species listed below were observed on the Dixon Commerce Building Expansion site during the June 21, 2021 survey. All plants listed have been named according to The Jepson Manual Second Edition (Baldwin et. al. 2012). The wetland indicator status of each plant as listed in the U.S. Army Corps of Engineers 2018 National Wetland Plant list is shown following its common name (USACE 2018).

OBL - Obligate
FACW - Facultative Wetland
FAC - Facultative
FACU - Facultative Upland
UPL - Upland

APIACEAE – CARROT FAMILY		
Foeniculum vulgare	Fennel	UPL
*Torilis arvensis**	Field hedge parsley	UPL
APOCYNACEAE – DOGBANE FAMILY		
*Nerium oleander**	Oleander	UPL
ASTERACEAE – SUNFLOWER FAMILY		
Carduus pycnocephalus	Italian thistle	UPL
Centauria solstitialis	Yellow star thistle	UPL
*Lactuca serriola**	Prickly lettuce	FACU
BRASSICACEAE – MUSTARD FAMILY		
Brassica nigra	Black mustard	UPL
Capsella bursa-pastoris	Shepherd's purse	FACU
Hirschfeldia incana	Perennial mustard	UPL
CONVOLVULACEAE – MORNING-GLORY FAMILY		
*Convolvulus arvensis**	Field bindweed	UPL
GERANIACEAE – GERANIUM FAMILY		
*Erodium botrys**	Broadleaf filaree	UPL
*Geranium dissectum**	Wild geranium	UPL
JUGLANDACEAE – WALNUT FAMILY		
*Juglans regia**	English walnut	UPL
PAPEVERACEA- POPPY FAMILY		
Eschscholzia californica	California Poppy	UPL
POACEAE - GRASS FAMILY		
Avena sp.	Wild Oat	UPL
Bromus diandrus	Ripgut brome	UPL
Bromus hordeaceus	Soft chess	FACU
ROSACEAE- ROSE FAMILY		
Prunus spp.	-	-
SAPINDACEA- Soapberry Family		
Aesculus californica	California buckeye	FACW

*Non-native species

Appendix C

Negative Archaeological Survey Report

NEGATIVE ARCHAEOLOGICAL SURVEY REPORT FOR 2299 COMMERCE WAY, SOLANO COUNTY, CALIFORNIA

Prepared for:

Nick Rini
Senior Vice President
NEARON
101 Ygnacio Valley Road, Suite 450
Walnut Creek, CA 94596

Submitted by:

PAR Environmental Services, Inc.
1906 21st Street,
Sacramento, CA, 95811

August, 2021

NEGATIVE ARCHAEOLOGICAL SURVEY REPORT FOR 2299 COMMERCE WAY, SOLANO COUNTY, CALIFORNIA

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PAR Environmental Services, Inc.
1906 21st Street,
Sacramento, CA, 95811

Prepared by:
Brandon G. Foster, MA

August 4, 202

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FIGURES

INTRODUCTION

NEARON (Client) propose to expand an existing building by 126,000 square feet. The existing project and expansion area are located on an approximately 29.71-acre parcel. The Project is located in Dixon, Solano County, California at the property of 2299 Commerce Way at the intersection of Vaughn Road and Commerce Way. (Figure 1, Figure 2). The established Area of Potential Impacts (API) is recorded in the 2020 City of Dixon Assessor's Map Book 111 Pages 9 and 20 (Figure 1, Figure 2, Figure 3).

PAR Environmental Services, Inc. (PAR), under contract with the Client, was asked to prepare a Cultural Resource Inventory Report (CRIR). The purpose of this document is to assist with project compliance for applicable sections of the California Environmental Quality Act (CEQA) and guidelines found in Public Resources Code (PRC) 15064. No federal funding will be used for this project. Solano County or City of Dixon is the lead agency for CEQA compliance.

PAR completed the cultural resources survey and documentation in a manner consistent with regulatory responsibilities under CEQA and in accordance with the guidelines of the State Office of Historic Preservation (OHP).

The cultural resources survey of the API was conducted on August 2, 2021 by PAR senior archaeologist, Andrea E. Maniery, and PAR staff archaeologist, Brandon Foster. Ms. Maniery has an M.A., is a Registered Professional Archaeologist, and has 10 years of professional experience. She meets the Secretary of the Interior Standards for Archaeology. Mr. Foster has a B.A. in History, a B.A. in Anthropology, and an M.A. in Anthropology. He has 10 years of experience in prehistoric and historic archaeology. Mr. Foster meets California State Standards for Archaeology as adopted by the Society for California Archaeology and prepared this report.

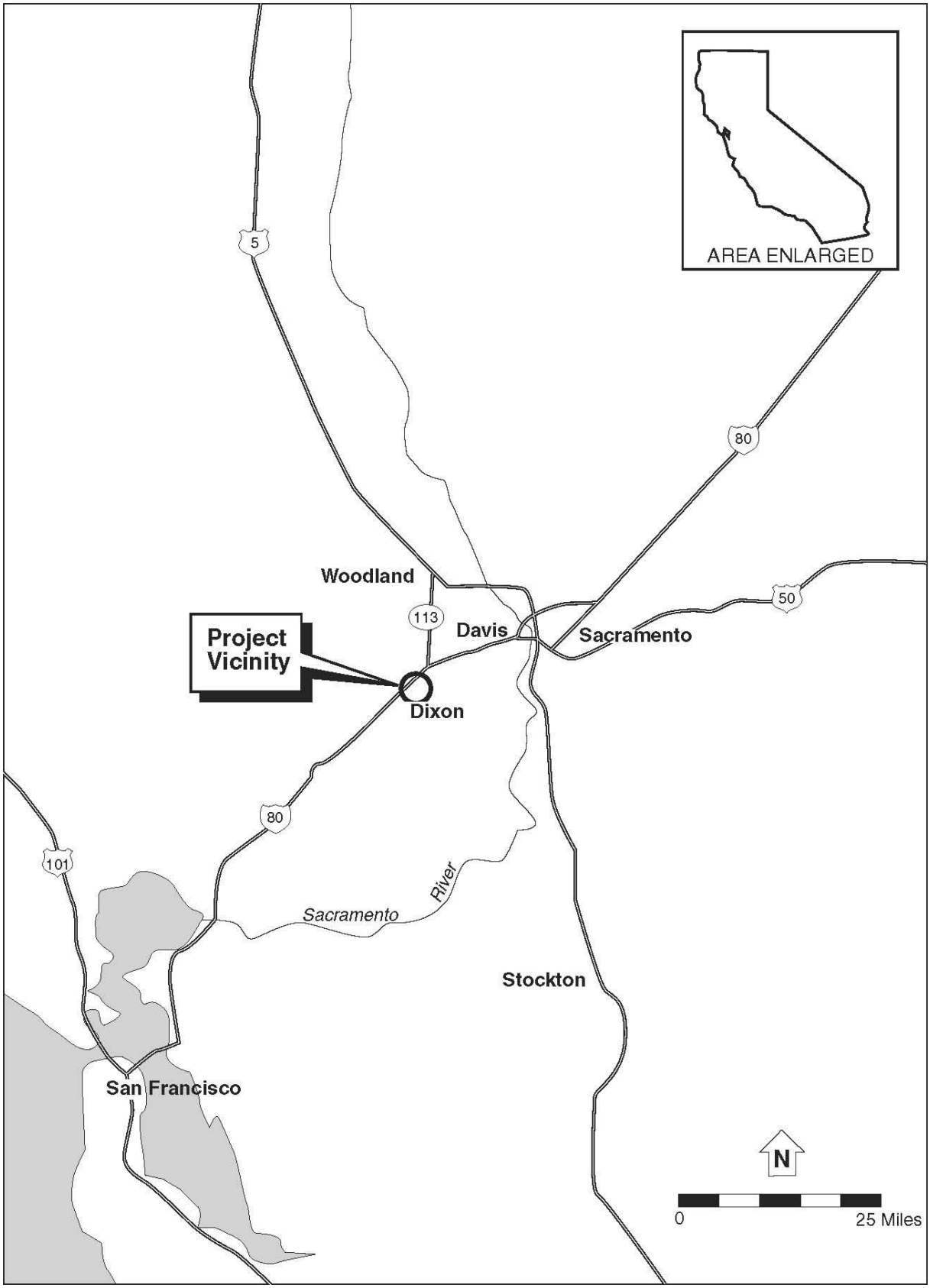

Figure 1. Project Vicinity Map

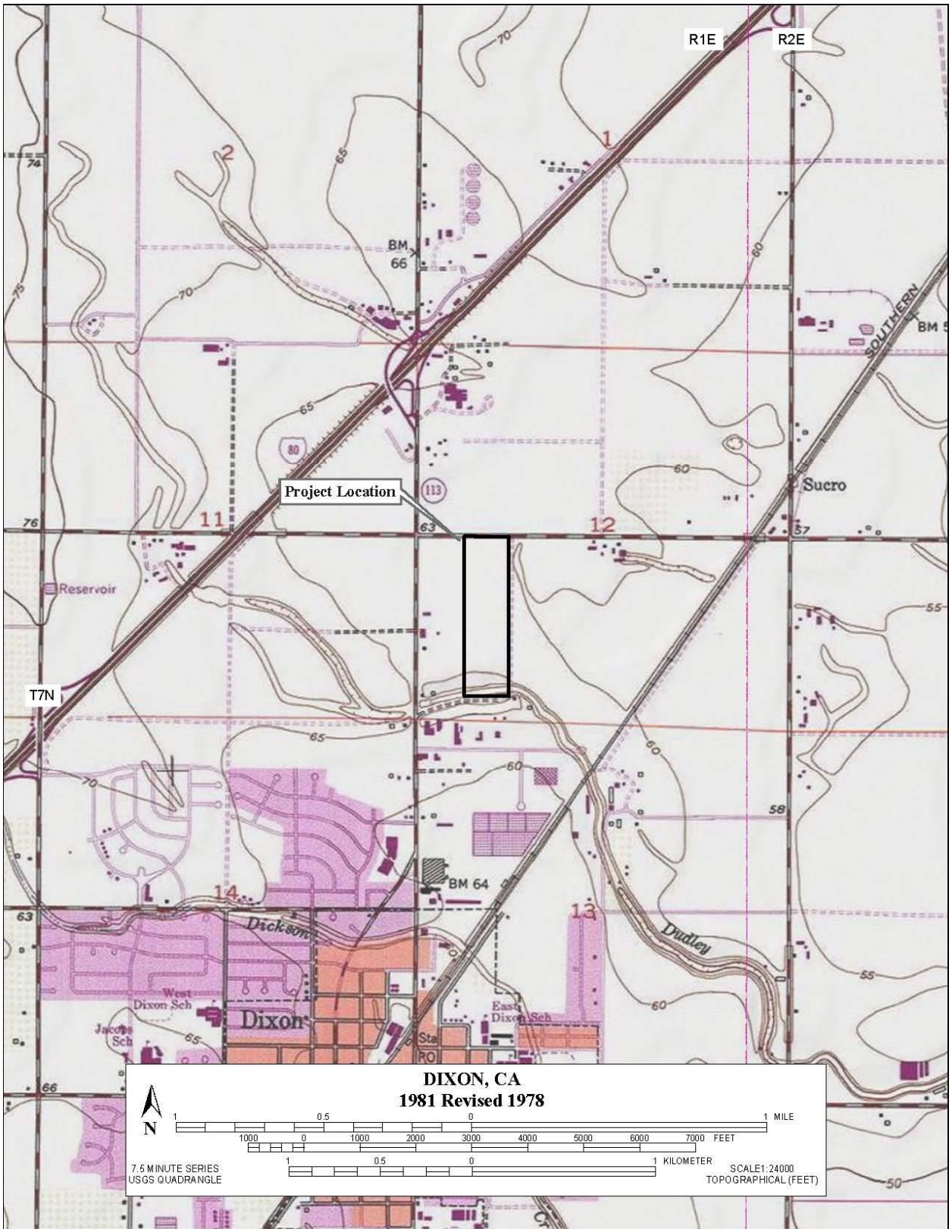

Figure 2. Project Location Map

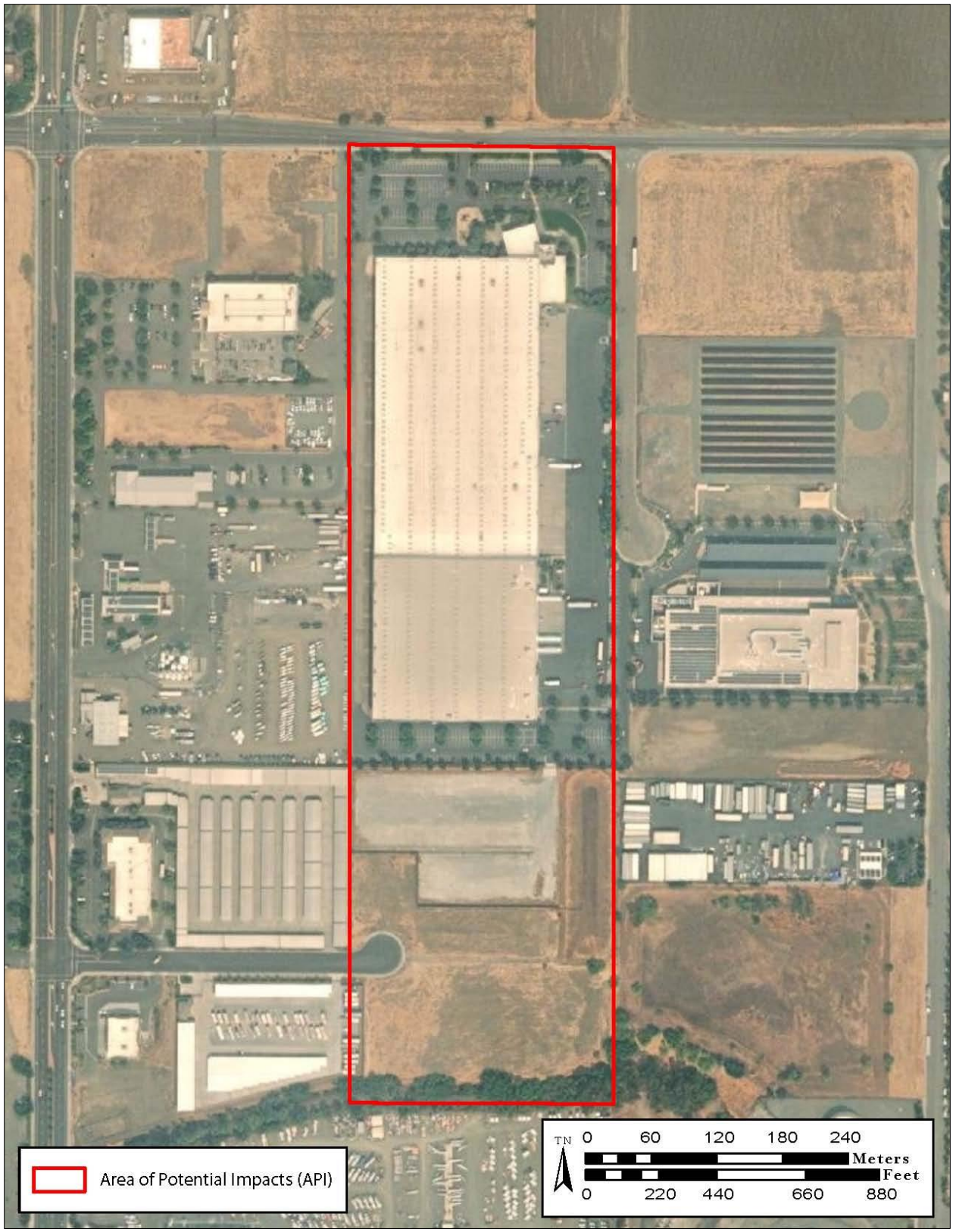

Figure 3. Project Area of Potential Impact Map

PROJECT DESCRIPTION

The proposed project will add an addition to an existing commerical building, as well as new parking areas. The current building was built around 2004-5 and expanded in 2007 and includes 446,089 square feet of space. It is approximately 1,082 feet long (east/west) and 348 feet wide (north/south). Existing parking is located on the east side of the building, with loading docks and trailer space on the south.

The Proposed Project would expand the west side of the building by 126,000 square feet. The new addition would be 432 feet long (east/west) and 291 feet wide (north/south). The new building would have 20 dock high doors and two grade level doors. New parking would be striped along the entire north side of the current and proposed structures. A new parking lot would be created on the west side of the new addition to accommodate both vehicles and trailors (Figure 4).

Area of Potential Impact

The API (see Figure 3) consists of a 29.71-acre parcel. Approximately two-thirds of the property has been developed for two large commercial buildings and parking spaces, while the remaining third is characterized by undeveloped land east of Atkinson Court. The API extends approximately 2,870 feet (0.54 miles) north-south by 791 feet (0.15 miles) east west.

SOURCES CONSULTED

Records Search

A records search of the API and a one-eighth-mile buffer around the area was conducted by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at the request of PAR on June 28, 2021 (Appendix A). The records search included a review of previous cultural resources studies, recorded resources, and the OPH historic properties data files. Cultural resource reports and records on file at PAR and online sources were also reviewed for the project area.

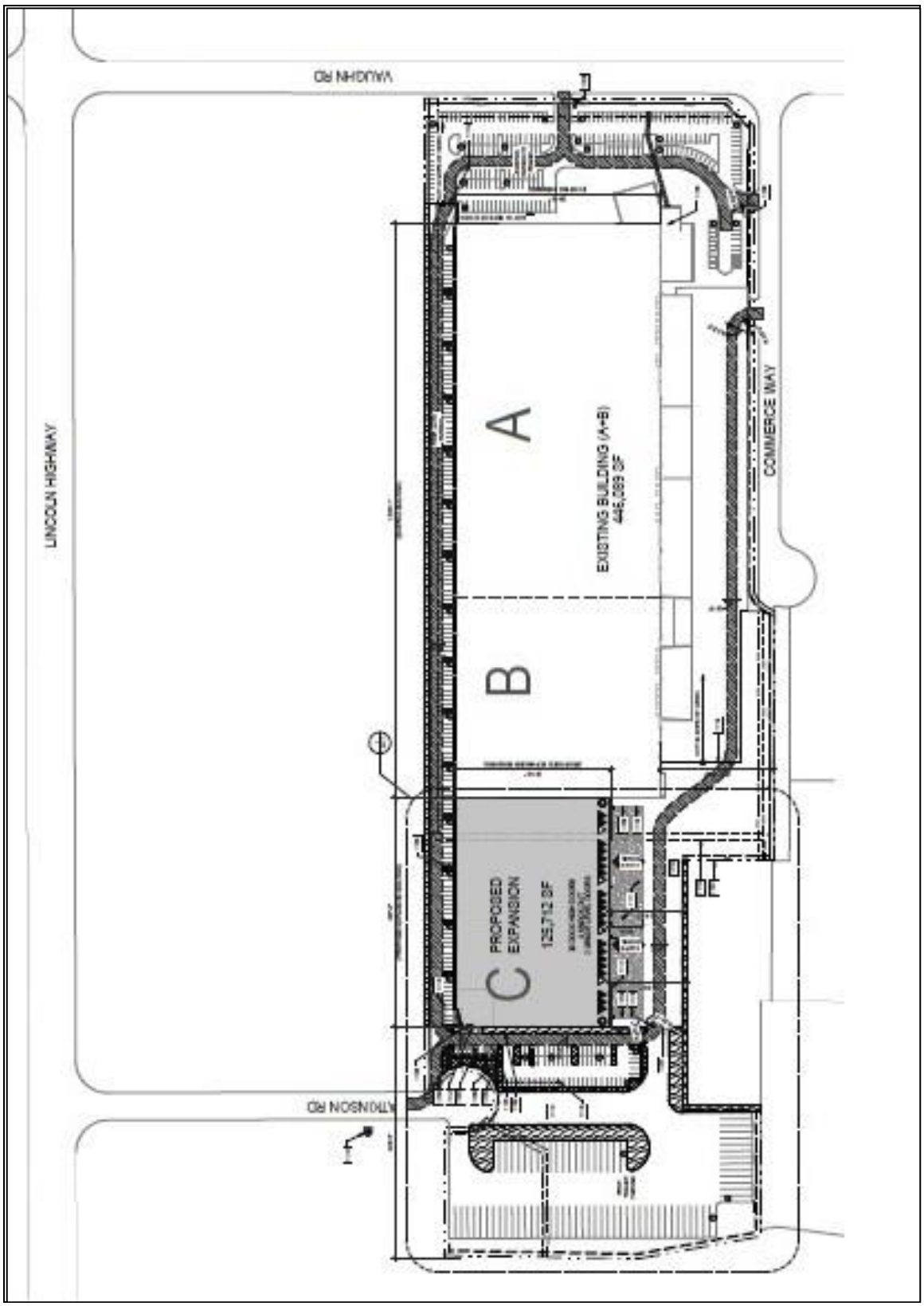

Figure 4. Proposed Project

The record search included the following sources:

- NWIC resource records on file as of July 2021;
- NWIC reports on file as of July 2021;
- Office of Historic Property Data File as of May 2021;
- California Inventory of Historic Resources (1976 – obsolete);
- *California State Historical Landmarks* (1996a and updates as of July 2021);
- *California Points of Historical Interest* (1992 and updates as of July 2021);
- *California Register of Historical Resources* (CRHR) (1996b and updates as of July 2021); and
- *National Register of Historic Places* (NRHP) (1966 and updates as of July 2021).

The NWIC record search did not identify any cultural resources within the one-eighth mile project buffer. According to files available at the NWIC, portions of the project were surveyed by Thomas (2018), Nawi et al. (2018), and Polanco (2018) for cultural resources with negative results.

Summary of Consultation

PAR contacted the Native American Heritage Commission (NAHC) on June 14, 2021 with a request to search the Sacred Lands File (SLF) for any information pertaining to the API (Appendix B). The NAHC responded on July 6, 2021, stating that the current project results were negative.

PAR assumes that the City of Dixon is taking the lead for government to government consultation for this project in compliance with AB 52. Therefore, PAR did not contact tribal members. Representatives of the Chumash, Luiseño, Karuk, and Paiute/White Mountain Apache tribes were included in the NAHC consultation list for this project and are appended to this report for the City of Dixon's reference (Appendix B).

BACKGROUND

Environmental Context

The proposed project is located at the northern edge of the City of Dixon, approximately 2/3 mile south of Interstate 80. The topography of the project area is flat with elevations averaging 62 feet above mean seal level (amsl). The closest permanent water source, Putah Creek, is approximately 5 miles north of the project area.

The environmental setting of the project area has been greatly altered by human modification over the past 150 years. Specifically, the introduction of non-native grasses, the

channelization of sloughs, the creation of elaborate levee systems along the Sacramento River, and the impacts of agricultural activities have all transformed the pre-1850 environment. On a larger scale, the deposition of deep alluvial soils over the past 10,000 years has buried previous environmental features and early archaeological resources.

Prehistory

Paleo-Indian Period: 13,000-10,000 Calibrated Years Before Present

Between about 16,000 and 11,500 years ago the regional climate underwent an abrupt transition, from the Tioga (Wisconsin) glacial maximum to the Early Holocene interstadial (Hill 1984, 2006). A climatic episode known as the Recess Peak glacial advance (Younger Dryas) occurred between about 13,500 and 11,500 Calibrated Years Before Present (cal BP), marked by an abrupt cooling and drying, and was accompanied by glacial advances in the Sierra Nevada. This period marks the earliest recognized archaeological cultural patterns in the Americas. In California, this period is poorly represented in the archaeological record at present. Two localities are particularly noted for site deposits that contain clear evidence of Paleo-Indian occupations. These include the Borax Lake site in Lake County, where numerous fluted points were recovered, and the Witt Site on the southwestern shore of Tulare Lake in Tulare County, where some fluted points and numerous concave-based but unfluted points have been found in association with the remains of large mammals - mostly bison (Rosenthal et al. 2007:151).

Archaic: 10,000-8000 cal BP

Following the end of the Pleistocene, between about 10,000 and 8,000 cal BP, climatic conditions continued warming and peaked during the Early Holocene (Rosenthal et al. 2007:151-157). Since then, California's climate has very slightly cooled to the present. Over that span, shorter term climatic shifts periodically have swung to both warmer and colder extremes than the present. The Archaic is a transitional cultural period characterized in the beginning by relatively small, mobile groups or bands that practiced a mobile subsistence with an emphasis on hunting and seed processing. By the Late Archaic in the Central Valley this had changed to "complex Hunter-Gather" social patterns with large, permanent villages and extensive evidence of material exchange (Fredrickson 1973; Rosenthal et al. 2007:151-157).

Middle Archaic: 7000-3000 cal BP

Increasingly warmer climates saw extensive desertification in southeastern California and the general disappearance of the pluvial lakes except for a very few, such as Tulare Lake and Buena Vista Lake in the southern Sacramento Valley. Geoarchaeological evidence suggests that the Central Valley landscape may have undergone a period of instability during this period as reflected in the number of Middle Holocene Archaic sites that are known from buried contexts. The lack of a well-documented occupation sequence on the Valley floor during this period is likely evidence of the burial of sites rather than the absence of prehistoric peoples.

Rosenthal et al. (2007) call out two adaptations in Central California during the mid-Archaic that they term "Foothill Traditions" and "Valley Traditions." The latter are poorly represented, likely because of the obscuration of the sites through geomorphic processes including sea level changes, and resultant alluviation and stream course changes (Rosenthal et al. 2007:153). Rosenthal et al. (2007) note that they perceive an emerging pattern of logistically organized subsistence and concomitant increasing sedentism along the major waterways. Abundant valley resources drove population density higher in the valleys, which some researchers have suggested led to resource intensification (Rosenthal and Wohlgemuth 2011). This resource intensification occurs in the valley throughout the archaic periods and is illustrated in both plant and animal resources (Rosenthal and Wohlgemuth 2011).

Upper Archaic ca. 2,500 - 800 cal BP

Within interior Central California, the Late or Upper Archaic is frequently associated with the archaeologically recognized Middle Horizon or Berkeley Pattern, so named because of the apparent spread of material culture and social patterns outward from the San Francisco Bay region to surrounding areas. Increasing sedentism is noted in the Sacramento and San Joaquin Valleys with massive middens marking Upper Archaic settlements along major stream courses in the Sacramento Valley and in the Sacramento-San Joaquin delta region (Rosenthal et al. 2007).

Emergent Period: 800 – 200 cal BP

The transition between the Upper Archaic and the Emergent is marked by changes in technology – the bow and arrow displaced or emplaced by other weapons systems; the bedrock mortar milling practice becomes important in some regions; and social complexity appears to increase dramatically (Rosenthal et al. 2007:157-159). This period is associated with the Sweetwater complex in northern Sacramento Valley (Kowta 1988) and also correlates to the most Recent Prehistoric II/Protohistoric Periods (Rosenthal and Wohlgemuth2011). The term "Emergent" was coined by D. A. Fredrickson (1973) to set off the complex, extensively sedentary societies of this later time period. Fredrickson argued that the complex hunter-gatherer societies that occupied much of California during the late prehistoric were effectively similar to early agricultural "Formative" societies elsewhere on the continent. These societies practiced a number of social patterns considered uncharacteristic of typical hunter-gatherers.

Ethnography

The project falls within territory commonly attributed to the ethnographic Patwin (Barrett 1908:293-332; Johnson 1978:350-360; Kroeber 1925: Plate 34). The Patwin occupied a strip of land approximately 90 miles long (north-south) centered on the lower foothills on the eastern slope of the North Coast Range. This strip of land was roughly 40 miles wide and included a portion of the Sacramento River in the northeastern portion of Patwin ethnographic territory. The Patwin, also referred to as the Southern Wintu, belong to the Penutian language family, which also includes the

Miwok, Maidu, Costanoan, and Yokuts. The use of the terms River and Hill Patwin for the eastern and western populations, respectively, is commonly accepted (Johnson 1978).

Most Patwin villages were situated on either bank of the Sacramento River, while others were located along the lower Napa River and northern shores of the Sacramento Delta. The surrounding plains were often submerged from floodwaters during the winter and dry in the summer, necessitating sparse occupation of the area, at least seasonally. Within the North Coast Range, tribelets lived in intermontane valleys, with several tribelets clustered around Cache and Putah creeks (Johnson 1978; Kroeber 1932).

The Patwin were a broad-based, hunting, fishing, and gathering society who relied on acorns as their staple food. Hunting and fishing was done individually or communally. Major animals taken include tule elk, deer, antelope, and bear. Waterfowl, such as ducks and geese, and mussels were taken from the Sacramento Delta and riverbeds and their tributaries. Fishing areas were privately owned, and permission was required for their use for members outside of the tribelet. Several seed varieties, like sunflower, clover, bunch grass, and wild oat, were collected and parched or dried for later consumption. Seed tracts were owned by families. A variety of nuts and berries were collected, including buckeyes, pine nuts, and juniper, manzanita, and black berries (Johnson 1978).

Kroeber (1932) estimated the Patwin pre-contact population to number around 12,500. By the time Kroeber (1932) had conducted his survey of the area, the remaining population was estimated to include a mere 200 individuals. By 1972, the U.S. Bureau of Indian Affairs identified only 11 remaining members (Johnson 1987). Historically, the nearest Patwin village to the project area was located near the current town of Winters, California, and it was known as Liwai. A second village, known as Ululato, was located at the foot of the North Coast Range along Ulatis Creek southwest of Dixon (Kroeber 1932).

Euroamerican contact with the Patwin began with Spanish missionaries and explorers beginning around 1800. By the time of mission secularization in the late 1830s, the native populations were being decimated by introduced Old World diseases (cf. Cook 1955). Euroamerican influence within Patwin territory increased dramatically as ranching and farming became popular in the area. The Sacramento Valley and portions of the delta near Suisun and Napa valleys were the most heavily impacted portions of Patwin territory early on, with those living in the uplands receiving less contact with new Euroamerican settlers. Following the Gold Rush, the Patwin who had survived epidemics and conflict were folded into Euroamerican society as laborers for ranches or were placed in small reservations established by the United States government (Johnson 1978:351).

History

The first non-native incursion into the San Francisco Bay Area occurred when, in 1835, the Mexican government commissioned Commandante General Mariano Guadalupe Vallejo to

colonize the area to create a buffer against the Russians at Fort Ross (solanocounty.com 2021). Solano County was first comprised of six Mexican land grants acquired by General Mariano Vallejo (i.e., Suscol, Suisun, Tolenas or Armijo, Los Putos, Rios Putos or Wolfskill, and Ulpinos or Bidwell). Vallejo encouraged Mexican and American citizens to purchase his land and raise cattle. The first settlers, the Armijo family, purchased land from Vallejo in 1842 and settled in the Suisun Valley. Others would soon follow (Esri 2021). Six years after Solano County's first settlers arrived, California was acquired by the United States under the Treaty of Guadalupe Hidalgo. The boundaries of Solano County were set on February 18, 1850, with Solano County becoming one of the original 27 counties (solanocounty.com 2021).

The area now known as Dixon emerged as a small community known as Silveyville following the Gold Rush. Silveyville was established as a halfway point between Napa and Sacramento by Elijah S. Silvey. Silvey made two trips from Missouri to California with his wife and two children before permanently settling in the area. On the 1852 return trip, Silvey brought 100 milk cows. Soon after, he established a hotel and saloon with corrals to accommodate the horses of the stagecoaches and freight wagons (Hoover et al. 1990). By 1865, Silveyville had around 150 residents. At that time, the bustling town featured a newspaper, blacksmith shop, store, and post office. Silvey served as the first postmaster.

The town collapsed in 1868 when the Central Pacific Railroad came through the area and bypassed Silveyville. The town of Dixon quickly sprang up around the new railroad tracks, and Silveyville was left behind. Its benefactor also soon perished; in November 1869, Silvery fell from a porch and died from his injuries (Eberling 2013). Thomas Dickson donated ten acres on the Central Pacific rail line for a train station. Thus, the town received the name of its benefactor, misspelling it as Dixon. Several buildings from Silveyville, including the bricks of the merchandise store and the Methodist Episcopal Church, were moved to Dixon. The merchandise store bricks were employed in constructing the Capitol Hotel, which stood until 1920 (Hoover et al. 1990).

Shortly after its founding, more and more farmers moved to the area, many of German descent. Dixon was incorporated in 1878 (Thompson 2015). Unlike nearby Vacaville with its many orchards, Dixon concentrated on the grain industry, which remained the major crop until irrigation technology improved. In the early 1900s, this became a reality when Dixon farmers were finally able to pump water for their farms. Soon after, farmers began growing alfalfa and raising cattle. Irrigation was essential to the dairy industry because of the need to grow cattle forage year round (California Department of Transportation 2007).

Its profitable dairy industry led to Dixon becoming known as the "Dairy City." Leading dairymen like H. R. Timm became well known in the region (The Sacramento Bee 29 April 1916). Timm started Timm Certified Dairy in 1910 with more than 300 cows and advertised "the world's largest certified dairy" on the roof of one of the barns facing the highway, becoming a familiar landmark for motorists. The successful dairy industry was aided by the railroad, which shipped dairy to Sacramento, Oakland, San Francisco, and other Bay Area cities and towns. One of the more profitable diaries, Gill Dairy, provided one-fifth of all the milk sold to San Francisco

at one time. The Gill family would also go on to design a refrigerated truck to haul their milk directly from the farm, which meant they did not have to rely on train schedules for shipping (Goerke-Shrode 2000).

The dairy industry continues to be a significant part of Dixon's economic fabric, although fewer dairies operate today. Now, Dixon is dominated by educational services, retail trade, healthcare, and manufacturing (City of Dixon, California 2019). Dixon attracts a large population from Davis, which is home to the University of California, Davis, Sacramento, and those from the Bay Area because of its proximity to these communities and its more affordable housing prices (Business View Magazine 2019).

Regarding the immediate Project area, early records indicate that a portion of the land was owned by John Geddes Brinckerhoff (Figure 5), who purchased the land in 1868 (United States Department of the Interior 1868). Born in Albany, New York in 1827, Brinckerhoff traveled to California by way of Illinois in 1850. He spent the first few years in California in search of placer gold before turning to farming. In 1857, he returned to Illinois and married Ruby Anne (née Colwell). He traveled back to California by steamer with his new wife and his parents, settling near Dixon until his death in 1902 (The San Francisco Call 17 March 1902).

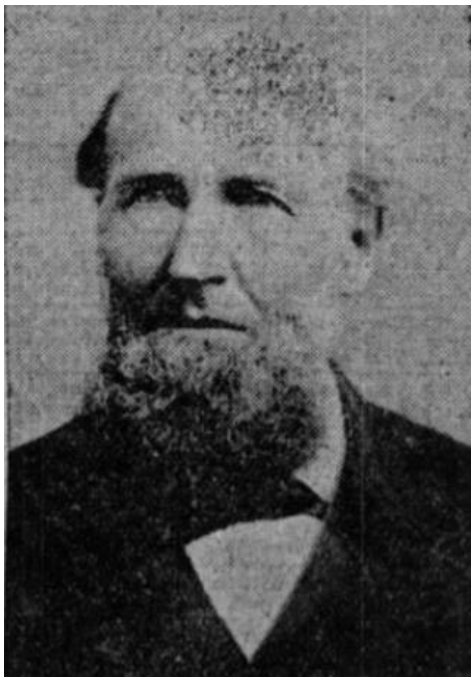

Figure 5. John Geddes Brinckerhoff (The San Francisco Call 17 March 1902).

Following his death, Brinckerhoff's land appears to have been subdivided, with several landowners denoted on Eager and Miller's (1915) *Official Map of the County of Solano California*. Subsequent maps do not delineate landowners, but little development appears to have occurred between the early twentieth and the beginning of the twenty-first century. Historic topographic maps of Dixon (United States Geological Survey [USGS] 1916, 1952) and Vacaville (USGS 1916, 1941, 1953) and historic aerials (Nationwide Environmental Title

Research, LLC. 2021) appear to indicate that the land was used for agriculture as late as 1993. No information could be found regarding the period between 1993 and 2005, but a 2005 aerial shows Section A of the commercial property currently occupying much of the Project area, indicating that its construction is a recent development. The 2004-5 era building was expanded in 2007 (Section B) to reach its current conformation.

FIELD METHODS

Two PAR archaeologists conducted a pedestrian survey of the API, using parallel transects spaced ten meters apart. Approximately two-thirds of the property has been developed for two large commercial buildings and parking spaces, while the remaining third is characterized by undeveloped land east of Atkinson Court. Full survey coverage was achieved on the undeveloped land, although ground visibility was exceedingly poor. The entire area was recently disked, suggesting that at least the top six inches of soil have undergone considerable disturbance. Modern refuse was also strewn about the undeveloped area. The mineral surface was exposed by boot scrapes every 20 meters for better visual inspection. Full survey coverage was not possible on the developed land. Much of the area has been paved. However, wherever soil was exposed (e.g., along the western face of the warehouses, or within ornamental plots) archaeologists performed intensive pedestrian survey. Finally, a large holding pond located on the eastern side of the undeveloped area did not undergo pedestrian survey because access was not possible. The holding pond is behind a chain link fence with no means of entry. Digital photographs and field notes were taken to document survey conditions, coverage, and disturbances within the API.

STUDY FINDINGS AND CONCLUSIONS

Survey Results

On August 2, 2021, two PAR archaeologists conducted a pedestrian survey of the API (Figure 6). The survey revealed no surface evidence of prehistoric or historic resources. A large collection of concrete rubble and a large cut palm stump were located at the southern end of the parcel along the Project API. Neither the rubble or the palm stump appear to have been older than 45 years of age. It is likely that they were either pushed from the undeveloped land within the API into the man-made ditch where they were found, or they were removed from the adjoining property located south of the API. In any case, neither are historical resources for the purposes of CEQA. The ground has been extensively disturbed by the initial building construction and subsequent expansion and discing. The potential for buried subsurface deposits is low.

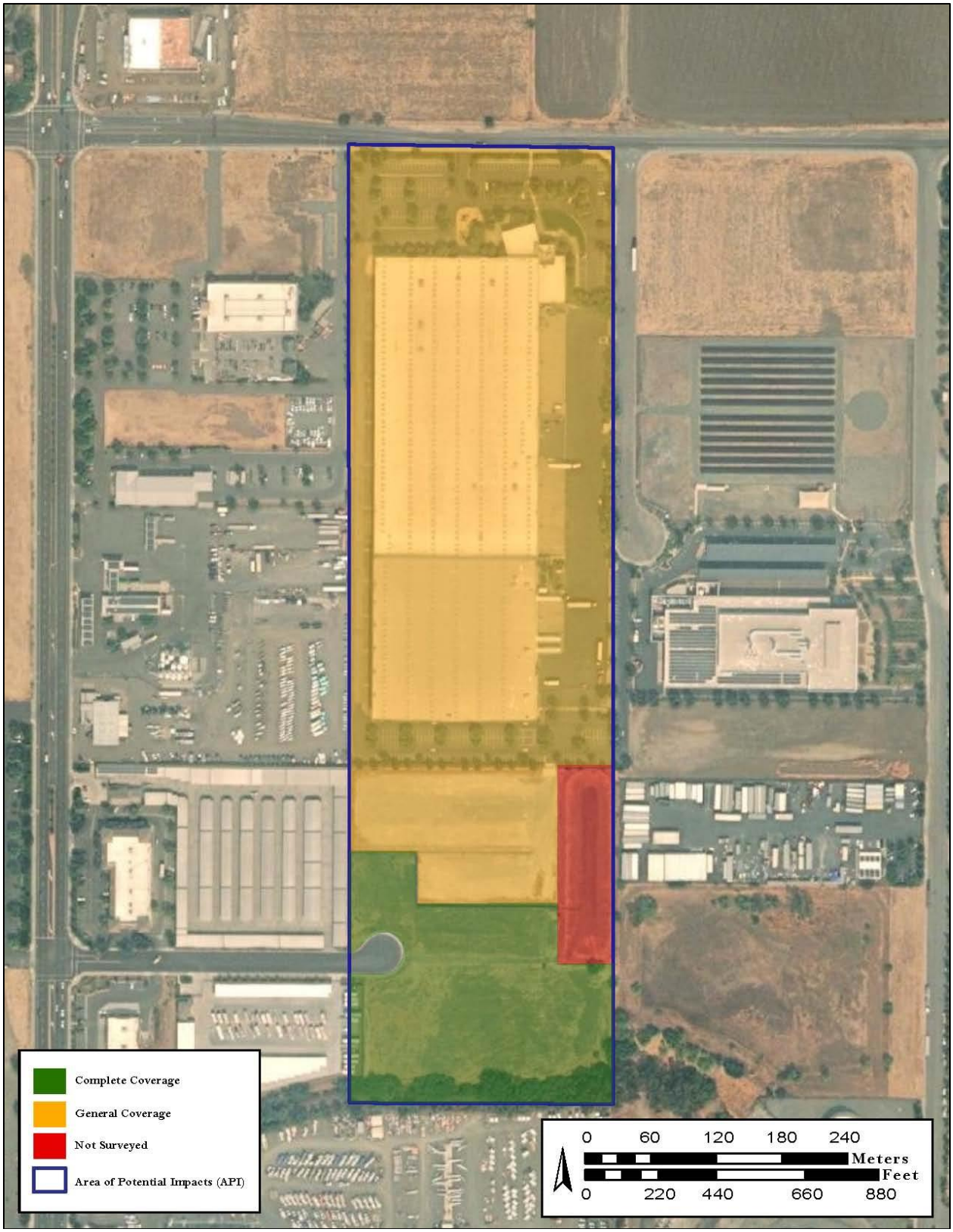

Figure 6. Survey Coverage Map.

RECOMMENDATIONS AND CONCLUSIONS

The Client proposes a 126,000 feet^2 building expansion within the City of Dixon, Solano County, CA. The purpose of this document is to assist with project compliance for applicable sections of the California Environmental Quality Act (CEQA) and guidelines found in PRC 15064.1. No federal funding will be used by the Client for this project.

The API was intensively surveyed where possible. The undeveloped land characterizing the southern one-third of the parcel received full survey coverage. The northern two-thirds of developed land received cursory coverage due to much of the parcel being paved. A fenced holding pond located at the eastern end of the undeveloped land was not surveyed because access was not possible. No cultural resources were identified.

Buried Site Potential

Prehistorically, the site was subjected to frequent flooding of the Sacramento River which likely served to wash away or deeply bury prehistoric sites. Along a similar vein to the historical sensitivity of the parcel, consistent use since the 1840s has significantly lowered the potential to encounter intact archaeological remains. Meyer and Rosenthal's (2008) Buried Archaeological Potential map, which is based on the distribution and age of geological deposits present at the modern ground surface, suggests that buried site potential largely favors historical and modern resources (150 years to present), although their discovery is variable.

The NAHC has indicated a negative result from the Sacred Lands File. PAR assumes that the County of Solano or City of Dixon will take the lead for any consultation with the Native American Contact List provided by the NAHC.

Unanticipated Discoveries

While an archaeological survey is designed to detect resources with surface manifestations, there is always some potential for unidentified subsurface deposits. CEQA Guidelines, Section 15064.6 (f) requires the lead agency for a project to ensure that provisions are made for accidentally discovered resources. These requirements include preserving the find until an archaeologist can evaluate the discovery, providing for the immediate evaluation of the find by an archaeologist, and contingency planning for the time and funding to mitigate project effects upon such accidental discoveries. Upon accidental discovery of an archaeological deposit it is recommended that work be halted within 100 ft. (30 m) of the discovery until a professional archaeologist has evaluated the find. Archaeological deposits may include historic glass or metal, horseshoes, brick, tools, historical car parts, and many other objects. Features, such as wells or privies, are also indicative of intact historical deposits.

Human Remains

California state law (California Health & Safety Code 7050.5, *Dead Bodies* and California Public Resources Code 5097.98, *Notification of Discovery of Native American Human Remains*) requires that any human remains discovered are to be treated with respect and dignity. Upon discovery of human remains, all work in the area must cease immediately within 50 feet of the find, nothing is to be disturbed and the area must be secured. The County Coroner's Office of the county where the remains are located must be called. The Coroner has 2 working days to examine the remains. All parties that discover human remains in California are required to follow a well-defined process.

It is important that the suspected remains, and the area around them, are undisturbed and the proper authorities called to the scene as soon as possible, as it could be a crime scene. The Coroner will determine if the remains are archaeological/historic or of modern origin and if there are any criminal or jurisdictional questions. If the Coroner determines that the remains are of Native American origin, an archaeologist and the Native American Heritage Commission must be notified within 48 hours. The NAHC then assigns a "most likely descendant" representative who works with the project proponent to assure proper disposition of the remains and any associated funerary artifacts.

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APPENDICES

APPENDIX A
RECORDS SEARCH RESULTS

APPENDIX B
NAHC CORRESPONDENCE

Appendix D

Technical Memorandum: VMT Analysis

TJKM VISION THAT MOVES YOUR COMMUNITY

TECHNICAL MEMORANDUM

Date:	August 11, 2021		
To:	Nick Rini	*Project No.:*	075-011 Dixon Commerce Center Expansion
From:	Chris Kinzel, TJKM	*Jurisdiction:*	City of Dixon
Subject:	**Dixon Commerce Center Expansion VMT Analysis**		

TJKM conducted a VMT analysis for the Dixon Commerce Center commercial project using the Solano-Napa Activity Based Model (SNABM). The project is located near downtown Dixon and consists of 125,712 square feet of warehouse expansion on a 30-acre site.

Vehicle Miles Traveled (VMT) Impact Assessment for the Dixon Commerce Center Expansion Project

This section of the memo provides an analysis of potential impacts of VMT attributable to the project. The City of Dixon has not yet adopted criteria and impact thresholds for evaluating VMT impacts. For this VMT Analysis, TJKM followed advice contained in the *Technical Advisory on Evaluating Transportation Impacts in CEQA* published by the Governor's Office of Planning & Research (OPR) in December 2018.

SB 743, which was signed into law by Governor Brown in 2013 and codified in Public Resources Code 21099, tasked OPR with establishing new criteria for determining the significance of transportation impacts under CEQA. SB 743 requires the new criteria to "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." SB 743 changes the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (see Pub. Resource Code, § 21099, subd. (b)(2)). In December 2018, OPR circulated its most recent Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR) that provides recommendations and describes various options for assessing VMT for transportation analysis purposes. The VMT analysis options described by OPR are primarily tailored towards single-use development residential, office or office projects, not mixed use projects and not hotel projects. OPR recommends the following methodology and criteria for specific land uses:

- For residential projects, OPR recommends that VMT impacts be considered potentially significant if a residential project is expected to generate VMT per Capita (i.e., VMT per resident) at a rate that exceeds 85 percent of a regional average. For office projects, OPR recommends that VMT impacts be considered potentially significant if a residential project is expected to generate VMT per Employee at a rate that exceeds 85 percent of a regional average.

- For retail projects, OPR recommends that VMT impacts be considered potentially significant if a project results in a net increase in total VMT. This approach takes into account the

likelihood that retail developments may lead to increases or decreases in VMT, depending on previously existing retail travel patterns. This approach may also be used for other types of projects with customer components.

- OPR does not provide specific guidance on evaluating other land use types, such as hotels, except to say that other land uses could choose to use the method applicable to the land use with the most similarity to the proposed project.
- For mixed-use projects, OPR describes several options that include (1) evaluating each land use separately; or (2) evaluating mixed-use projects based on the method applicable to the dominant land use. Evaluating each land use separately would potentially fail to measure the positive effects of mixed-use projects in reducing VMT.

OPR also recommends exempting some project types from VMT analysis based on the likelihood that such projects will generate low rates of VMT. OPR recommends that projects generating less than 110 trips per day generally may be assumed to cause a less than significant transportation impact.
Potentially relevant to the analysis of VMT attributable to employee VMT: OPR's Technical Advisory also notes that "low wage workers in particular would be more likely to choose a residential location close to their workplace if one is available."

Section 15064.3 of the State CEQA Guidelines describes the requirements for assessing transportation impacts based on vehicle miles traveled (VMT) that apply statewide beginning on July 1, 2020. As described in Section 15064.3:

- "Vehicle miles traveled" refers to the amount and distance of automobile travel "attributable to a project." Other relevant considerations may include the effects of the project on transit or non-motorized travel. As described separately in the Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR, December 2018), VMT re-routed from other origins or destinations as the result of a project would not be attributable to a project except to the extent that the re-routing results in a net increase in VMT. For example, OPR guidelines note that retail projects typically re-route travel from other retail destinations, and therefore a retail project may lead to increases or decreases in VMT, depending on previously existing travel patterns. Similarly, a large share of retail trips are "pass-by trips" that would not be considered attributable to a retail project.
- Lead agencies have discretion to choose the most appropriate methodology to evaluate a project's vehicles miles traveled, including whether to express the change in absolute terms, per capita, per household or any other measure.
- If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered: a lead agency may evaluate the project's vehicle miles travelled qualitatively.
- A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence.

VMT Impact Criteria for Proposed Project

Based on the OPR recommendations, VMT impacts attributable to the proposed warehouse expansion may be considered potentially significant if home-based work VMT per employee (VMT per job) exceeds 85 percent the average rate for Solano County.

The most recent version of the Solano-Napa Activity Based Model (SNABM) was used, which was adopted by the Solano Transportation Authority on December 2020. The project was inserted into the model's land use file and ran for the 2015 base year to generate VMT results.

125,712 square feet of warehouse space converts to 103 total employees using a factor of 1,225 square feet per employee derived from the Southern California Council of Governments (SCAG) regional employment density study. The project is located in TAZ #950.

Table 1: Land Use Changes for Base Year for Project Model Run

TAZ	Total Employees	Manufacturing Employees	Population	Employed Residents
950	+103	+103	+0	+0

A base year plus project model run was conducted with the land use changes added. The results are summarized in tables 2-4.

Table 2: Base Year VMT Metrics

Metrics	Home-based Work VMT	Population	Employees	VMT per Job
TAZ #950	4,885	6	426	**11.47**
Dixon City	89,242	17,765	4,345	**20.54**
Solano County	4,956,966	407,734	130,626	**37.95**

Table 3: Base Year Plus Project VMT Metrics

Metrics	Home-based Work VMT	Population	Employees	VMT per Job
TAZ #950	5,893	6	529	**11.14**
Dixon City	91,063	17,765	4,448	**20.47**
Solano County	4,943,374	407,734	130,729	**37.81**

Table 4: Base Year vs Project VMT Metrics Difference

Metrics	Home-based Work VMT	Population	Employees	VMT per Job
TAZ #950	+1,008	0	+103	-0.33
Dixon City	+1,821	0	+103	-0.07
Solano County	+13,592	0	+103	+0.07

For the base year, the project will decrease the commercial VMT per job in TAZ #950 from 11.47 to 11.14. In addition, the project also will decrease commercial VMT per job in the City of Dixon from 20.54 to 20.47 and Solano County from 37.95 to 37.814.

On a project level for the base year, the project generated 5,893 commercial VMT, or **11.14** VMT per job in TAZ #950. Since this value is lower than the Solano County 85% threshold baseline of 32.26 VMT per job, the Dixon Commerce Center Expansion project is found to be below the significance threshold of VMT analysis for the baseline scenario.

In conclusion, VMT impacts for the Dixon Commerce Center expansion project are found to be insignificant for the base year, and no mitigation is required for VMT impacts attributable to this project.