

# ENVIRONMENTAL INITIAL STUDY

## DRAFT INITIAL STUDY CHECKLIST PROPOSED MITIGATED NEGATIVE DECLARATION References and Documentation

AIRPORT ROAD DISTRIBUTION CENTER  
Site Development Permit #2021-01493

Prepared by:  
CITY OF REDDING  
Development Services Department  
*Planning Division*  
777 Cypress Avenue  
Redding, CA 96001

November 2021

# CITY OF REDDING

## ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Airport Road Distribution Center – Site Development Permit #2021-01493

2. **Lead Agency:**

CITY OF REDDING  
Development Services Department  
*Planning Division*  
777 Cypress Avenue  
Redding, CA 96001

3. **Contact Person:** Lily Toy, Planning Manager; (530) 245-7231; ltoy@cityofredding.org

4. **Project Location:** 5497 and 5525 Airport Road

5. **Applicant's Name and Address:**

Larry Ginnings  
2030 Main Street, Suite 342  
Dallas, TX 75201  
(214) 717-4204

**Representative's Name and Address:**

Kimley-Horn, ATTN: Sheetal K. Bhatt  
555 Capitol Mall, Suite 300  
Sacramento, CA 95814  
(916) 859-3609

6. **General Plan Designation:** "General Industrial" (GI) and "Acquisition Overlay" (AO)

7. **Zoning:** "General Industrial" (GI)

8. **Description of Project:** The project proposes to develop a warehouse distribution center at 5497 and 5525 Airport Road, on Assessor Parcel Number (APN) 054-200-002 (29.19 acres) and APN 054-210-006 (9.59 acres), east of Airport Road and west of Old Oregon Trail. The two parcels total approximately 38.8 acres. The proposed project also includes an approximate 1.4-acre sewer line corridor extending south of the project site along the future Aviation Drive alignment to an existing tie-in at Shasta View Drive. The proposed distribution facility would contain 250,955 square feet of warehouse space that includes an administration office and is consistent with both the existing General Plan and zoning designations for the subject parcels. Facility hours of operation would be Monday through Sunday, 24-hours a day with up to 375 onsite employees.

**Buildings and Structures.** The 250,955 square-foot distribution facility is situated centrally onsite and includes approximately 10,000 square feet of administration office space within the facility. Building height, including the facades to screen rooftop mounted mechanical equipment, would not exceed 45 feet in height. A series of sound barrier walls proposed along the west side of the facility with a total length of 610 feet and heights ranging from 10 to 12 feet are included to minimize onsite noise associated with loading and unloading operations.

**Parking.** Onsite parking is provided with 438 automobile parking spaces, including 25 priority electric vehicle (EV) designated spaces, and 11 handicap spaces. The project also includes 64 van staging spaces and 62 trailer parking stalls. Automobile, including handicap parking is provided on the west side of the facility, long trailer parking is provided on the south side of the facility, and van parking is provided on the north. Truck loading is also located on the south side on the facility with 44, 8-foot x 9-foot dock doors. The east side of the facility has an additional 9, 8-foot x 9-foot dock doors located on the south end and 15, 5-foot x 9-foot van loading dock doors on the north end. The north side of the facility includes 5, 8-foot x 9-foot dock doors and 10, 14-foot x 16-foot drive-in doors. Van staging is also provided on the north side of the facility located adjacent to the property line. An approximate 10.6-acre area within the "Acquisition Overlay" (AO) area is reserved as a future parking area.

Access. Two proposed driveway connections will be located at the proposed extension of Aviation Drive along the west side of the property. Aviation drive will be constructed along the project frontage and adjacent to the Airport Road. The proposed Aviation Drive will extend from the existing southern terminus of Aviation Drive to the north of the project site and extend southward along the project frontage and will tie into Aviation Drive to the south. The construction of Aviation Drive to the south of the project site is the responsibility of other developers and is not a part of the proposed project. The northern access is located approximately 350 feet south of the intersection of Airport Road at Electro Way and is controlled with a remote access lift arm gate. The southern access is located approximately 600 feet south of the northern site access driveway on Aviation Drive and is controlled with a remote access lift arm gate.

Landscaping. Landscaped areas include parking islands and perimeter landscaping. The project proposes the planting of approximately 126 trees throughout the site to enhance the site's aesthetics and provide additional screening. The utilization of native shrubs would ensure the landscaping is low-maintenance and would conserve water. The proposed project has been designed to be consistent with the State of California's Model Water Efficient Landscape Ordinance (MWELO). Landscape irrigation would include automatic irrigation controller with soil moisture sensors/rain sensors; run-off prevention, low head drainage, and over spray; utilization of low volume/water efficient drip and rotary heads.

Storm Drainage. The proposed project would increase the amount of impervious surface area by replacing approximately 18-acres of natural ground areas with impermeable surfaces such as buildings, parking, sidewalks, and driveways. Efforts to maintain the existing drainage conditions via grading and use of storm drain inlets shall be used to discharge runoff from the development to the existing swale along Airport Road. Stormwater runoff from all structures, impervious, and pervious areas shall be collected from the project site and retained/treated by Best Management Practices (BMPs) in accordance with the City of Redding Post Construction Standards and the Phase II MS4 Permit. A 1-acre stormwater detention basin is located in the southwest corner of the site. Surface flow would be moved by proposed storm drains throughout the facility to the stormwater basin, and then by an overland release to an existing swale located along the eastern shoulder of Airport Road.

Offsite Improvements. An approximate 1.4-acre sewer line corridor extending south of the project site along the future Aviation Drive alignment to an existing tie-in at Shasta View Drive will be required for sewer service. A 15-inch sewer main will be located within this alignment to convey project related wastewater to the Stillwater Wastewater Treatment Plant.

Grading and Construction. The project will require approximately 28,000 cubic yards of cut material and approximately 43,300 cubic yards of fill material. Grading activities require the import of approximately 15,300 cubic yards of imported soil. The project will be constructed in one phase with construction anticipated to be begin in the first quarter of 2022 and continue for approximately 11 months. Anticipated completion date is December 31, 2022.

9. **Surrounding Land Uses and Setting:** The project site lies within a semi-developed area of southeast Redding immediately west of the Redding Municipal Airport. Land to the north and east have a General Plan classification of "General Industrial" (GI) and "Acquisition Overlay" (AO) with a corresponding zoning designation of "General Industrial" (GI) and "Public Facility" (PF); land to the south has a General Plan classification of "General Industrial" (GI) and a zoning designation of "General Industrial" (GI) and "Public Facility" (PF); land west of the site is designated "General Industrial" (GI) in the General Plan with a corresponding zoning designation of "General Industrial" (GI).

An existing light industrial business park is located immediately to the north. A self-storage project was approved in July 2020 for the parcel immediately to the south of the project site. An existing mini storage development and other industrial uses are located farther to the south in and around the Redding Municipal Airport. Vacant industrial land lies to the west across Airport Road.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

California Department of Fish and Wildlife  
California Regional Water Quality Control Board  
United States Army Corps of Engineers  
United States Fish and Wildlife Service

- 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

Consultation and correspondence with various culturally affiliated Tribal groups and agencies were conducted as in accordance with Public Resources Code (PRC) Section 21080.3.1 (AB 52). On October 27, 2021, the City initiated environmental review under the California Environmental Quality Act (CEQA) for the proposed Airport Road Distribution Center project. The City sent a certified project notification letter to the Wintu Tribe of Northern California and the Redding Rancheria, a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, on October 27, 2021, pursuant to PRC Section 21080.3.1, notifying that the project was under review and to provide the Tribes 30 days from the receipt of the letter to request consultation on the project in writing. No responses were received requesting initiation of consultation under the provisions of AB 52.

**Note:** *Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see PRC Section 21080.3.2.). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.*

*Information contained in the Cultural Resources Inventory for the Airport Road Distribution Center Project (ENPLAN, 2021) related on the specific location of prehistoric and historic sites is confidential and exempt from the Freedom of Information Act (FOIA) and the California Public Records Act (CPRA); therefore, site specific cultural resource investigations are not attached to this Initial Study. Professionally qualified individuals, as determined by the California Office of Historic Preservation, may contact the City of Redding Development Services Department, Planning Division directly in order to inquire about its availability.*

- 12. Purpose of this Document:** This document analyzes the environmental effects of the proposed Airport Road Distribution Center project and makes appropriate findings in accordance with Section 15070 of the State CEQA Guidelines. In addition, this document has been prepared to the degree of specificity appropriate to the current proposed action, as required by Section 15146 of the State CEQA Guidelines. The analysis considers the actions associated with the proposed project to determine the short-term and long-term effects associated with their implementation.

**13. List of Attachments:**

Attachment A	Location Maps
Attachment B	Project Site Plan and Facility Exhibits
Attachment C	Air Quality, Greenhouse Gas, and Energy Model Outputs
Attachment D	Biological Resource Assessment
Attachment E	Aquatic Resources Delineation Report
Attachment F	Tree Survey Report
Attachment G	Cultural Resources Inventory Report (on file in the Development Services Department, Planning Division)
Attachment H	Preliminary Geotechnical Engineering Investigation
Attachment I	Phase I Environmental Site Assessment
Attachment J	Facility Acoustical Analysis
Attachment K	SB 743 Analysis
Attachment L	Traffic Impact Analysis

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

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

	Aesthetics		Agricultural Resources		Air Quality
<b>X</b>	Biological Resources	<b>X</b>	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	<b>X</b>	Tribal Cultural Resources
	Utilities and Service Systems		Wildfire	<b>X</b>	Mandatory Findings of Significance

**DETERMINATION: (To be completed by the Lead Agency)**

On the basis of the initial evaluation:

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

Copies of the Initial Study and related materials and documentation may be obtained at the Planning Division of the Development Services Department, 777 Cypress Avenue, Redding, CA 96001. Contact Lily Toy, Planning Manager at (530) 245-7231.



Lily Toy, Planning Manager  
Development Services Department

November 29, 2021

Date

## EVALUATION OF ENVIRONMENTAL IMPACTS:

This section provides an evaluation of the potential environmental impacts of the proposed Airport Road Distribution Center Project located in the City of Redding, as well as the CEQA Mandatory Findings of Significance. A discussion of cumulative impacts is also included at the end of this chapter. The issue areas evaluated in this Initial Study include:

- |                                 |                               |
|---------------------------------|-------------------------------|
| - Aesthetics                    | - Land Use & Planning         |
| - Agricultural Resources        | - Mineral Resources           |
| - Air Quality                   | - Noise                       |
| - Biological Resources          | - Population & Housing        |
| - Cultural Resources            | - Public Services             |
| - Energy                        | - Recreation                  |
| - Geology & Soils               | - Transportation              |
| - Greenhouse Gas Emissions      | - Tribal Cultural Resources   |
| - Hazards & Hazardous Materials | - Utilities & Service Systems |
| - Hydrology & Water Quality     | - Wildfire                    |

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the State CEQA Guidelines and used by the City in its environmental review process. This checklist has been updated with the revisions of the January 1, 2019 State CEQA Guidelines. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the proposed project's impacts and identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable impact on the environment.
- **Less Than Significant Impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- **Potentially Significant Impact Unless Mitigation Incorporated.** The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially Significant Impact.** The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

All answers must take into account the whole action involved, including potential off and onsite, indirect, direct, construction, and operation, except as provided for under State CEQA Guidelines Section 15183 and State CEQA Statute Section 21083. The setting discussion under each resource section in this chapter is followed by a discussion of impacts and applicable mitigation measures.

This Initial Study identifies several potentially significant environmental effects related to the proposed project. Some effects are mitigated by implementation of existing provisions of law and standards of practice related to environmental protection. Such provisions are considered in the environmental impact analysis, and the degree to which they would reduce potential environmental effects is discussed. Additional mitigation measures are specifically identified when necessary, to avoid potential environmental effects or to reduce them to a level that is less than significant.

Prior environmental evaluations applicable to all or part of the project site:

- *City of Redding General Plan 2000 – 2020*, October 3, 2000.
- *City of Redding General Plan Final Environmental Impact Report* (SCH #1998072103), 2000.

## I. AESTHETICS

This section of the Initial Study describes the existing visual environment in and around the project area. The analysis assesses the potential for aesthetics impacts using accepted methods of evaluating visual quality, as well as identifying the type and degree of change the proposed project would likely have on the character of the surrounding area.

### Environmental Setting

Scenic vistas are defined as expansive views of highly-valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures. The project study area is located in the southeast quadrant of Redding. The City has not designated specific scenic vistas in the immediate project area as a part of the General Plan (COR, 2000).

The project site is located on the east side of Airport Road approximately 1.5 miles north of the main entrance to the Redding Municipal Airport. The site ranges in elevation from approximately 500 to 520 feet above mean sea level (msl). Land uses adjoining the study area are primarily rural, with commercial and industrial businesses in the vicinity of the project site. The predominant community onsite is oak woodland. Vegetation is dominated by common manzanita, poison oak, valley oak, interior live oak, and gray pine. Approximately 19 acres of the site has been cleared of brush (ENPLAN, 2021). The remainder of the site is densely vegetated with pedestrian trails throughout.

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. According to Caltrans' California Scenic Highway Program and the National Scenic Byways Program, the proposed project is not located near a highway which has been listed as a State or federal Scenic Highway or as an Eligible State Scenic Highway-Not Officially Designated (Caltrans, 2018; FHWA, 2018).

### Impact Analysis

Degradation of the visual character of a site is usually addressed through a qualitative evaluation of the changes to the aesthetic characteristics of the existing environment and the proposed project-related modification that would alter the visual setting. In order to analyze the potential impacts of visual resources, as seen from potential public scenic views, and to document potential change in character or quality within the project area, the existing visual conditions as seen from Airport Road has been evaluated.

The following includes an analysis of environmental parameters related to *Aesthetics* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Except as provided in Public Resources Code Section 21099, 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?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				X
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? ( <i>Public views are those that area experienced from publicly accessible vantage point</i> ). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

- a) The project study area is located along Airport Road, adjacent to the Redding Municipal Airport in southeast quadrant of Redding. As noted above, the City has not designated a specific scenic vista in the immediate project area as a part of the General Plan and there is no designated State or federal scenic highways or scenic highway corridors in the vicinity of the proposed project. The project would not introduce new structures that would be dissimilar to nor located adjacent to nearby receptors such that development of the proposed project would preclude long-distance views. No impact would occur in this regard.
- b) The City's General Plan identifies ridgelines, as well as the glistening water, sheer cliffs, tree-lined banks, and the network of creeks and gullies of the Sacramento River as scenic assets. The proposed project is located on relatively flat land immediately adjacent to the Redding Municipal Airport, approximately 3 miles east of the Sacramento River. As previously mentioned above, there are no national, State, or County designated scenic vistas in the vicinity of the project site. No impact would occur in this regard.
- c) The project will be compatible with the existing visual character of the property and its surroundings. The proposed project maintains a maximum height of 45 feet and will not exceed the 50-foot building height limitation per Redding Municipal Code (RMC) Section 18.34.040 for lands zoned "General Industrial" (GI) (COR, 2019). The proposed project would be consistent in height with buildings on adjacent properties and would not obstruct any documented scenic vistas. The proposed project would not represent a significant change to the overall scenic quality of the area. Impacts would be less than significant.
- d) Exterior light sources associated with the project would include parking lot lighting, exterior wall-mounted lighting fixtures on the proposed building, as well as new street lighting. Parking lot lighting would include exterior pole-mounted light standards (maximum 45 feet high) located throughout the site to provide safety and security lighting. The light standards and additional wall-mounted light fixtures on building structures would be used to ensure safety of the public and safe onsite pedestrian and vehicular circulation. In accordance with RMC Section 18.40.090 all parking area lighting, including building and pole-mounted lighting would be fully shielded and directed downward to prevent objectionable light at, or glare across, the property line and public right-of-way (COR, 2018). Impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Aesthetics*.

## Documentation and References

- Caltrans (California Department of Transportation). 2018. *California Scenic Highway System*. [Online]:  
[http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm). Accessed September 27, 2021.
- COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Natural Resources Element*. October 3, 2000.
- COR. 2019. *Redding Municipal Code Section 18.34.040*. July 20, 2019.
- COR. 2018. *Redding Municipal Code Section 18.40.090*. August 21, 2018.
- ENPLAN. 2021. *Aquatic Resources Delineation Report, Airport Road Distribution Center Project*. November 2021.
- FHWA (Federal Highways Administration) National Scenic Byways Program. 2018. [Online]:  
<https://www.fhwa.dot.gov/byways/states/CA>. Accessed September 27, 2021.
- National Wild and Scenic Rivers System. 2018. [Online]: <https://www.rivers.gov/california.php>. Accessed September 27, 2021.



## II. AGRICULTURAL RESOURCES

The purpose of this section of the Initial Study is to determine the extent to which the project contributes to the physical deterioration of agricultural resources. This section describes the agricultural resources within the project study area, and the applicable regulations that govern those resources.

### Environmental Setting

The Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) maps and classifies farmland. Classifications are based on a combination of physical and chemical characteristics of the soil and climate that determine the degree of suitability of the land for crop production. The project site does not contain designated farmland. The project site has not been historically used for agricultural purposes, nor does it possess soils that are prime for agricultural production (COR, 2000). The site is not located within an area of Prime Farmland as identified by the California Department of Conservation's Important Farmland Series Mapping and Monitoring Program (DOC, 2021). In addition, the DOC's Important Farmland Map for Shasta County identifies the project site as Urban and Built-Up Land (DOC, 2016).

According to the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS, 2021), three soil units have been mapped within the project study area: Perkins gravelly loam, gravelly clay loam substrates, 0 to 3 percent slopes (PmA), Red Bluff loam, 0 to 3 percent slopes (RbA), and Red Bluff loam, 3 to 8 percent slopes (RbB). These soils classifications are considered "Prime Farmland if Irrigated."

The California Land Conservation Act of 1965, commonly known as the Williamson Act, allows local governments to form contracts with private landowners to restrict specific parcels of land to agricultural or open space use. The project site is not under an active Williamson Act contract.

### Impact Analysis

CEQA Section 21095 and CEQA Guidelines Appendix G, together, define Prime, Unique, and Farmland of Statewide Importance as "Important Farmland," whose conversion may be considered significant. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment (LESA) Model (1997, as updated) prepared by the California DOC as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

The following includes an analysis of environmental parameters related to *Agricultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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 Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 5110(g))?				X

Would the Project:		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
d	Result in the loss of forest land or conversion of forest land to non-forest use?				X
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest land?				X

- a) As discussed above, the project site does not contain designated farmland and has not been historically used for agricultural purposes. Additionally, the site is not located within an area of Prime Farmland as identified by the California Department of Conservation's Important Farmland Series Mapping and Monitoring Program (DOC, 2021). While the three onsite soil units can be considered prime if irrigated, the site has historically not been irrigated nor used for farming or farming related activities. As a result, the onsite soil units are not considered prime. No impact would occur in this regard.
- b) As discussed above, the proposed project site is not under a current Williamson Act contract. In addition, the proposed project site is not under a Farmland Security Zone contract or within an agricultural preserve. Therefore, project implementation would not result in conflicts with existing agricultural zoning. No impact would occur in this regard.
- c) The proposed project site is not zoned as either forest land or timberland. The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impact would occur in this regard.
- d) The proposed project is not located within existing forest land. The project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur in this regard.
- e) Refer to impact discussion II.a, above. In addition, the proposed project is not located within or within close proximity to existing farmland or forest land. The project would not result in the conversion of farmland to non-agricultural use or result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur in this regard.

## Mitigation Measures

No mitigation measures are required.

## Findings

In the course of the above evaluation, impacts associated with *Agricultural Resources* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

## Documentation and References

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Natural Resources Element*. October 3, 2000.

DOC (California Department of Conservation). 2021. *Farmland Mapping and Monitoring Program*. [Online]:

<https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed September 27, 2021.

DOC. 2016. *Shasta County Important Farmland*. December 2017.

NRCS (Natural Resources Conservation Service). 2021. *Custom Soil Resource Report for Shasta County Area, California, Airport Road Distribution Facility*. March 19, 2021.

### III. AIR QUALITY

This section examines the air quality in the project area, includes a summary of applicable air quality regulations, and analyzes potential air quality impacts associated with the proposed project. Air quality impacts were assessed in accordance with methodologies recommended by the US Environmental Protection Agency (EPA), California Air Resources Board (CARB), and the Shasta County Air Quality Management District (SCAQMD). Where quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod).

#### Environmental Setting

Shasta County, including the far northern Sacramento Valley, currently exceeds the State's ambient standards for ozone (smog) and particulates (fine, airborne particles). Consequently, these pollutants are the focus of local air quality policy, especially when related to land use and transportation planning. Even with application of measures to reduce emissions for individual projects, cumulative impacts are unavoidable when ozone and/or particulate emissions are involved. For example, the primary source of emissions contributing to ozone is from vehicles. Any project that generates vehicle trips has the potential of contributing incrementally to the problem. The Environmental Impact Report for the General Plan acknowledged this dilemma; and as a result, Findings and a Statement of Overriding Considerations were adopted by the City Council for impacts to air quality resulting from growth supported under the General Plan (COR, 2000a).

The City Air Quality Element of the General Plan establishes emission-reduction goals of 20 to 25 percent, depending on the projected level of unmitigated emissions for a project (COR, 2000b). Mitigation thresholds are established by the Shasta County Air Quality Maintenance District (AQMD) for the important regional/local pollutants, including: Reactive Organic Gases (ROG) and Oxides of Nitrogen (NO<sub>x</sub>), which are ozone precursors, and Inhalable Particulate Matter, 10 Micron (PM<sub>10</sub>). The mitigation thresholds for these pollutants are tiered at two levels as follows:

Level "A"	Level "B"
25 pounds per day of NO <sub>x</sub>	137 pounds per day of NO <sub>x</sub>
25 pounds per day of ROG	137 pounds per day of ROG
80 pounds per day of PM <sub>10</sub>	137 pounds per day of PM <sub>10</sub>

If a project has unmitigated emissions less than the Level "A" threshold, then it is viewed as a minor project (from an air quality perspective) and only application of Standard Mitigation Measures (SMMs) is required to try to achieve at least a 20 percent reduction in emissions, or the best reduction feasible otherwise. Land uses that generate unmitigated emissions above Level "A" require application of appropriate Best Available Mitigation Measures (BAMMs), in addition to the SMMs, in order to achieve a net emission reduction of 20 percent or more. If, after applying SMMs and BAMMs, a use still exceeds the Level "B" threshold, then a minimum of 25 percent of the unmitigated emissions exceeding 137 pounds per day must be offset by reducing emissions from existing sources of pollution; otherwise, an Environmental Impact Report is required.

#### Impact Analysis

The following includes an analysis of environmental parameters related to *Air Quality* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. This section analyzes the short-term air quality impacts associated with construction activities as well as the long-term operational impacts that may result due to development of the proposed project.

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?				X

Would the Project:		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard			X	
c)	Expose sensitive receptors to substantial pollutant concentrations?			X	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

- a) The proposed project is located within the jurisdiction of the Shasta County AQMD. The proposed project involves distribution center. The approximately 250,955 square foot structure would be used for distribution operations. The proposed project would be constructed in one phase. The anticipated construction duration for the proposed project would be approximately twelve months. Stationary sources, such as structures and businesses, would comply with Shasta County and City of Redding rules and regulations and are generally not considered to have a significant air quality impact. The proposed project is considered an industrial use, and in addition, because it is not residential in nature would not directly induce growth in the City or county or result in long-term development that would conflict with the City's general plan growth forecast.

As shown in the discussion below, construction would not exceed Shasta County AQMD thresholds. Operation of the proposed project would exceed Level A thresholds however implementation of SMMs and BAMMs would reduce impacts. Therefore, implementation of the proposed project would not obstruct implementation of an air quality plan. No impact would occur in this regard.

- b) Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., reactive organic gases [ROG] and nitrogen oxides [NO<sub>x</sub>]) and particulate matter 10 microns in size or less (PM<sub>10</sub>) and particulate matter 2.5 microns in size or less (PM<sub>2.5</sub>). Construction-generated emissions are short term and temporary, lasting only while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the Shasta County AQMD's thresholds of significance.

Construction results in the temporary generation of emissions during site preparation, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water.

The duration of construction activities associated with the project are estimated to last approximately twelve months. The project's construction-related emissions were calculated using the Shasta County AQMD-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Project site preparation, and grading are anticipated to begin in early 2022. Paving was modeled to be completed mid-2022. Building construction is estimated to begin mid-2022 and last approximately eight months to winter 2023. Architectural coating would begin fall of 2022 and end early 2023. Table 1 displays the maximum daily emissions that are expected to be generated from the construction of the proposed project in comparison to the daily thresholds established by the Shasta AQMD. Refer to Attachment C for additional information regarding the construction assumptions used in this analysis.

Construction-generated emissions are short-term and temporary, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. The project site was previously undeveloped. The proposed project does not include any demolition. Temporary emissions from site preparation and excavation, as well as from motor vehicle exhaust associated with construction equipment and the movement of equipment across unpaved surfaces, worker trips, etc., would occur. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities.

Table 1 presents construction emissions generated by the proposed project in the Shasta County AQMD in tons per year and pounds per day.

**Table 1**  
**CONSTRUCTION RELATED EMISSIONS**

Construction Year	Pollutant				
	Reactive Organic Gases (ROG) lbs/day	Nitrogen Oxide (NO <sub>x</sub> ) lbs/day	Carbon Monoxide (CO) lbs/day	Coarse Particulate Matter (PM <sub>10</sub> ) lbs/day	Particulate Matter (PM <sub>2.5</sub> ) lbs/day
2022	16	24.88	26.19	5.53	2.3
2023	4.38	0.16	0.44	0.11	0.03
<i>Shasta County AQMD Significance Threshold "Level A" <sup>1, 2</sup></i>	25	25	-	80	-
<i>Shasta County AQMD Significance Threshold "Level B"</i>	137	137		137	
<b>Exceed Shasta County AQMD Threshold?</b>	<b>No</b>	<b>No</b>	-	<b>No</b>	-

CO = carbon monoxide; NO<sub>x</sub> = nitrogen oxide; PM<sub>2.5</sub> = particulate matter no more than 2.5 microns in diameter; PM<sub>10</sub> = particulate matter no more than 10 microns in diameter; ROG = reactive organic gases; - = no threshold.

Notes: 1. In developing these thresholds, Shasta County AQMD considered levels at which project emissions are cumulatively considerable. Consequently, exceedances of project-level thresholds would be cumulatively considerable. 2. Shasta County AQMD considers violations of the CO ambient air quality standard significant. Refer to Impact AQ-c.

Source: Refer to the CalEEMod outputs provided in Attachment C.

As shown in Table 1, the proposed project would not exceed Shasta County AQMD thresholds. Under policy of the Air Quality Element, a project has the potential to impact air quality primarily in two ways: (1) the project would generate vehicle trip emissions (with NO<sub>x</sub>, ROG, and PM<sub>10</sub>) that contribute cumulatively to local and regional air quality conditions; and (2) fugitive dust (particulate/PM<sub>10</sub>) emissions are possible during construction activities. As a distribution center the project does not have the potential to generate significant emission concentrations of other pollutants subject to State and federal ambient air quality standards.

#### Long-Term Operational Emissions

Project-generated increases in emissions would be predominantly associated with motor vehicle use by employees and deliveries travelling to and from the site. To a lesser degree, secondary effects could occur from increases in emissions from increased power usage during the growing and processing phases, landscape maintenance equipment, and architectural coatings. All operations would occur indoors. Table 2 shows that the proposed project's maximum emissions.

**Table 2**  
**MAXIMUM PROJECT OPERATIONAL EMISSIONS**

Emission Source	Pollutant				
	Reactive Organic Gases (ROG) lbs/day	Nitrogen Oxide (NO <sub>x</sub> ) lbs/day	Carbon Monoxide (CO) lbs/day	Coarse Particulate Matter (PM <sub>10</sub> ) lbs/day	Particulate Matter (PM <sub>2.5</sub> ) lbs/day
Area	7.34	<0.001	0.04	<0.001	<0.001
Energy	0.11	1.21	1.04	0.11	0.11
Mobile	7.12	100.31	48.05	24.38	7.73
Stationary	-	-	-	0.00	0.00
<b>Total Project Emissions</b>	<b>14.57</b>	<b>101.52</b>	<b>49.09</b>	<b>24.49</b>	<b>7.84</b>
<i>Shasta County AQMD Significance Threshold "Level A" <sup>1, 2</sup></i>	25	25	-	80	-

Emission Source	Pollutant				
	Reactive Organic Gases (ROG) lbs/day	Nitrogen Oxide (NO <sub>x</sub> ) lbs/day	Carbon Monoxide (CO) lbs/day	Coarse Particulate Matter (PM <sub>10</sub> ) lbs/day	Particulate Matter (PM <sub>2.5</sub> ) lbs/day
<i>Shasta County AQMD Significance Threshold "Level B"</i>	137	137		137	
<b>Exceed Shasta County AQMD Threshold?</b>	<b>No</b>	<b>Yes – Level A</b>	-	<b>No</b>	-

CO = carbon monoxide; NO<sub>x</sub> = nitrogen oxide; PM<sub>2.5</sub> = particulate matter no more than 2.5 microns in diameter; PM<sub>10</sub> = particulate matter no more than 10 microns in diameter; ROG = reactive organic gases; – = no threshold.

Notes: 1. In developing these thresholds, Shasta County AQMD considered levels at which project emissions are cumulatively considerable. Consequently, exceedances of project-level thresholds would be cumulatively considerable. 2. Shasta County AQMD considers violations of the CO ambient air quality standard significant. Refer to Impact AQ-c.

Source: Refer to the CalEEMod outputs provided in Attachment C.

As shown in Table 2, operation of the proposed project would exceed Level A Shasta County AQMD thresholds but would not exceed Level B thresholds. As described in the City General Plan, if Level A thresholds are exceeded then the project must adhere to BAMMs as well as SMMS as described below:

Application of SMMs is required in order to strive toward the General Plan policy of a 20 percent reduction in emissions to address small-scale cumulative effects. SMMs applicable to this project address primarily short-term impacts related to construction and are standard development regulations promulgated in Redding Municipal Code (RMC) Chapter 16.12 and California Building Code. Application of the SMMs and the application of BAMMs for NO<sub>x</sub> emissions as outlined below would reduce the project's potential air quality impacts to a level less than significant level.

#### SMMs:

1. Nontoxic soil stabilizers shall be applied according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for ten days or more).
2. All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.
3. Temporary traffic control shall be provided as appropriate during all phases of construction to improve traffic flow (e.g., flag person).
4. Construction activities that could affect traffic flow shall be scheduled in off-peak hours.
5. Active construction areas, haul roads, etc., shall be watered at least twice daily or more as needed to limit dust.
6. Exposed stockpiles of soil and other backfill material shall either be covered, watered, or have soil binders added to inhibit dust and wind erosion.
7. All truck hauling solid and other loose material shall be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of CVC Section 23114. This provision is enforced by local law enforcement agencies.
8. All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads. Wheel washers shall be used where vehicles enter and exit unpaved roads onto paved roads, or trucks and any equipment shall be washed off leaving the site with each trip.

#### BAMMs:

1. Implement all applicable Standard Mitigation Measure and Level A Mitigation Measures.
2. Construct, contribute, or dedicate land for the provision of offsite bicycle trails lining the facility to designated bicycle commuting routes in accordance with an adopted citywide or countywide plan.
3. Synchronize traffic signals along streets impacted by development.
4. Construct onsite and offsite bus turnouts, passenger benches, and shelters.
5. Provide for pedestrian access between bus service and major points within the development.
6. Construct offsite pedestrian facility improvements such as overpasses and wider sidewalks.
7. Orient building structures and install landscape that takes advantage of passive solar design principles.

Alternatives to open burning of cleared vegetative material on the project site shall be used unless otherwise deemed infeasible by the City Planning Division. Suitable alternatives include, but are not limited to, onsite chipping and mulching and/or hauling to a biomass fuel site. Implementations of relevant SMMs and BAMMs will reduce impacts to less than significant levels.

### Cumulative Emissions

As discussed above, the project's construction-related and operational emissions would have the potential to exceed Level A Shasta County AQMD significance thresholds but not Level B. The Shasta County AQMD has not established separate significance thresholds for cumulative construction or operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The Shasta County AQMD developed the thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a project that exceeds the Shasta County AQMD thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown in Table 1 and Table 2, the project's construction would not exceed Shasta County AQMD thresholds, but operational emissions would exceed Level A thresholds. However, implementation of SMMs and BAMMs would reduce the impact to less than significant. As a result, air quality emissions associated with the project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

- c) Sensitive land uses are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The State CEQA Guidelines indicate that a potentially significant impact could occur if a project would expose sensitive receptors to substantial pollutant concentrations. The nearest sensitive receptors are residential uses located approximately 800 feet to the west of the project site.

### Construction Toxic Air Contaminants

The proposed project would not create a significant hazard to surrounding residents and other sensitive receptors through exposure to substantial pollutant concentrations such as particulate matter during construction activities and/or other toxic air contaminants (TACs). Sensitive land uses are generally defined as locations where people reside or where the presence of air emissions could adversely affect the use of the land. Typical sensitive receptors include residents, schoolchildren, hospital patients, and the elderly. As described above, the nearest sensitive receptors are residential uses located approximately 800 feet to the west of the project site. However, the proposed project would not produce concentrations of TACs; therefore, impacts regarding stationary or mobile TACs would be less than significant.

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known TAC. Project construction would generate diesel particulate matter (DPM) emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. For construction activity, DPM is the primary toxic air contaminant of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. As described above, the closest sensitive receptors are the residences located approximately 800 feet to the west of the project site.

The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Construction is temporary and would be transient throughout the site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time.

Construction is subject to and would comply with California regulations (e.g., California Code of Regulations [CCR], Title 13, Division 3, Article 1, Chapter 10, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the project site (i.e.,

construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited.

Maximum (worst case) construction exhaust emissions over the entire construction period were used in AERMOD to approximate construction DPM emissions (Attachment C). Risk levels were calculated with the CARB Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST) based on the California Office of Environmental Health Hazard Assessment's (OEHHA) *Air Toxics Hot Spots Program Risk Assessment Guidelines* (February 2015). Results of this assessment are summarized in Table 3, below.

**Table 3**  
**CONSTRUCTION RISK**

Emissions Sources	Pollutant Concentration (µg/m³)	Cancer Risk (per Million)	Chronic Hazard	Acute Hazard
Construction	0.010	3.35	0.002	0.139
Threshold	N/A	10	1.0	1.0
Threshold Exceeded?	No	No	No	No

Source: Refer to Attachment C.

Maximum concentration of PM<sub>2.5</sub> exhaust during construction would be 0.01 µg/m³. The highest calculated carcinogenic risk from project construction would be approximately 3.35 per million, which would exceed the 10 in one million threshold. The maximally exposed individual (MEI) during construction (i.e., the closest sensitive receptor) to the project site are residential land uses (approximately 800 feet away). Impacts will be less than significant

#### Operational Toxic Air Contaminants

According to the *Traffic Impact Analysis Redding Distribution Facility* (KHA, 2021), the project would include passenger vehicles, vans, and trucks. The project is anticipated to generate approximately 1,086 daily vehicle trips. As shown in Table 4, the highest calculated carcinogenic risk resulting from the project is 0.33 per million residents, which is below the 10 per million threshold. Acute and chronic hazards also would be below the significance threshold of 1.0. Operational mobile impacts would be less than significant in this regard.

**Table 4**  
**OPERATIONAL RISK ASSESSMENT RESULTS**

Exposure Scenario	Pollutant Concentration (µg/m³)	Maximum Cancer Risk (Risk per Million)	Chronic Noncancer Hazard	Acute Noncancer Hazard
Particulate Matter (PM <sub>2.5</sub> )	0.001	0.33	0.0001	0.006
Threshold	NA	10	1.0	1.0
Exceed Threshold?	No	No	No	No

Note: The maximum cancer would be experienced at the residents located west of the project site based on worst-case exposure durations for the project, 95<sup>th</sup> percentile breathing rates, and 30-year averaging time.

Source: Refer to Attachment C.

The pollutant concentrations modeled in AERMOD represent the exposure levels outdoors. The air district conservatively does not include indoor exposure adjustments for residents. However, the typical person spends the majority of time indoors rather than remaining outdoors in the same location for 24 hours a day.<sup>1</sup> Therefore, the AERMOD outdoor pollutant concentrations are not necessarily representative of actual exposure at the project site and tend to overestimate exposure.

<sup>1</sup> California Air Resources Board Research Division and University of California, Berkeley, *Activity Patterns of California Residents*, May 1991. The study indicates that on average, adults and adolescents in California spent almost 15 hours per day inside their homes, and 6 hours in other indoor locations, for a total of 21 hours (87% of the day). Approximately two hours per day were spent in transit, and just over one hour per day was spent in outdoor locations.



### Mobile Sources

The project would not place sensitive receptors within 1,000 feet of a major roadway (mobile TAC source). Additionally, the project's effects to existing vehicle distribution and travel speeds would be nominal. According to the transportation analysis, the project would generate 1,086 new daily trips (KHA, 2021). Any changes to vehicle distribution and travel speeds can affect vehicle emissions rates, although these changes would be minimal and would not substantially change criteria pollutant emissions, which are primarily driven by vehicle miles travelled (VMT). Traffic is also predominantly light-duty and gasoline powered and therefore any shifts in traffic would not constitute a change in substantial cancer risk. The project does not involve the increase of transit trips or routes and would not generate increased emissions from expanded service (e.g., increased bus idling service). Therefore, impacts related to cancer risk, hazards, and PM<sub>2.5</sub> concentrations from mobile sources would be less than significant at the project site.

### Carbon Monoxide Hotspots

The primary mobile-source criteria pollutant of local concern is carbon monoxide. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. CO concentration modeling is therefore typically conducted for intersections that are projected to operate at unacceptable levels of service during peak commute hours.

Shasta County is in attainment for CO and concentrations in the area have historically been low, and well within compliance with both state and federal ambient air quality standards. As such, the Shasta County AQMD does not require the analysis of CO hotspots. The overall effect in the County is that CO concentrations remain relatively low, and it is not anticipated that CO from project traffic would generate a CO hotspot. Although the Shasta County AQMD does not have thresholds for CO hotspots, the Bay Area Air Quality Management District (BAAQMD) has screening criteria and notes that CO impacts may be determined to be less than significant if a project would not increase traffic volumes at local intersections to more than 44,000 vehicles per hour, or 24,000 vehicles per hour for locations in heavily urban areas, where "urban canyons" formed by buildings tend to reduce air circulation. According to the transportation analysis prepared for the project, the project would generate 1,086 daily trips. The project's effects to existing vehicle distribution and travel speeds would be nominal. The project would not involve intersections with more than 24,000 or 44,000 vehicles per hour (KHA, 2021). As a result, the project would not have the potential to create a CO hotspot and impacts would be less than significant.

- d) The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they can be unpleasant, leading to distress among members of the public and can generate citizen complaints to local governments and regulatory agencies. projects with the potential to frequently expose people to objectionable odors would have a significant impact.

Project construction would use a variety of gasoline- or diesel-powered equipment that would emit exhaust fumes. While exhaust fumes, particularly diesel exhaust, may be considered objectionable by some people, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly within increasing distance from the source.

There are sensitive receptors within approximately 800 feet of the project site. However, implementation of SMMs and BAMMs would reduce these emissions to the extent feasible based on the type and availability of equipment for a specific task. Compliance with General Plan Policies and applicable State and local laws would reduce impacts associated with odors to a less than significant level.

### **Mitigation Measures**

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Air Quality*.

## Documentation and References

COR (City of Redding). 2000a. *City of Redding General Plan Environmental Impact Report, SCH #1998072103*. 2000.  
COR. 2000b. *City of Redding General Plan 2000 – 2020, Natural Resources Element*. October 3, 2000.  
KHA (Kimley-Horn Associates). 2021. *Traffic Impact Analysis Redding Distribution Facility*. August 12, 2021.

## IV. BIOLOGICAL RESOURCES

This section of the Initial Study describes the affected environment for biological resources and is based upon the *Aquatic Resource Delineation Report, Airport Road Distribution Center Project* (ENPLAN, 2021a), the *Biological Study Report, Airport Road Distribution Center Project* (ENPLAN, 2021b), and the *Tree Survey Report, Airport Road Distribution Project* (ENPLAN, 2021c). Technical documents are provided as Attachments D, E, and F, respectively. The assessments summarize the results of biological field surveys of the project area and describes the potential impacts on biological resources that would result from implementation of the proposed project. Additionally, this section provides mitigation measures that would reduce the impacts identified.

### Environmental Setting

The proposed project site ranges in elevation from approximately 500 to 520 feet above mean sea level (msl) and is currently undeveloped. A large portion of the site has been cleared of all underbrush. The primary habitat type onsite is oak – pine woodland. The dominant species include valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), gray pine (*Pinus sabiniana*), poison oak (*Toxicodendron diversilobum*), white-leaf manzanita (*Arctostaphylos viscida*), and common manzanita (*Arctostaphylos manzanita*). The Natural Resources Conservation Service (NRCS, 2021) maps three soil units within the project boundary: Perkins gravelly loam, gravelly clay loam substrate, 0 to 3 percent slopes, MLRA 17; Red Bluff loam, 0 to 3 percent slopes, MLRA 17, moist; and Red Bluff loam, 3 to 8 percent slopes.

A small portion of an existing vernal pool is located within the project site on the western side where the two parcel boundaries meet. Airport Road splits this vernal pool, with the majority located offsite on the west side of the Airport Road. The verbal pool extends approximately 160 feet onto the site.

The sewer line extension is proposed in the future Aviation Drive right-of-way. The approximate 1.4-acre corridor passes through previously cleared, highly disturbed land in front of a mini-storage facility as well as through relatively undisturbed land supporting oak – pine woodland as described above.

### Impact Analysis

Records reviewed for this evaluation consisted of California Natural Diversity Data Base (CNDDB) records for special-status plants, animals, and natural communities (refer to Table 1 contained in Attachment E); the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (refer to Table 2 contained in Attachment E); US Fish and Wildlife Service (USFWS) records for federally listed, proposed, and Candidate plant and animal species under jurisdiction of the USFWS; and National Wetlands Inventory (NWI) maps. USFWS's Environmental Conservation Online System (ECOS) Critical Habitat Mapper was used to identify the presence of critical habitat in the vicinity of the project site. The National Marine Fisheries Service (NMFS) was not consulted because the project site does not contain any streams that could potentially support fish.

The CNDDB records search covered a five-mile radius around the project site. This review of records addressed portions of the Bend, Balls Ferry, Cottonwood, Enterprise, Olinda, Palo Cedro, and Redding quadrangles. CNPS records were reviewed for the Enterprise quadrangle. The USFWS and NWI records searches were based on the study area location.

The following includes an analysis of environmental parameters related to *Biological Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<b>Would the Project:</b>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		

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

a) The following evaluation of potential impacts on special-status species is based on records searches and field studies is documented in the *Biological Study Report* prepared for the proposed project (ENPLAN, 2021b) (refer to Attachment E). The study includes an assessment of the following:

- Natural Communities
- Special-Status Species
- Nesting Migratory Birds

To determine the presence or absence of special-status plant and animal species, a botanical and wildlife survey was conducted on April 15, July 22, August 20, 2021, October 18, 2021, and November 5, 2021. Some of the special-status species potentially occurring in the study area would not have been evident at the time the fieldwork was conducted. However, determination of their potential presence could readily be made based on observed habitat characteristics.

#### Natural Communities

Review of National Wetlands Inventory (NWI) records showed that one wetland has been mapped in the project site, and is identified as a fresh emergent wetland (PEM1A). The feature is located along Airport Road, on the western edge of the project site. The study area boundary includes only a portion of the wetland feature that was identified by NWI, the remainder extends to the west and is bisected by Airport Road.

Review of CNDDDB records identified three natural communities within a five-mile radius of the project site: Great Valley cottonwood riparian forest, Great Valley valley oak riparian forest, and Great Valley willow scrub. All three of these communities are considered sensitive; however, field studies confirmed that they are not present in the project area; thus, no further discussion is warranted.

Based on the field evaluation, one natural community was identified in the project study area: a mixed-oak / foothill pine woodland. The site is dominated by foothill pine (also called gray pine), interior live oak, and valley oak. The woodland contains both large trees ( $\geq 12$  inches in diameter at breast height [DBH]) and dense stands of small trees. The introduced tree-of-heaven is common in the eastern portion of the study area. The shrub understory consists of dense stands of common manzanita, white-leaf manzanita, and poison oak (except where brushing has been completed); the herbaceous layer is present in openings, and includes various grasses and forbs. This community most closely resembles the mixed oak – *Pinus sabiniana* / grass association described in the California Department of Fish and Wildlife (CDFW) California Natural Communities List, which is not identified as a sensitive natural community.

The approximate southern half of the sewer line corridor sewer corridor also supports a mixed-oak / foothill pine woodland, as described above. The northern portion of the corridor has been previously cleared and portions have been graveled; the area is used as an informal parking area. Soils are compacted and support a mix of introduced ruderal species such as puncture vine, long-beaked filaree, red-stemmed filaree, medusa-head, and European pulsey.

As a result of the field evaluation, one wetland feature was identified as an inclusion in the mixed oak-foothill pine woodland (refer to Figure 3 contained in Attachment E); this is the same feature as shown on the NWI map. The wetland feature is a highly degraded vernal pool approximately 0.35 acres in size located on the western edge of the project site, adjacent to Airport Road. The feature is the eastern portion of a larger vernal pool that was bisected as a result of construction of Airport Road. A culvert is present beneath the roadway, but appears to be nearly blocked by sediment and debris. Additionally, a roadside ditch has been constructed on the west side of Airport Road and directs water in a north-south direction rather than between the two pool sections. Given these two hydrologic barriers, the eastern and western portions of the wetland no longer share a consistent surface water connection.

A trench was excavated on the east side of the onsite wetland years ago, probably to serve as a vehicle barrier. The trench has intercepted and redirected sheet flow that once helped sustain the wetland, but did not prevent vehicle access to the pool itself. Given its reduced watershed, severed hydrologic connection with the main portion of the historical pool, and historical and recent disturbances, the onsite wetland is drier than in past years and now supports a predominance of weedy plant species with a low diversity and abundance of native vernal pool species. Despite its degraded character, the feature is considered as a sensitive natural community. Because preservation/restoration of the wetland and an appropriate watershed buffer is not practicable, mitigation for the loss of the feature is warranted. This would consist of purchasing wetland mitigation credits from a U.S. Army Corps of Engineers (Corps) or CDFW-approved mitigation bank at a minimum 1:1 ratio, as further detailed in Mitigation Measure BIO-1, below.

The Corps must authorize construction activities expected to affect wetland communities; thus, a Section 404 Permit will be required from the Corps related to any impact to vernal pool habitat. Construction activities resulting in fill also require a Section 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board (CVRWQCB). Potential impacts to jurisdictional waters would be reduced through compliance with the regulatory process (i.e., Section 404 Permit and 401 Certification). With implementation of Mitigation Measure BIO-1 impacts would be less than significant.

#### Special-Status Plant Species

Review of the USFWS species lists (refer to Attachment E) for the project area identified one federally listed plant species as potentially being present in the project area: slender Orcutt grass (federally threatened). In addition, the USFWS ECOS mapper identified critical habitat for slender Orcutt grass immediately west of the project site on the west side of Airport Road and approximately 0.6 miles due east of the project site.

CNDDDB records (Table 1 contained in Attachment E) show that no special-status plant species occurrences have been mapped within the project site boundary. However, six special-status plant species have been identified within a five-mile radius of the project site: Boggs Lake hedge-hyssop, legene, Red Bluff dwarf rush, silky cryptantha, slender Orcutt grass, and watershield. An additional two non-status species have also been recorded within a five-mile radius of the project site: Henderson's bentgrass and woolly meadowfoam. The CNPS Inventory (Table 2 contained in Attachment E) identifies three additional non-status plants: dubious pea, Redding checkerbloom, and tripod buckwheat, within the Enterprise quadrangle.

The potential for each special-status plant species to occur in the project site is evaluated in Table 3 contained in Attachment D. No special-status plant species were observed during the botanical field survey, nor are any expected to be present. A list of plant species observed during the botanical survey is also provided in Attachment E.

#### Special-Status Wildlife Species

Review of the USFWS species list for the project area (refer to Attachment E) identified the following federally listed animal species as potentially being present in the project area: northern spotted owl, California red-legged frog, delta smelt, valley elderberry longhorn beetle, conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp. The USFWS ECOS mapper identified critical habitat for vernal pool tadpole shrimp and vernal pool fairy shrimp approximately 0.6 miles east of the project site; no critical habitat is mapped within the boundary of the project site (ENPLAN, 2021b).

Review of CNDDDB records showed that one special-status animal species has been documented on the project site: vernal pool tadpole shrimp. Eleven other special-status animal species have been reported within a five-mile radius of the project site: bald eagle, bank swallow, Central Valley spring-run (CVSR) Chinook salmon evolutionary significance unit (ESU), Sacramento River winter-run (SRWR) Chinook salmon ESU, osprey, spotted bat, Central Valley steelhead distinct population segment (DPS), tricolored blackbird, valley elderberry longhorn beetle, vernal pool fairy shrimp, and western spadefoot toad. Three non-status animals have also been reported in the search radius: California linderiella, great egret, and western pearlshell (ENPLAN, 2021b). The potential for each of the above special-status animal species to occur in the study area is further evaluated in Table 3 of Attachment E. As documented in Table 3, potentially suitable habitat is present in and adjacent to the project area for the valley elderberry longhorn beetle, and vernal pool branchiopods have been recorded on the site in the past.

Valley Elderberry Longhorn Beetle. Three elderberry shrubs were observed within the project area (refer to Figure 3 in Attachment E). The northern shrub (Elderberry 1) has one intact stem with a basal diameter of approximately 4.2 inches, and a damaged stem with a basal diameter of just over 6 inches. The latter was broken off about two feet above ground level during recent brushing, but supports an approximate 2.4-inch diameter stem that branches from the main trunk about one foot above ground level. No exit holes were identified on the shrub during the field survey; however, a lack of exit holes does not preclude occupancy by the beetle. The central shrub (Elderberry 2) has one live stem with a basal diameter of approximately 1.2 inches; no exit holes were observed. The southernmost shrub (Elderberry 3) was cut at ground level during site brushing about a year ago; although the shrub has resprouted, the stems are less than an inch in diameter at the base and have no potential to support the listed beetle.

According to the CNDDDB records, the nearest known VELB occurrence is approximately 1.5 miles southwest of the project site, within the riparian corridor surrounding Churn Creek. The nearest riparian habitat is about 400 meters to the east, along Stillwater Creek; Clover Creek is about 2,788 feet to the west, but has a very poorly developed riparian corridor. The onsite elderberries are unlikely to support the listed beetle given the site elevation (500 to 520 feet above msl), the isolated locations of the elderberries, the absence of onsite riparian habitat, the distance to riparian habitats and known occupation sites, and the absence of exit holes. Nonetheless, in accordance with the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)*, and as called for under Mitigation Measure BIO-2, below, the Sacramento Fish and Wildlife Office will be consulted to obtain an assessment of potential presence of the beetle and the need for conservation measures (if any). Implementation of Mitigation Measure BIO-2 would result in less than significant impacts.

Vernal Pool Branchiopods. As discussed above, the project site contains one degraded vernal pool feature. A study conducted by ENPLAN in 2006/2007, identified the presence of *Lepidurus sp.* and *Linderiella sp.* (two genera of vernal pool branchiopods) eggs in soil samples taken from the vernal pool. Although egg characteristics can be used to provide identification only to the genus level, wet-season surveys and supporting data indicate that the species present were the federally listed *Lepidurus packardii* and the non-listed *Linderiella occidentalis*.

Due to the severe degradation of the wetland feature since 2007, as discussed above, the onsite wetland no longer appears to contain suitable habitat for vernal pool branchiopods. Although eggs of these species can remain dormant through extreme conditions and maintain their ability to hatch, given the limited amount of vernal pool vegetation present on the site, it appears unlikely that the wetland holds water for a period of time long enough for vernal pool branchiopods to reach reproductive maturity. Therefore, federally listed vernal pool branchiopods have a very low potential to be present on the project site with its now-normal modified condition. However, because presence of federally listed species has been previously reported on the project site, a final determination regarding presence/absence can only be made by the USFWS. Mitigation Measure BIO-3 calls for completion of consultation prior to site development. Implementation of Mitigation Measure BIO-3 would result in less than significant impacts.

- b) Refer to impact discussion IV.a, above. Impacts would be less than significant with implementation of Mitigation Measure BIO-1, BIO-2, and BIO3.
- c) Refer to impact discussion IV.a, above. Impacts would be less than significant with implementation of Mitigation Measure BIO-1, BIO-2, and BIO3.

### Noxious Weeds

The introduction and spread of noxious weeds during construction activities has the potential to impact natural habitats in surrounding areas. A number of invasive weeds were observed in the project area during the field survey, including yellow star-thistle, smooth cat's-ear, rose clover, red-stemmed filaree, Klamath weed, soft chess, ripgut brome, and tree-of-heaven. These could be exported to other areas and/or other noxious weeds could be imported into the project area by unwashed construction vehicles. Mitigation Measure BIO-4 specifies actions to be taken to reduce or eliminate the potential to spread noxious weeds. Implementation of Mitigation Measure BIO-4 would result in less than significant impacts.

- d) Under the Migratory Bird Treaty Act (MBTA) of 1918, migratory bird species, their nests, and their eggs are protected from injury or death, and any project-related disturbances during the nesting period. In addition, California Fish and Game Code Section 3503 and Section 3503.5 provide regulatory protection to resident and migratory birds and all birds of prey within the State. No special-status bird species were identified as potentially occurring in the project area; however, given the onsite habitat characteristics, many non-status bird species are expected to be present and may nest within the project site. Project construction has some potential to directly affect nesting birds due to vegetation removal, and could also indirectly affect nesting birds. Indirect effects such as nest abandonment by adults could occur in response to loud noise levels and other human-induced disturbances during construction. Mitigation Measure BIO-5 outlines recommended actions to reduce or eliminate direct and indirect effects on nesting birds. Implementation of Mitigation Measure BIO-5 would result in less than significant impacts.
- e) The natural oak – pine woodland onsite provides attractive habitat for nesting and migratory birds. While many trees located within the open space associated with the project will be preserved from development, there is the potential that raptors and migratory birds could be impacted by tree removal and other major land-clearing activity necessary to construct the subdivision. To minimize impacts from construction, mitigation is provided below to encourage mass tree removal and other land-clearing work to be conducted outside the main nesting period of April 1 to July 31, and requiring a nest survey and appropriate nest-avoidance measures, if any work must occur during the nesting season.

As previously mentioned above, dominant tree species onsite include valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), gray pine (*Pinus sabiniana*), poison oak (*Toxicodendron diversilobum*), white-leaf manzanita (*Arctostaphylos viscida*), and common manzanita (*Arctostaphylos manzanita*). The City has adopted a Tree Management Ordinance (RMC Chapter 18.45) that promotes the conservation of mature, healthy trees in the design of new development. The ordinance also recognizes that the preservation of trees will sometimes conflict with necessary land-development requirements. The City's General Plan EIR further acknowledges that preservation of native trees will sometimes conflict with normal land development and that implementation of the General Plan will ultimately set aside over 7,000 acres of open space, much of which contains oak habitat (COR, 2000b). But efforts must still be made to retain existing trees if reasonably possible, and to sufficiently plant new trees in the context of the new development. A tree survey is required to identify natural trees and tree groups most suitable for preservation or "candidate trees/groups."

Candidate trees are protected under RMC Section 18.45.030. The tree protection ordinance requires a tree removal permit (an application for a discretionary permit also serves as an application for tree removal) for the removal of any tree that exceeds 6 inches DBH. Where all identified candidate trees/groups cannot be preserved, the set-aside of a natural area or areas within a project site that is particularly suitable for the planting, retention, and/or natural regeneration of trees is considered to be a desirable means of accomplishing the goals of the ordinance.

A *Tree Survey Report* was prepared for the proposed project by ENPLAN (Attachment F). The tree survey identified a total of 890 trees onsite, within six species: blue oak, interior live oak, gray pine, ponderosa pine, valley oak, and tree of heaven (*Ailanthus altissima*). Twenty-two of the recorded trees were identified as candidate trees (ENPLAN, 2021c). No candidate tree groupings were identified. The loss of candidate trees will be offset through implementation of the proposed planting plan in accordance with RMC Chapter 18.45. Specifically, RMC Section 18.45.120(B) requires one 15-gallon tree for every 2,000 square feet of industrial gross floor area or covered space or one 15-gallon tree for every four parking spaces, whichever is greater. As a result, the proposed project requires a minimum of 106 trees based on the required parking. Based on the proposed planting plan (see Attachment B), 126 trees native to the local area, which would occur mainly in and along within parking islands and along project frontages, will be planted. The native trees will be planted for their aesthetics, to moderate temperatures, and to provide habitat for wildlife.

Approval of the proposed project constitutes a determination that the proposed project is consistent with the City's Tree Preservation Ordinance. Since the project must be consistent with the ordinance before a permit is issued, the proposed project would not result in a conflict with RMC Chapter 18.45. Impacts would be less than significant.

- f) A Habitat Conservation Plan (HCP) is a federal planning document that is prepared pursuant to Section 10 of the Federal Endangered Species Act (FESA). A Natural Community Conservation Plan (NCCP) is a State planning document administered by CDFW. There are no HCPs, NCCPs or other habitat conservation plans that apply to the proposed project. No impact would occur in this regard.

## Mitigation Measures

The following mitigations measures have been developed to reduce potential impacts related to *Biological Resources* to less than significant levels:

Mitigation Measure BIO-1. Prior to issuance of a grading permit affecting the onsite vernal pool, as identified in the *Aquatic Resources Delineation Report, Airport Road Distribution Center Project* (Attachment D), the project applicant shall obtain the following resource agency permits from the Corps and CVRWQCB, or any other applicable agency (i.e., USFWS) identified through the permitting process:

- Prior to any discharge of dredged or fill material into "waters of the U.S.", including wetlands, authorization under a Nationwide Permit or Individual Permit shall be obtained from the Corps. For any features determined to not be subject to Corps jurisdiction during the verification process, authorization to discharge (or a waiver from regulation) shall be obtained from the CVRWQCB. For fill requiring a Corps permit, water quality certification shall be obtained from the CVRWQCB prior to discharge of dredged or fill material.
- To offset the loss of onsite wetlands, the applicant shall purchase vernal pool creation credits (or other credit types as may be approved by the resource agencies) at a minimum 1:1 ratio at a Corps- or CDFW-approved mitigation bank, or pay in-lieu fees in accordance with the Corps' In-Lieu Fee Program. Proof of purchase of credits or payment of fees shall be provided to the City of Redding prior to fill or disturbance of the onsite wetland.
- All measures contained in the permits or associated with any agency approvals shall be implemented to the satisfaction of the lead regulatory agency.

Mitigation Measure BIO-2. Prior to conducting work within 50 meters of the onsite elderberry shrubs, consultation shall be completed with the USFWS, resulting in a determination from the USFWS as to whether the shrubs provide habitat for the federally listed beetle. If the USFWS determines that the project may adversely affect the beetle or its habitat, conservation or mitigation measures shall be implemented as required by the USFWS.

Mitigation Measure BIO-3. Prior to conducting work within 50 meters of the onsite vernal pool, consultation shall be completed with the USFWS, resulting in a determination from the USFWS as to whether the onsite wetland provides habitat for federally listed vernal pool branchiopods. If the USFWS determines that the project may affect federally listed vernal pool branchiopods or their habitat, conservation or mitigation measures shall be implemented as required by the USFWS.

Mitigation Measure BIO-4. The potential for introduction and spread of noxious weeds shall be avoided/minimized by the following: 1) Using only certified weed-free erosion control materials, mulch, and seed; 2) Limiting any import or export of fill material to material that is known to be weed free; and 3) Requiring the construction contractor to thoroughly wash all equipment at a commercial wash facility prior to entering and upon leaving the job site.

Mitigation Measure BIO-5. In order to avoid impacts to nesting birds, including raptors, protected under the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 and Section 3503.5, including their nests and eggs, one of the following shall be implemented:

- Vegetation removal and other ground-disturbance activities associated with construction shall occur between September 1 and January 31 when birds are not nesting; or



- If vegetation removal or ground disturbance activities occur during the nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area. Surveys shall begin prior to sunrise and continue until vegetation and nests have been sufficiently observed. The survey shall take into account acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds.

At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.). The results of the survey shall be submitted to the CDFW upon completion. The survey shall be conducted no more than one week prior to the initiation of construction. If construction activities are delayed or suspended for more than one week after the preconstruction survey, the site shall be resurveyed.

If active nests are found, the City shall contact the CDFW and the USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.

## Findings

In the course of the above evaluation, impacts associated with *Biological Resources* were found to be less than significant with the implementation of mitigation measures.

## Documentation and References

COR (City of Redding). 2000a. *City of Redding General Plan 2000 – 2020, Natural Resources Element*. October 3, 2000.

COR. 2000b. *City of Redding General Plan Environmental Impact Report, SCH #1998072103*. 2000.

COR. 2019. *Redding Municipal Code Chapter 18.45*. August 21, 2018.

ENPLAN. 2021a. *Aquatic Resources Delineation Report, Airport Road Distribution Center Project, Redding, Shasta County, California*. November 2021.

ENPLAN. 2021b. *Biological Study Report, Airport Road Distribution Center Project, Redding, Shasta County, California*. November 2021.

ENPLAN. 2021c. *Tree Survey Report, Airport Road Distribution Center Project*. October 19, 2021.

## V. CULTURAL RESOURCES

The purpose of the section of the Initial Study is to identify any potential cultural resources within or adjacent to the proposed project, and to assist the Lead Agency, in this case the City of Redding, in determining whether such resources meet the office definitions of “historical resources,” as provided in the California Public Resources Code (PRC), in particular under the California Environmental Quality Act (CEQA). The analysis in this section has been prepared in accordance with Section 15064.5 of the State CEQA Guidelines, which considers the potential impacts on prehistoric, historic, and paleontological resources. This section describes the potential cultural resources within the project study area, and the applicable regulations that govern those resources.

### Environmental Setting

The Area of Potential Effects (APE) for Assessor’s Parcel Number (APN) 054-210-002 and APN 054-210-006 consists of approximately 38.8 acres and measures approximately 1,000 feet (north-south) by 1,900 feet (east-west). The APE is generally undisturbed, although brush clearing has recently been performed on a portion of the APE. An offsite sewer line would be constructed in the future Aviation Drive right-of-way; this portion of the APE is approximately 1.4 acres in size, measuring approximately 1,060 feet (north-south) by 60 feet (east-west).

The project site is relatively flat and is situated at approximately 510 feet above mean sea level (msl). The vegetation community consists of an oak-pine woodland, with the dominant species consisting of gray pine (*Pinus sabiniana*), interior live oak (*Quercus wislizeni*), and valley oak (*Quercus lobata*). The shrub layer is very dense in areas that have not been brushed, with common species including white-leaf manzanita (*Arctostaphylos viscida*) and poison oak (*Toxicodendron diversilobum*). A sparse cover of annual grasses and forbs is present in areas that have been brushed. Two soil units are present on the study site: Red Bluff loam, 0 to 3 percent slopes and Red Bluff loam, 3 to 8 percent slopes. These soil units date from 25,000 to 1.9 million years in age and are considered to have a low sensitivity for buried resources (ENPLAN, 2021). Historical and contemporary land uses in the vicinity include agricultural and commercial developments. The Redding Municipal Airport is located just southeast of the APE.

### Regulatory Setting

The purpose of the *Cultural Resource Inventory Report* (ENPLAN, 2021) is to satisfy the requirements of CEQA (all as amended). CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Section 21084.1). If it can be demonstrated that a project will cause damage to resources Eligible for or Listed in the California Register of Historic Resources (CRHR), Tribal Cultural Resources (TCRs) and other resources on county or local lists, or those determined by the lead agency to be significant, the lead agency may require reasonable efforts be made to permit any or all of the resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the State’s historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to PRC Section 5024.1(c) (1–4), a resource is considered historically significant if it (i) retains “substantial integrity,” and (ii) meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of installation, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

## Impact Analysis

The following includes an analysis of environmental parameters related to *Cultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

- a) Based on the result of the *Cultural Resource Inventory Report* there are no NRHP, CRHR sites, California Historical Landmarks, California Points of Historical Interest, or historical properties located within the APE or within a half-mile radius of the project (ENPLAN, 2021). Therefore, no impacts to historical resources would occur with implementation of the proposed project.
- b) Record and literature search revealed 14 previous cultural resource studies having been conducted within a half-mile radius of the APE. One of these surveys addresses portions of the APE. The records search also revealed that three cultural resources, two historic and one prehistoric, are located within a half-mile radius of the APE. There are no previously recorded archaeological resources within the APE. A pedestrian archaeological survey was conducted on July 22, 2021 and October 22, 2021, by the author, in which the entire APE was surveyed. No prehistoric or historical archaeological sites were identified within the APE during the field survey.

The results of archival research, previous surveys within and adjacent to the study area, and the environmental context all contribute to an assessment of the sensitivity level for a given project area. The project is located in an area that does not appear to be sensitive for prehistoric or historic occupation. The area is considered to have a low to moderate sensitivity for surface sites and very low sensitivity for subsurface sites (ENPLAN, 2021). Despite numerous previous surveys in the project vicinity, only three cultural resources, a road, a bridge, and a prehistoric isolate (two basalt flakes), have been located within a half-mile radius of the project area. None of these surveys noted potential buried resources. However, the possibility exists that cultural resources, including buried archaeological materials, could exist in the area and may be uncovered during construction. Therefore, if any resources are found during the construction of the proposed project, they will be mitigated through implementation of Mitigation Measure CR-1. Adherence to protocols established by Mitigation Measure CR-1 would serve to avoid impacts that would result in a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5. Impacts would be less than significant with mitigation incorporated.

- c) There are no known burial sites on or immediately adjacent to the proposed project site. If human remains are unearthed during future development of the site, the provisions of California Health and Safety Code Section 7050.5 shall apply. Under this Section, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition, pursuant to California PRC Section 5097.98 and Mitigation Measure CR-2. Impacts are considered less than significant with mitigation incorporated.

## Mitigation Measures

The following mitigation measures have been developed to reduce potential impacts related to *Cultural Resources* to less than significant levels:

**Mitigation Measure CR-1.** If cultural resources, such as chipped or ground stone, or bone are inadvertently discovered during ground-disturbance activities, work shall be stopped within 50 feet of the discovery, as required by the California Environmental Quality Act (CEQA; January 1999 Revised Guidelines, Title 14 California Code of Regulations [CCR] 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the material, and offered recommendations for further action.

**Mitigation Measure CR-2.** If In the event that previously unidentified evidence of human burial or human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie human remains (Public Resources Code, Section 7050.5) the Shasta County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. when the commission is unable to identify a descendant or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.

## Findings

In the course of the above evaluation, impacts associated with *Cultural Resources* were found to be less than significant with the implementation of the mitigation measures.

## Documentation and References

COR (City of Redding). 2000a. *City of Redding General Plan 2000 – 2020, Natural Resources Element*. October 3, 2000.  
ENPLAN. 2021. *Cultural Resources Inventory Report, Airport Road Distribution Center, City of Redding, Shasta County, California*. November 2021.

## VI. ENERGY

The purpose of the section of the Initial Study is to analyze the potential direct and indirect environmental impacts associated with the project's projected energy consumption. Such impacts can include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.). Analyses of emissions of air quality and Greenhouse Gas (GHG) pollutants during both the construction and long-term operational phases of the project are analyzed in Section III, AIR QUALITY, and Section VIII, GREENHOUSE GAS EMISSIONS.

### Environmental Setting

Redding Electric Utility (REU) provides electrical services to the City of Redding through State-regulated public utility contracts. The Pacific Gas and Electric Company (PG&E) provides electric and natural gas services to certain areas in the City. Electricity and natural gas service are available to most locations where land uses could be developed.

The City's development review process includes a review and comment opportunity for utility companies, including REU and PG&E, to provide input from each utility company on all development proposals. The input facilitates a detailed review of all projects by service purveyors to assess the potential demands for utility services on a project-by-project basis. Utility companies are bound by contract to update energy systems to meet any additional demand.

### Regulatory Setting

Building energy efficiency standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission [CEC]) in June 1977 and are updated every three years (CCR Title 24, Part 6). CCR Title 24, Part 6 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On May 9, 2018, the CEC adopted the 2019 Building Energy Efficiency Standards (2019 Standards), which went into effect on January 1, 2020.

The 2019 Standards improved upon the previous 2016 Standards for new construction of and additions and alterations to residential and nonresidential buildings. Under the 2019 Standards, residential buildings are anticipated to be approximately seven percent more energy-efficient and nonresidential buildings approximately 30 percent more energy-efficient due mainly to lighting upgrades.

CALGreen is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary measures (CALGreen Tier 1 and Tier 2) that local governments may adopt which encourage or require additional measures in the five topical areas.

### Renewable Portfolio Standard

In 2002, California established its Renewable Portfolio Standard program<sup>2</sup> with the goal of increasing the annual percentage of renewable energy in the state's electricity mix by the equivalent of at least 1 percent of sales, with an aggregate total of 20 percent by 2017. The California Public Utilities Commission subsequently accelerated that goal to 2010 for retail sellers of electricity (Public Utilities Code Section 399.15[b][1]). Then-Governor Schwarzenegger signed Executive Order S-14-08 in 2008, increasing the target to 33 percent renewable energy by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs the CARB under its AB 32 authority to enact regulations to help the State meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020. In September 2010, the CARB adopted its Renewable Electricity Standard regulations, which require all the state's load-serving entities to meet this target. In October 2015, then-Governor Brown signed into legislation Senate Bill 350, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030. Signed in 2018, SB 100 revised the program's goal to achieve the 50 percent renewable resources target by December 31, 2026 and a 60 percent

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<sup>2</sup> The Renewable Portfolio Standard is a flexible, market-driven policy to ensure that the public benefits of wind, solar, biomass, and geothermal energy continue to be realized as electricity markets become more competitive. The policy ensures that a minimum amount of renewable energy is included in the portfolio of electricity resources serving a state or country.

renewable resources target by December 31, 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

## Impact Analysis

The following includes an analysis of environmental parameters related to *Energy* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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?			X	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

- a) The project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Direct energy use would involve the short-term use of energy for construction activities. Project construction would primarily consume diesel and gasoline through operation of construction equipment, material deliveries, and debris hauling. Construction is estimated to result in a short-term consumption of energy, representing a small demand on local and regional fuel supplies that would be easily accommodated and would be temporary.

### Construction

The energy consumption associated with construction of the proposed project includes primarily diesel fuel consumption from on-road hauling trips and off-road construction diesel equipment, and gasoline consumption from on-road worker commute and vendor trips. Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers, and heating, ventilation, and air conditioning) would be powered by a generator. The amount of electricity used during construction would be minimal; typical demand would stem from the use of electrically powered hand tools and several construction trailers by managerial staff during the hours of construction activities. The majority of the energy used during construction would be from petroleum. Table 5 quantifies the construction energy consumption are provided for the project, followed by an analysis of impacts based on those quantifications.

In total, construction of the proposed project is anticipated to consume approximately 94,977 gallons of diesel and 51,646 gallons of gasoline. The project's fuel from the entire construction period would increase fuel use in the County by approximately 0.2 percent for diesel and 0.05 percent for gasoline.

There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or state. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and CARB engine emissions standards. These engines use highly efficient combustion engines to minimize unnecessary fuel consumption.

**Table 5**  
**PROJECT ENERGY CONSUMPTION DURING CONSTRUCTION**

Source	Project Construction	Shasta County Annual Energy Consumption	Percentage Increase Countywide
Diesel Use			
On-Road Construction Trips <sup>1</sup>	55,567	48,288,859	0.1151%
Off-Road Construction Equipment <sup>2</sup>	39,310		0.0814%
Construction Diesel Total	94,877		0.1965%
Gasoline			
On-Road Construction Trips <sup>1</sup>	51,646	103,228,075	0.0500%

Notes: 1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2021 in Shasta County for construction year 2022. 2. Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (hp)-hour from USEPA.

Sources: AWMA, 1992; DOE 2016; USEPA 1996; refer to Attachment C.

The CEQA Guideline Appendix G and Appendix F criteria requires the project's effects on local and regional energy supplies and on the requirements for additional capacity to be addressed. A 0.2 percent increase in construction fuel demand is not anticipated to trigger the need for additional capacity. Fuel consumption is based on a conservative construction phasing and conservative estimates for annual construction fuel consumption. Longer phases would result in lower construction intensity and a lower annual fuel consumption, resulting in lower annual demand on energy supplies. Additionally, use of construction fuel would cease once the project is fully developed. As such, project construction would have a nominal effect on the local and regional energy supplies. Therefore, it is expected that construction fuel consumption associated with the project would not be inefficient, wasteful, or unnecessary. The project would not substantially affect existing energy or fuel supplies, or resources and new capacity would not be required. Impacts would be less than significant.

#### Operational

Energy use related to the proposed project would include energy directly consumed for special lighting, ventilation, and air conditioning systems, as well as fuel usage from on-road vehicles. Quantifications of operational energy consumption are provided for the proposed project are provided in Table 6, below.

**Table 6**  
**ANNUAL ENERGY CONSUMPTION DURING OPERATIONS**

Source	Project Operational	Shasta County Annual Energy Consumption	Percentage Increase Countywide
<b>Electricity Use</b>	<b>Megawatt Hour/Year (MWh/year)</b>		
Area <sup>1</sup>	213	1,579,284	0.0135%
<b>Natural Gas Use</b>	<b>Therms/year</b>		
Area <sup>1</sup>	44,947	34,183,019	0.1315%
<b>Diesel Use</b>	<b>Gallons/Year</b>		
Mobile <sup>2</sup>	526,131	197,751,600	1.0965%
<b>Gasoline Use</b>	<b>Gallons/Year</b>		
Mobile <sup>2</sup>	282,654	101,784,474	0.2777%

Notes: 1. The electricity and natural gas usage are based on project-specific estimates and CalEEMod defaults. 2. Calculated based on the mobile source fuel use based on vehicle miles traveled (VMT) and fleet-average fuel consumption (in gallons per mile) from EMFAC2021 for operational year 2023.

Source: Refer to Attachment C.

Operation of uses implemented pursuant to the proposed project would annually consume approximately 213 MWh of electricity, 44,947 therms of natural gas, 526,131 gallons of diesel, and 282,654 gallons of gasoline.

Redding Electric Utility (REU) provides electricity to the project area. The project site is expected to continue to be served by the existing REU electrical facilities. Total electricity demand in REU's service area is forecast to increase from 767,535 MWh in 2018 to 804,309 MWh in 2037 (REU, 2019). The proposed projects anticipated electricity demand (approximately 213 MWh) would be nominal compared to overall demand in REU service area. Therefore, the projected electrical demand would not significantly impact REU's level of service.

Regarding natural gas, Shasta County consumed 34,183,019 therms of natural gas in 2020 (CEC, 2021). Therefore, the project's operational energy consumption for space and water heating would represent 0.1315 percent of the natural gas consumption in the County.

In 2021, Californians are anticipated to consume approximately 14,773,931,520 gallons of gasoline and approximately 3,625,305,260 gallons of diesel fuel. Shasta County annual gasoline fuel use in 2023 is anticipated to be 197,751,600 gallons and diesel fuel use was 101,784,474 gallons. Expected project operational use of gasoline and diesel would represent approximately 1.1 percent of current gasoline use and 0.28 percent of current diesel use in Shasta County (EIA, 2020). It should also be noted that the proposed project design and materials would comply with the 2019 Building Energy Efficiency Standards, which took effect on January 1, 2020.

Although the project would exceed one percent of Shasta County use if fuel during the operations, project operations would not substantially affect existing energy or fuel supplies or resources. The proposed project would comply with applicable energy standards and new capacity would not be required. Impacts would be less than significant.

- b) The project will not conflict with any State or local plans for renewable energy or energy efficiency. Project design and operation would comply with State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. As discussed above, project development would not cause inefficient, wasteful, and unnecessary energy consumption, and impacts would be less than significant. The proposed project would be required to comply with existing regulations, or would be directly affected by the outcomes (vehicle trips and energy consumption would be less carbon intensive due to statewide compliance with future low carbon fuel standard amendments and increasingly stringent Renewable Portfolio Standards). Therefore, the proposed project would comply with existing State energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impacts would occur in this regard.

## Mitigation Measures

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant with respect to *Energy*.

## Documentation and References

- CEC (California Energy Commission). 2021. *Energy Consumption Data Management System. California Energy Consumption Database*. [Online]: <https://ecdms.energy.ca.gov/>. Accessed November 10, 2021.
- COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Air Quality Element*. October 3, 2000.
- CPUC (California Public Utilities Commission). 2018. *California Renewable Portfolio Standard – Annual Report*. [Online]: [https://www.cpuc.ca.gov/uploadedFiles/CPUC\\_Public\\_Website/Content/Utilities\\_and\\_Industries/Energy\\_-\\_Electricity\\_and\\_Natural\\_Gas/Renewables%20Portfolio%20Standard%20Annual%20Report%202018.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/Renewables%20Portfolio%20Standard%20Annual%20Report%202018.pdf). Accessed November 10, 2021.
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REU (Redding Electric Utility). 2019. *Integrated Resource Plan*. 2019. [Online]: <https://www.cityofredding.org/departments/redding-electric-utility/reu-pages/reu-s-integrated-resource-plan>. Accessed November 10, 2021.

SRTA (Shasta Regional Transportation Agency). 2018. *Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region*. October 9, 2018.

## VII. GEOLOGY AND SOILS

The purpose of this section of the Initial Study is to describe the geologic and seismic setting of the project area, identify potential impacts associated with implementation of the proposed project, and, as necessary, recommend mitigation to reduce the significance of impacts. The issues addressed in this section are risks associated with faults, strong seismic ground shaking, seismic-related ground failure such as liquefaction, landslides, and unstable geological units and/or soils.

### Environmental Setting

Based upon the mineral land classification conducted by the Department of Conservation (DOC), Division of Mines and Geology, the project site is located within an area designated as alluvial deposits of the Red Bluff Formation (DOC, 1997).

Active faults are defined as faults that have had surface displacement in the Holocene epoch (in the past 11,000 years) based on CCR Division 2, Title 14, also known as the Alquist-Priolo Earthquake Fault Zoning Act (A-P Act). Potentially active faults are defined by the A-P Act as faults showing surface displacement during mid to late Quaternary time (about 1.6 million years before present) that have a relatively high potential for ground rupture. In general, Quaternary faults that do not record evidence of Holocene surface displacement are not considered as being active by the State. In addition, the California Geologic Survey (CGS) evaluates the activity rating of a fault in fault evaluation reports (FER). FERs compile available geologic and seismologic data and evaluate if a fault should be zoned as active, potentially active, or inactive. If a FER evaluates a fault as active, then it is typically incorporated into a Special Studies Zone in accordance with the Alquist-Priolo Earthquake Hazards Act. The project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active faults are known to pass through the project site (DOC, 2021; MTA, 2021).

Based on the most recent available data, no active or potentially active faults are reported to be present within the boundaries of the project site (DOC, 2019; MTA, 2021). Regional active faults within about 15 miles of the proposed project include the Bear Creek fault zone and the Battle Creek fault zone (DOC, 2019).

According to the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS, 2021), three soil units have been mapped within the project study area (refer to Table 7).

**Table 7**  
**SOIL TYPES AND CHARACTERISTICS**

Soil Name	Landform and Parent Material	Drainage	Surface Runoff	Permeability	Shrink-Swell Potential
Perkins gravelly loam, gravelly clay loam substratum, 0 to 3 percent slopes, MLRA 17	Stream terraces – Alluvium derived from igneous, metamorphic and sedimentary rock	Well Drained	High	Moderate	Moderate
Red Bluff loam, 0 to 3 percent slopes, MLRA 17, moist	Fan remnants - Alluvium derived from igneous, metamorphic and sedimentary rock	Well Drained	Medium	Moderate	Moderate
Red Bluff loam, 3 to 8 percent slopes	Terraces - Alluvium	Well Drained	High	Moderately Slow	Moderate

Source: United States Department of Agriculture, Natural Resources Conservation Service. 2021.

The project site ranges in elevation between 500 and 520 feet above mean sea level (msl). According to DOC's Fire Perimeters and Deep Landslide Susceptibility mapping, most of the project study area is considered to be at low risk for landslides (DOC, 2011).

### Impact Analysis

The following includes an analysis of environmental parameters related to *Geology and Soils* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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: <ul style="list-style-type: none"> <li>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publications 42.</li> <li>ii) Strong seismic ground shaking?</li> <li>iii) Seismic-related ground failure, including liquefaction?</li> <li>iv) Landslides?</li> </ul>			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

- a) The project may potentially expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

*i. Rupture of a known earthquake fault:*

There are no Alquist-Priolo earthquake faults designated in the Redding area of Shasta County. Regional active faults within about 15 miles of the proposed project include the Bear Creek fault zone and the Battle Creek fault zone (DOC, 2019). The nearest known active fault is the Rocky Ledge fault, located about 43 miles northeast of the site (MTA, 2021). There are no other documented earthquake faults in the immediate vicinity that pose a significant risk, and the site is located in an area designated in the Health and Safety Element of the General Plan as having a low ground-shaking potential (COR, 2000). Impacts would be less than significant.

*ii. Strong seismic ground shaking:*

The entire northern California region is subject to the potential for moderate to strong seismic shaking due to distant seismic sources. Seismic shaking can be generated on faults many miles from the project vicinity. An earthquake is caused by a sudden slip on a fault. Stresses in the earth's outer layer push the sides of the fault together. Stress builds up, and the rocks slip suddenly, releasing energy in waves that travel through the earth's crust and cause the shaking that is felt during an earthquake.

According to City's *Local Hazard Mitigation Plan*, the City is at a relatively low risk of exposure to strong seismic shaking (COR, 2015). It should be noted however that no region is immune from potential earthquake damage. Seismic shaking potential is considered minimal, and the hazard is not higher or lower at the project site than throughout the region. Impacts would be less than significant.

*iii. Seismic-related ground failure, including liquefaction:*

Liquefaction results from an applied stress on the soil, such as earthquake shaking or other sudden change in stress condition, and is primarily associated with saturated, cohesionless soil layers located close to the ground surface. During liquefaction, soils lose strength and ground failure may occur. This is most likely to occur in alluvial (geologically recent, unconsolidated sediments) and stream channel deposits, especially when the groundwater table is high. No portion of the site falls within the 100-year floodplain of the Sacramento River or any creek (FEMA, 2011). As shown in Table 7, above, soils in the project area include alluvium or terrace deposits. A preliminary liquefaction and seismic settlement hazards analysis was conducted onsite and determined that the potential for liquefaction is considered low and significant seismic settlements are not anticipated (MTA, 2021). Impacts would be less than significant.

*iv. Landslides:*

As described above, the project site ranges in elevation between 500 and 520 feet above msl. The project is not located on or near any documented landslide hazard areas, and there is no evidence of ground slippage or subsidence occurring naturally on the site. Most of the project study area is considered to be at low risk for landslides (DOC, 2011). No impact is anticipated in this regard.

- b) Earthwork, grading, and soil stockpiling activities associated with construction will be conducted in accordance with the conditions of a grading permit issued by the City of Redding and a Construction Stormwater Pollution Prevention Plan (SWPPP) and Notice of Intent (NOI) administered by the Central Valley Regional Water Quality Control Board (CVRWQCB). These requirements include:
- *City of Redding Grading Ordinance.* This ordinance requires the application of “Best Management Practices” (BMPs) in accordance with the City Erosion and Sediment Control Standards Design Manual (RMC Section 16.12.060, Subsections C, D, E). In practice, specific erosion-control measures are determined upon review of the final project improvement plans and are tailored to project-specific grading impacts.
  - *California Regional Water Quality Board “Construction Activity Storm Water Permit.”* This permit somewhat overlaps the City’s Grading Ordinance provision by applying state standards for erosion-control measures during construction of the project.
  - *California Regional Water Quality Control Board “Project Storm Water Pollution Prevention Plan (SWPPP).”* This plan emphasizes stormwater best management practices and is required as part of the Construction Activity Storm Water Permit. The objectives of the SWPPP are to identify the sources of sediment and other pollutants that affect the quality of stormwater discharges and to describe and ensure the implementation of practices to reduce sediment and other pollutants in stormwater discharges.
  - The Construction SWPPP will specify BMPs for erosion and sediment control measures. Therefore, the potential for substantial soil erosion and loss of topsoil is considered to be less than significant.

Actions for compliance with these regulations are addressed under standard conditions of approval, which are uniformly applied to all land development projects. Since the project is subject to uniformly applied ordinances and policies and the overall risk of erosion is low, potential impacts related to soil erosion and sedimentation are less than significant.

- c) Refer to impact discussion VII.a, above. Impacts would be less than significant.
- d) Expansive soils have high shrink-swell potential that expand when wet and shrink when dry. This can result in damage to foundations and structures. Soils at the project site present consist of sandy and clay loams that present a moderate potential for expansion. Before final design and the commencement of construction, a design-level geotechnical investigation with recommendations will be prepared. Necessary recommendations will present geotechnical engineering conclusions and specific recommendations for site preparation, foundation design, site drainage, addressing expansive soils, and pavement design to achieve compliance with the California Building Code, which would reduce risk associated with expansive soils. Impacts would be less than significant.

- e) The proposed project does not involve the use of septic tanks or alternative wastewater disposal. An approximate 1.4-acre sewer line corridor extending south of the project site along the future Aviation Drive alignment to an existing tie-in at Shasta View Drive will be required for sewer service. A 15-inch sewer main will be located within this alignment to convey project related wastewater to the Stillwater Wastewater Treatment Plant. No impact would occur in this regard.
- f) No paleontological resources or unique geologic features have been identified on the proposed project site, and the potential for their occurrence is considered minimal. No impact is anticipated in this regard.

## Mitigation Measures

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Geology and Soils*.

## Documentation and References

- COR (City of Redding). 2000a. *City of Redding General Plan 2000 – 2020, Health and Safety Element*. October 3, 2000.
- COR. 2000b. *City of Redding General Plan Final Environmental Impact Report*. 2000.
- COR. 1998. *City of Redding General Plan Background Report*. 1998.
- COR. 1999. *City of Redding Municipal Code Chapter 16.12*. 1999.
- COR. 2015. *Local Hazard Mitigation Plan*. November 2015.
- DOC (California Department of Conservation). 2019. *Fault Activity Map of California (2010)*. [Online]: <https://gis.conservation.ca.gov/server/rest/services/CGS/FaultActivityMapCA/MapServer>. Accessed September 29, 2021.
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- DOC. 2018. *Earthquake Fault Zones, A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California – Special Publication 42*. Revised 2018.
- DOC. 1997. *Mineral Land Classification of Alluvial Sand and Gravel, Crushed Stone, Volcanic Cinders, Limestone, and Diatomite within Shasta County, California – DMG Open File Report 97-03*. 1997.
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- MTA (Moore Twining Associates, Inc.) 2021. *Preliminary Information for In-Progress Geotechnical Engineering Investigation for Proposed Distribution Center in Redding, California*. May 5, 2021.
- NRCS (Natural Resources Conservation Service). 2021. *Custom Soil Resource Report for Shasta County Area, California, Airport Road Distribution Facility*. March 19, 2021.
- USDA (United States Department of Agriculture, Soil Conservation Service and Forest Service). 1974. *Soil Survey of Shasta County Area*. August 1974.

## VIII. GREENHOUSE GAS EMISSIONS

This section of the Initial Study evaluates greenhouse gas (GHG) emissions associated with the proposed project and analyzes project compliance with applicable regulations. Consideration of the project's consistency with applicable plans, policies, and regulations, as well as the introduction of new sources of GHGs, is included in this section.

### Environmental Setting

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns and precipitation. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), as well as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). These "greenhouse" gases (GHGs) allow solar radiation (sunlight) into the Earth's atmosphere but prevent radiative heat from escaping, thus warming the Earth's atmosphere. GHGs are emitted by both natural processes and human activities. Concentrations of GHG have increased in the atmosphere since the industrial revolution. Human activities that generate GHG emissions include combustion of fossil fuels (CO<sub>2</sub> and N<sub>2</sub>O); natural gas generated from landfills, fermentation of manure and cattle farming (CH<sub>4</sub>); and industrial processes such as nylon and nitric acid production (N<sub>2</sub>O).

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the "cumulative radiative forcing effect of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas." The reference gas for GWP is CO<sub>2</sub>; therefore, CO<sub>2</sub> has a GWP factor of 1. The other main GHGs that have been attributed to human activity include CH<sub>4</sub>, which has a GWP factor of 28, and N<sub>2</sub>O, which has a GWP factor of 265. When accounting for GHGs, all types of GHG emissions are expressed in terms of CO<sub>2</sub> equivalents (CO<sub>2</sub>e) and are typically quantified in metric tons (MT) or million metric tons (MMT).

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, established a State goal of reducing GHG emissions to 1990 levels by the year 2020, which would require a reduction of approximately 173 MMT net CO<sub>2</sub>e below "business as usual" emission levels. Senate Bill (SB) 97, a companion bill, directed the California Natural Resources Agency (Resources Agency) to certify and adopt guidelines for the mitigation of GHGs or the effects of GHG emissions. SB 97 was the State Legislature's directive to the Resources Agency to specifically establish that GHG emissions and their impacts are appropriate subjects for analysis under the California Environmental Quality Act (CEQA). Executive Order (EO) S-3-05 was enacted in June 2005 and calls for an 80 percent reduction below 1990 levels by 2050. SB 32 was signed into law in 2016 and establishes an interim GHG emission reduction goal for the State to reduce GHG emissions to 40 percent below 1990 levels by the year 2030.

To date, no national standards have been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

### Regulatory Setting

#### CARB Scoping Plan

The California Air Resources Board (CARB) adopted its Scoping Plan on December 11, 2018. The Scoping Plan functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California will implement to reduce CO<sub>2</sub>eq emissions by 174 MMT, or approximately 30 percent, from the State's projected 2020 emissions level of 596 million MT CO<sub>2</sub>eq under a business as usual (BAU) scenario. This is a reduction of 42 million MT CO<sub>2</sub>eq, or almost ten percent, from 2002 to 2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.

CARB's Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that “a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal.” The Scoping Plan update did not establish or propose any specific post-2020 goals, but identified such goals adopted by other governments or recommended by various scientific and policy organizations.

#### Shasta County Air Quality Management District

The Shasta County Air Quality Management District (AQMD) does not have an adopted Climate Action Plan, greenhouse gas threshold of significance, or guidance document for assessing project-level greenhouse gas impacts under CEQA. The following Shasta County AQMD rule is applicable to the project:

- *Rule 3:28 Stationary Internal Combustion Engines.* This rule applies to any gaseous, diesel, or any other liquid-fueled stationary internal combustion engine within the boundaries of the air district, including emergency standby engines. Emergency standby internal engines may be operated only during emergencies and for testing and maintenance purposes. Testing and maintenance shall be limited to no more than 100 hours per year.

In 2010, the Shasta County AQMD initiated the regional climate action planning (RCAP) process and released a draft RCAP in 2011. The Draft RCAP included jurisdictional climate action plan components for the City of Redding. The Draft RCAP contains a 2008 baseline GHG emissions inventory for the community, business-as-usual emissions forecasts for year 2020, the adjusted business-as-usual forecasts for 2020, emission reduction measures the City may implement. However, the draft RCAP has not been adopted and, therefore, is not used to assess the project’s greenhouse gas emissions.

#### City of Redding General Plan

The City’s General Plan 2000-2020 was adopted in 2000, with amendments in 2012, 2013, and 2014. The *General Plan* does not contain goals or policies directly aimed at reducing greenhouse gas emissions. Goals and policies within the Community Development and Design Element, Transportation Element, Transportation Element, and Air Quality Element affect or reduce greenhouse gas generation through requiring or promote alternative transit infrastructure.

As the Lead Agency, the City has opted to utilize a quantitative non-zero project-specific threshold using a methodology recommended by the California Air Pollution Officers (CAPCOA) and accepted by the California Air Resources Board. According to CAPCOA’s *Threshold 2.3, CARB Reporting Threshold*, 10,000 metric tons of carbon-dioxide equivalents per year (MTCO<sub>2</sub>eq/yr) is recommended as a quantitative non-zero threshold. According to the CAPCOA, this threshold would be equivalent to 550 dwelling units, 400,000 square feet of office use, 120,000 square feet of retail, or 70,000 square feet of supermarket use. This approach is estimated to capture over half the future residential and commercial development projects and is designed to support the goals of AB 32 and not hinder it. The US Environmental Protection Agency (EPA) identifies four primary constituents that are most representative of the GHG emissions:

- *Carbon Dioxide (CO<sub>2</sub>).* Emitted primarily through the burning of fossil fuels. Other sources include the burning of solid waste and wood and/or wood products and cement manufacturing.
- *Methane (CH<sub>4</sub>).* Emissions occur during the production and transport of fuels, such as coal and natural gas. Additional emissions are generated by livestock and agricultural land uses, as well as the decomposition of solid waste.
- *Nitrous Oxide (N<sub>2</sub>O).* The principal emitters include agricultural and industrial land uses and fossil fuel and waste combustion.
- *Fluorinated Gases.* These can be emitted during some industrial activities. Also, many of these gases are substitutes for ozone-depleting substances, such as CFC’s, which have been used historically as refrigerants. Collectively, these gases are often referred to as “high global-warming potential” gases.

The primary generators of GHG emissions in the United States are electricity generation and transportation. The EPA estimates that nearly 85 percent of the nation’s GHG emissions are comprised of carbon dioxide (CO<sub>2</sub>). The majority of CO<sub>2</sub> is generated by petroleum consumption associated with transportation and coal consumption associated with electricity generation. The remaining emissions are predominately the result of natural-gas consumption associated with a variety of uses.

## Impact Analysis

The following includes an analysis of environmental parameters related to *Greenhouse Gas Emissions* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

- a) Construction of the proposed project would result in direct emissions of CO<sub>2</sub>, N<sub>2</sub>O, and CH<sub>4</sub> from the operation of construction equipment and the transport of materials and construction workers to and from the project site. Several State-led GHG emissions-reducing regulations have recently taken effect, and changes to regulations will continue to take effect in the near future that will substantially reduce GHG emissions. For instance, implementation of Assembly Bill 1493 (the Pavley Standard) (Health and Safety Code Sections 42823 and 43018.5) will significantly reduce the amount of GHGs emitted from passenger vehicles. The Pavley Standard is aimed at reducing GHG emissions from noncommercial passenger vehicles and light-duty trucks of model years 2009–2016 by requiring increased fuel efficiency standards of automobile manufacturers. The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

The electricity provider for the City of Redding, REU, is subject to California’s Renewables Portfolio Standard (RPS). The RPS 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, which will have the effect of reducing GHG emissions generated during energy production. REU will be required to achieve the 50 percent renewable energy goal by 2030 established by SB 100. The proposed project would result in direct GHG emissions from construction and operation related activities. Total GHG emissions generated during construction are presented in Table 8. The CalEEMod outputs are contained within Attachment C.

**Table 8**  
**CONSTRUCTION GREENHOUSE GAS EMISSIONS**

Construction Year and Season	CO <sub>2</sub> e Emissions, metric tons/year
Total (2022 & 2023)	1,398
Emissions amortized over 30 years	47

Source: CalEEMod version 2020.4.0; refer to Attachment C.

As shown in Table 8, project construction-related activities would generate approximately 1,398 MTCO<sub>2</sub>e of GHG emissions over the course of construction. One-time, short-term construction GHG emissions are typically summed and amortized over the project’s lifetime (assumed to be 30 years).<sup>3</sup> It is reasonable to look at a 30-year time frame for buildings since this is a typical interval before a new building requires the first major renovation (IEA, 2008). The amortized project emissions would be approximately 47 MTCO<sub>2</sub>e per year. Once construction is complete, the generation of construction related GHG emissions would cease. SCAQMD does not have a threshold for construction GHG emissions. However, emissions are below SCAQMD’s 10,000 MTCO<sub>2</sub>e threshold. Therefore, project construction GHG impacts are less than significant.

<sup>3</sup> The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, August 26, 2009).



### Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of a project. Operational GHG emissions would also result from indirect sources, such as offsite generation of electrical power, the energy required to convey water to, and wastewater from the project, the emissions associated with solid waste generated from the project, and any fugitive refrigerants from air conditioning or refrigerators. Total GHG emissions associated with the proposed project are summarized in Table 9. As shown in Table 9, the project would generate approximately 8,604 MTCO<sub>2</sub>e annually from both construction and operations.

**Table 9**  
**PROJECT GREENHOUSE GAS EMISSIONS**

<b>Emissions Source</b>	<b>MTCO<sub>2</sub>e<sup>1</sup> per Year</b>
Construction (amortized over 30 years)	47
Area	0.0168
Energy	632
Mobile	7,870
Waste	60
Water	114
<b>Total Annual Project GHG Emissions<sup>2</sup></b>	<b>8,676</b>
<i>Threshold<sup>3</sup></i>	10,000
<b><i>Exceed Threshold?</i></b>	<b>No</b>

Notes: 1. Emissions were calculated using CalEEMod version 2020.4.0; 2. Total values are from CalEEMod and may not add up due to rounding; 3. Shasta County AQMD does not have a GHG operational threshold, therefore the CAPCOA threshold of 10,000 MTCO<sub>2</sub>e was utilized.

Source: CalEEMod version 2020.4.0; Refer to Attachment C.

Table 9 shows that the proposed project would result in approximately 8,676 MTCO<sub>2</sub>e per year from amortized construction, area, energy, mobile, waste, and water usage. Shasta County AQMD does not have a GHG threshold, therefore the CAPCOA threshold of 10,000 MTCO<sub>2</sub>e was utilized. The proposed project would not exceed the numeric threshold of 10,000 MTCO<sub>2</sub>e. Thus, the proposed project would have a less than significant impact with respect to GHG emissions. In addition, with continued implementation of various statewide measures, the proposed project's operational energy and mobile source emissions (approximately 97 percent of total project emissions) would continue to decline in the future. GHG operational emissions would be less than significant.

- b) As of 2021, the City of Redding and Shasta County do not have a Climate Action Plan (CAP). The project would not conflict with any other applicable plan, policies, or regulations adopted to reduce GHG emission. As noted, in threshold "a" above, the project is in conformance with the City's air quality policies and thresholds, and with state guidelines and regulations, and implementation of SMMs and BAMMs, above. The proposed project would have no impact on any plans, policies, or regulations related to GHG emissions.

### California Air Resource Board Scoping Plan Consistency

The California State Legislature adopted AB 32 in 2006. AB 32 focuses on reducing GHGs (CO<sub>2</sub>, CH<sub>4</sub>, NO<sub>x</sub>, HFCs, PFCs, and SF<sub>6</sub>) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan provides a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as the cap-and-trade program, and an AB 32 implementation fee to fund the program. As shown in Table 10, the proposed project is consistent with most of the strategies, while others are not applicable to the proposed project.

**Table 10**  
**PROJECT CONSISTENCY WITH APPLICABLE CARB SCOPING PLAN MEASURES**

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Transportation	California Cap-and-Trade Program Linked to Western Climate Initiative	Regulation for the California Cap on GHG Emissions and Market-Based Compliance Mechanism October 20, 2015 (CCR 95800)	<b>Consistent.</b> The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, generated in-State or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period.
	California Light-Duty Vehicle GHG Standards	Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles	<b>Consistent.</b> This measure applies to all new vehicles starting with model year 2012. The proposed project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles, model year 2012 and later, associated with construction and operation of the proposed project would be required to comply with the Pavley emissions standards.
		2012 LEV III California GHG and Criteria Pollutant Exhaust and Evaporative Emission Standards	<b>Consistent.</b> The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with the site would comply with LEV III standards.
	Low Carbon Fuel Standard	2009 readopted in 2015. Regulations to Achieve GHG Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480	<b>Consistent.</b> This measure applies to transportation fuels utilized by vehicles in California. The proposed project would not conflict with implementation of this measure. Motor vehicles associated with construction and operation of the proposed project would utilize low carbon transportation fuels as required under this measure.
	Regional Transportation-Related GHG Targets.	SB 375. Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28	<b>Consistent.</b> The proposed project would provide development in the region that is consistent with the growth projections in the Shasta County 2015 Regional Transportation Plan.
	Goods Movement	Goods Movement Action Plan January 2007	<b>Not applicable.</b> The proposed project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
	Medium/Heavy-Duty Vehicle	2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer GHG Regulation	<b>Consistent.</b> This measure applies to medium and heavy-duty vehicles that operate in the state. The proposed project would not conflict with implementation of this measure. Medium and heavy-duty vehicles associated with construction and operation of the proposed project would be required to comply with the requirements of this regulation.
	High Speed Rail	Funded under SB 862	<b>Not applicable.</b> This is a statewide measure that cannot be implemented by a project applicant or Lead Agency.
Electricity and Natural Gas	Energy Efficiency	Title 20 Appliance Efficiency Regulation	<b>Consistent.</b> The proposed project would not conflict with implementation of this measure. The proposed project would comply with the latest energy efficiency standards.
		Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential Building	
		Title 24 Part 11 California Green Building Code Standards	
	Renewable Portfolio Standard/Renewable Electricity Standard.	2010 Regulation to Implement the Renewable Electricity Standard (33% 2020)	<b>Consistent:</b> The proposed project would obtain electricity from the electric utility, REU. According to the 2019 Integrated Resource Plan, REU would be compliant with 50% renewable energy by 2030.
	Million Solar Roofs Program	SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030)	
	Million Solar Roofs Program	Tax Incentive Program	<b>Consistent.</b> This measure is to increase solar throughout California, which is being done by various electricity providers and existing solar programs. The program provides incentives that are in place at the

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
			time of construction.
Water	Water	Title 24 Part 11 California Green Building Code Standards	<b>Consistent.</b> The proposed project would comply with the CalGreen standards, which requires a 20 percent reduction in indoor water use.
		SBX 7-7—The Water Conservation Act of 2009	
		Model Water Efficient Landscape Ordinance	
Green Buildings	Green Building Strategy	Title 24 Part 11 California Green Building Code Standards	<b>Consistent.</b> The State is to increase the use of green building practices. The proposed project would implement required green building strategies through existing regulation that requires the proposed project to comply with various CalGreen requirements. The proposed project includes sustainability design features that support the Green Building Strategy.
Industry	Industrial Emissions	2010 CARB Mandatory Reporting Regulation	<b>Not applicable.</b> The Mandatory Reporting Regulation requires facilities and entities with more than 10,000 MTCO <sub>2</sub> e of combustion and process emissions, all facilities belonging to certain industries, and all electric power entities to submit an annual GHG emissions data report directly to CARB. As shown above, mobile source emissions make up the majority of emissions and project stationary source GHG emissions would not exceed 10,000 MTCO <sub>2</sub> e. Therefore, this regulation would not apply.
Recycling and Waste Management	Recycling and Waste	Title 24 Part 11 California Green Building Code Standards	<b>Consistent.</b> The proposed project would not conflict with implementation of these measures. The proposed project is required to achieve the recycling mandates via compliance with the CALGreen code. The City has consistently achieved its state recycling mandates.
		AB 341 Statewide 75 Percent Diversion Goal	
Forests	Sustainable Forests	Cap and Trade Offset Projects	<b>Not applicable.</b> The proposed project is in an area designated for urban uses. No forested lands exist onsite.
High Global Warming Potential	High Global Warming Potential Gases	CARB Refrigerant Management Program CCR 95380	<b>Not applicable.</b> The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial refrigerators and cold storage system. The proposed project would not conflict with the refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap and Trade Offset Projects for Livestock and Rice Cultivation	<b>Not applicable.</b> The proposed project site is designated for urban development. No grazing, feedlot, or other agricultural activities that generate manure occur currently exist onsite or are proposed to be implemented by the proposed project.

Source: California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017 and CARB, *Climate Change Scoping Plan*, December 2008.

The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan in 2013. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. As such, impacts related to consistency with the Scoping Plan would be less than significant.

The proposed project is estimated to result in approximately 8,676 MTCO<sub>2</sub>e per year, therefore the GHG emissions caused by long-term operation of the proposed project would be less than significant. Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed project would benefit from the implementation of current and potential future regulations (e.g., improvements in vehicle emissions, SB 100/renewable electricity portfolio improvements, etc.) enacted to meet an 80 percent reduction below 1990 levels by 2050.

The proposed project demonstrates consistency with the Scoping Plan goals, and would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce GHG emissions, including Title 24, AB 32, and SB 32. Therefore, no impacts would occur in this regard.

## **Mitigation Measures**

No mitigation measures are required.

## **Findings**

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Greenhouse Gas Emissions*.

## **Documentation and References**

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020*. October 3, 2000.

IEA (International Energy Agency). 2008. *Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings*. March 2008.

SRTA (Shasta Regional Transportation Agency). 2018. *Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region*. October 9, 2018.

## IX. HAZARDS AND HAZARDOUS MATERIALS

The purpose of this section of the Initial Study is to identify, to the extent feasible, the potential for hazards associated with historic and current site uses, surrounding sites, and recognized environmental conditions in connection with the proposed project site and to identify potential risks to human health, including uses of the proposed project site, workers, and construction workers. Information in this section focuses on the potential for the proposed project to create a significant hazard to the public or the environment through the use, transport, disposal, or accidental release of hazardous materials.

### Environmental Setting

Hazards are those physical safety factors that can cause injury or death, and while by themselves in isolation may not pose a significant safety hazard to the public, when combined with development of projects can exacerbate hazardous conditions. Hazardous materials are typically chemicals or processes that are used or generated by a project that could pose harm to people, working at the site or on adjacent areas. Many of these chemicals can cause hazardous conditions to occur should they be improperly disposed of or accidentally spilled as part of project development or operations. Hazardous materials are also those listed as hazardous pursuant to Government Code Section 65962.5.

The Shasta County Environmental Health Department is the administering agency and the Certified Unified Program Agency (CUPA) for Shasta County with responsibility for regulating hazardous materials handlers, hazardous waste generators, underground storage tank facilities, above ground storage tanks, and stationary sources handling regulated substances. A Hazardous Materials Business Plan (HMBP) is required of businesses in Shasta County that handle, use, generate, or store hazardous materials. The primary purpose of this plan is to provide readily available information regarding the location, type, and health risks of hazardous materials to emergency response personnel, authorized government officials, and the public. Large cases of hazardous materials contamination or violations are referred to the Central Valley Regional Water Quality Control Board (CVRWQCB) and the California Department of Toxic Substances Control (DTSC).

Under Government Code Section 65962.5, both the DTSC and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB lists identified no open cases of hazardous waste violations within one-mile of the project site.

The U.S. Environmental Protection Agency (EPA) maintains the Enforcement and Compliance History Online (ECHO) program. The ECHO website provides environmental regulatory compliance and enforcement information for approximately 800,000 regulated facilities nationwide. The ECHO website includes environmental permit, inspection, violation, enforcement action, and penalty information about EPA-regulated facilities. Facilities included on the site are Clean Air Act (CAA) stationary sources; Clean Water Act (CWA) facilities with direct discharge permits, under the National Pollutant Discharge Elimination System; generators and handlers of hazardous waste, regulated under the Resource Conservation and Recovery Act (RCRA); and public drinking water systems, regulated under the Safe Drinking Water Act (SDWA). ECHO also includes information about EPA cases under other environmental statutes. When available, information is provided on surrounding demographics, and ECHO includes other EPA environmental data sets to provide additional context for analyses, such as Toxics Release Inventory data. According to the ECHO program, the project site is not listed as having a hazardous materials violation (EPA, 2021).

The California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP) designates lands in three general classifications, "Moderate", "High" and "Very High" Fire Hazard Severity Zones. The 2007 FRAP (updated May 2008) does not identify the project site or surrounding vicinity as a part of a designated fire hazard severity zone (CAL FIRE, 2008). Additionally, the project site does not fall within a State Responsibility Area (SRA). The proposed project is within RFD Fire Station 7 response area.

The proposed project site is located along Airport Road, immediately adjacent to the Redding Municipal Airport. Redding Municipal Airport is a commercial service aviation facility, as defined by the Federal Aviation Administration (FAA), which is intended to serve the aviation needs of the community. Redding Municipal Airport provides services to commercial, air cargo, military, and private aircraft. Services and facilities available on the airfield include hangar storage, tie-downs, fixed base operator services, flight instruction, aircraft rental, aircraft maintenance, and fueling. The airfield also provides support to CAL FIRE and the US Forest Service (USFS). The Airport encompasses approximately 1,500 acres of land. The current runway system consists of two runways, with the primary instrument runway at 7,003 feet. The Airport averages 290 operations (takeoffs and landings) each day (COR, 2015a).

## Impact Analysis

The following includes an analysis of environmental parameters related to *Hazards and Hazardous Materials* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

- a) The proposed project includes the use of regulated materials (such as petroleum hydrocarbons, fuels, and lubricants) for the use of mechanized equipment during construction. All hazardous or regulated materials that are used on site during construction activities will be properly stored and secured to prevent access by the general public. No hazardous materials will be disposed of at the project site. Procedures will be followed when handling or storing hazardous materials, and all job site employees will be trained in the proper usage and storage of hazardous materials, as needed. The potential hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials is considered less than significant.

Businesses that store hazardous materials are subject to the Shasta County's HMBP program, which is regulated by the Shasta County Environmental Health Division as part of the Certified Unified Program. The program requires the preparation of a document that provides an inventory of hazardous materials onsite, emergency plans and procedures in the event of an accidental release, and training for employees on safety procedures for handling hazardous materials and in the event of a release or threatened release. These plans are routine documents that are intended to disclose the presence of hazardous materials and provide information on what to do if materials are inadvertently released. The proposed project is subject to preparation of a HMBP.

In addition, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented for the project. The SWPPP would describe any hazardous materials required for the project and would include best management practices for prevention of accidental spills as well as cleanup requirements for any accidental spills or releases of hazardous materials. Therefore, compliance with applicable laws and regulations would minimize the potential for the project to create a significant hazard to the public or the environment, and impacts would be less than significant.

- b) A *Phase I Environmental Site Assessment* was prepared for the project site and determined that no recognized environmental conditions are currently present (KHA, 2021). Potential construction-related hazards could be created during the course of construction given that construction activities involve the use of heavy equipment, which uses small and incidental amounts of oils and fuels and other potentially flammable substances. The level of risk associated with the accidental release of hazardous

substances is not considered significant due to the small volume and low concentration of hazardous materials used during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law. All hazardous materials used for operations would be appropriately stored onsite and handled in accordance with City, State, and federal regulations. Because any hazardous materials used for operations would be in small quantities, long-term impacts associated with handling, storing, and disposing of hazardous materials from project operation are not anticipated. Impacts would be less than significant.

- c) The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impact would occur in this regard.
- d) Under Government Code Section 65962.5, both the DTSC and the SWRCB are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB lists identified no open cases of hazardous waste violations on the project site. Therefore, the project site is not on a parcel included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DTSC, 2021; SWRCB, 2021). As a result, this would not create a significant hazard to the public or to the environment. No impact would occur in this regard.
- e) The proposed project maintains a maximum height of 45 feet and will not exceed the 50-foot building height limitation per Redding Municipal Code (RMC) Section 18.34.040 for lands zoned "General Industrial" (GI) (COR, 2019). It should be noted that the eastern portion of the site is located within the Approach Clear Zone for the Redding Municipal Airport. This portion of the site has been reserved as a future parking area and would not include any structures. The site is also within the 55 dB to 60 dB noise contours of the airport. As a result, the proposed project would not result in a safety hazard or excessive noise for people working onsite. Impacts would be less than significant.
- f) General Plan Figure 4-9, *Evacuation Routes – Flooding*, and Figure 4-10, *Evacuations Routes – Wildland Fires* (contained in the Health and Safety Element) identify those routes in, through and out of the City that are considered the most suitable for certain mass evacuations. With the exception of Airport Road north of the project site, no other roads immediately serving the proposed project are identified as an evacuation route in the City's General Plan. No roadway closures are anticipated during construction. However, if temporary closures would be required, emergency access would be maintained at all times. Construction effects would be temporary, and all areas would be returned to pre-project conditions upon completion of construction. As a result, the proposed project would not impair implementation of any emergency response plan or emergency evaluation plan as it would not alter existing roadways, or physically interfere with existing roadway patterns. Impacts would be less than significant.
- g) The proposed project is located within the response area of City of Redding Fire Department (RFD) Fire Station No. 7. Fire Station No. 7 is located onsite at the Redding Municipal Airport approximately 1.1 miles south of the proposed project. The proposed project is located not located within a designated fire hazard severity zone or SRA. The proposed project would not result in any alterations to slope, wind, or other factors that could potentially exacerbate wildfire risks onsite or within the project vicinity. The proposed project would provide appropriate fire suppression based on the California Building Code and City requirements. Compliance with applicable regulations and regular inspection of project facilities would reduce wildfire risks. No impact would occur in this regard.

## Mitigation Measures

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Hazards and Hazardous Materials*.

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## Documentation and References

- CAL FIRE (California Department of Forestry and Fire Protection). 2021. *State Responsibility Area Viewer*. [Online]: <https://calfire-forestry.maps.arcgis.com>. Accessed: September 27, 2021.
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- COR. 2019. *Redding Municipal Code Section 18.34.040*. July 20, 2019.
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- KHA (Kimley-Horn and Associates). 2021. *Phase I Environmental Site Assessment, Airport Road Distribution Facility, Redding, Shasta County, California*. April 2021.
- SWRCB (State Water Resources Control Board). 2019. *GeoTracker*. [Online]: <https://geotracker.waterboards.ca.gov>. Accessed September 30, 2021.



## X. HYDROLOGY AND WATER QUALITY

The purpose of this section of the Initial Study is to describe the hydrologic and water quality setting of the proposed project site and surrounding area. This section also evaluates potential long-term and short-term water quality impacts associated with construction and long-term operation of the proposed project.

### Environmental Setting

The City's storm drainage infrastructure currently includes approximately 130 miles of storm drainpipe, 174 miles of open channels, and 45 detention basins. The City has several programs that provide water quality protection, many of which are addressed in the Natural Resources Element of the General Plan, a grading ordinance that addresses erosion and sediment control, a floodplain ordinance, and a Storm Water Quality Improvement Plan (SWQIP).

The project site and surrounding area is located within the Sacramento River hydrologic region of northern California within the Redding Groundwater Basin (RGWB), Enterprise Subbasin (DWR, 2021). The Redding Groundwater Basin underlies approximately 544 square miles in the north end of the Sacramento Valley; the Enterprise Subbasin is approximately 95 square miles in the northeast portion of the Redding Basin. The Enterprise Subbasin comprises the portion of the Redding Groundwater Basin bounded on the west and southwest by the Sacramento River, on the north by the Klamath Mountains, and on the east by Little Cow Creek and Cow Creek (DWR, 2004).

The City is a member of the Redding Area Water Council (RAWC), a consortium of water purveyors that operate in Shasta County. In 1998, the Shasta County Water Agency, on behalf of the RAWC, prepared the *Coordinated AB 3030 Groundwater Management Plan* for the RGWB. The groundwater management plan was prepared to provide a mechanism for both the public and private stakeholders in the RGWB to evaluate, manage, protect, and preserve local groundwater resources. The City is also participating in a consortium of nearby groundwater users to form a Groundwater Sustainability Agency (GSA) pursuant to the requirements of AB 1739, SB 1168, and SB 1319 collectively known as the Sustainable Groundwater Management Act (SGMA).

The Enterprise Subbasin is identified as a medium priority basin under the SGMA (DWR, 2021). Groundwater was encountered onsite in borings and test pits to depth of 36 feet below ground surface (bgs) made as part of the preliminary geotechnical investigation for the proposed project (MTA, 2021).

### Impact Analysis

The following includes an analysis of environmental parameters related to *Hydrology and Water Quality* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;			X	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv) Impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

- a) Since the project would be served by City sanitary sewer service, the project would not involve any permitted discharges of waste material into ground or surface waters. Construction and operation of the project would not violate any water quality standards established by the Central Valley Regional Water Quality Control Board (CVRWQCB) in its Basin Plan for the Sacramento River and San Joaquin River Basins. Water pollution Best Management Practices (BMPs) are required and will be incorporated into the improvement plans for the project. The City's construction standards require that all projects prepare an erosion and sediment control plan (ESCP) prior to construction to address water pollution control. The ESCP will ensure that water quality standards are not substantially affected by the project during construction. Impacts would be less than significant.
- b) The proposed project, considering its location within the City's water service area, is represented within the projected growth of the City's 2015 *Urban Water Management Plan* (COR, 2016a; 2016b). The proposed project would use approximately 5,000 gallons per day (gpd) or 5.6 acre-feet per year (AFY) of water. Given the proposed project's demand estimate of 5.6 AFY, this demand represents less than 1 percent the total City demand between 2020 and 2035. Therefore, the demands of the proposed project can be accommodated within the City's existing water resources as sufficient water supplies are available to serve the project and reasonably foreseeable future development during normal, dry, and multiple day years (COR, 2016a). In addition, refer to impact discussion X.e, below for a full assessment of the project's impact to the RGWB. Impacts would be less than significant.
- c) The proposed project would not 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 offsite:*

As previously discussed above, earthwork, grading, and soil stockpiling activities associated with new cell construction will be conducted in accordance with the conditions of a Construction Storm Water Pollution Prevention Plan (SWPPP) and Notice of Intent (NOI) administered by the CVRWQCB. The Construction SWPPP will specify BMPs for erosion and sediment control measures. The final improvement plans for the project must also incorporate specific design measures intended to limit pollutant discharges in stormwater from urban improvements as established under the State's National Pollutant Elimination System (NPDES) general permit, which the City is now obligated to follow in accordance with State Water Quality Control Order No. 2012-0006-DWQ. Feasible BMPs would be incorporated in the final design of the project's storm-drain system, as approved by the City Engineer, based on the BMPs listed in the latest edition of the *California Storm Water Quality Association Storm Water Best Management Practices Handbook*.

The proposed development is located on the western side of an existing property which consists of two drainage areas. The project boundary is proposed within the western drainage area which drains toward a swale along Airport Road. Efforts to maintain the existing drainage conditions via grading and use of storm drain inlets would be used to discharge runoff from the development to the existing swale. Stormwater runoff from all structures, impervious, and pervious areas shall be collected from the project site and retained/treated by BMPs in accordance with the City of Redding Post Construction Standards and the Phase II MS4 Permit. Therefore, the potential for substantial soil erosion and loss of topsoil associated with the proposed project is considered to be less than significant.

- ii. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite:*

The site is not located within an established flood hazard zone and would not result in a substantial increase in the rate or amount of surface runoff. Upon completion, the site would contain 18 acres of impervious surface and approximately 10 acres of pervious surface. City of Redding Policy 1806 requires that all subdivision development include stormwater detention facilities designed to maintain existing predevelopment rates of runoff during a 10-, 25-, and 100-year storm event with a 6-hour duration. A stormwater basin is located in the southwest corner of the project site with 1-acre provided for treatment area. Surface flow would be moved by proposed storm drains throughout the facility to the stormwater basin, and then by an overland release to an existing swale located along the eastern shoulder of Airport Road. As a result, the proposed project does not have the potential to result in significant flooding on- or offsite. Less than significant impacts would occur in this regard.

- iii. *Create or contribute runoff water which would exceed the capacity of existing planned stormwater drainage systems or provide substantial additional sources of polluted runoff:*

Refer to impact discussions under X.a, X.c.i, and X.c.ii, above. Impacts would be less than significant.

- iv. *Impede or redirect flood flows:*

The Federal Emergency Management Agency (FEMA) has mapped the 100-year and 500-year floodplains along the Sacramento River and Stillwater Creek in the vicinity of the project site. The site and surrounding area are located outside of the mapped 100-year floodplain (FEMA, 2011). No impact would occur in this regard.

- d) Two major dams are located in the general vicinity of the proposed project: Shasta Dam and Whiskeytown Dam. The anticipated inundation resulting from the unlikely failure of these dams has been documented in the General Plan. According to Figure 4-5 of the Health and Safety Element of the General Plan, the proposed project is not located within Shasta Dam or Whiskeytown Dam Failure inundation area (COR, 2000). In addition, there are no levees near the proposed project. The threat of a tsunami wave is not applicable to inland areas; there is no potential for the generation of a seiche. No impact would occur in this regard.
- e) The proposed project is located within the Sacramento River Basin. The *Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region (Fifth Edition)* was prepared for the Sacramento River Basin and the San Joaquin River Basin. The Basin Plan includes water quality objectives for the San Joaquin River. Implementation of the plan is conducted through the NPDES permits and waste discharge requirements for pollution (CVRWQCB, 2018). Implementation of the proposed project would not result in a conflict with Basin Plan for the Sacramento River Basin.

The proposed project does not include groundwater wells and would receive water 5.6 acre-feet (AF) annually from the City of Redding's municipal supply, which relies predominantly Central Valley Project (CVP) surface water resources. As represented in the City's 2015 *Urban Water Management Plan*, adequate water supplies are available from the City to serve the proposed project and uses within the City's service area under normal wet year and multiple dry year conditions through year 2035. According to the City's 2015 *Urban Water Management Plan*, groundwater wells can supply enough water to supplement existing surface water contracts with the US Bureau of Reclamation (USBR) without any noted overdraft conditions in the local groundwater basin (COR, 2016). In addition, the proposed project would comply with federal, State, and local regulations and policies regarding water conservation. For these reasons, the proposed project would have a less than significant impact on groundwater supplies and groundwater recharge.

As previously discussed above, the project site and surrounding area is located within the Sacramento River hydrologic region of northern California within the Redding Groundwater Basin, Enterprise Subbasin (DWR, 2021). It is important to note that the RGWB is not an adjudicated basin. As the basin is not in overdraft, no legal pumping limit has been set; therefore, no overdraft mitigation efforts are currently underway. Though no safe yield has been established for the Redding Groundwater Basin, groundwater modeling as part of the *Coordinated AB3030 Groundwater Management Plan* indicates that the RGWB is resilient to severe drought conditions and is able to recover with one year of normal rainfall (COR, 2016). However, as previously described above, the Enterprise Subbasin of the RGWB, in which the project is located, has been identified as a medium priority basin under the SGMA. As a result, the Enterprise Anderson Groundwater Sustainability Agency (EAGSA) was formed consisting of the overlying members of the RGWB. As required, the EAGSA shall prepare and implement a Groundwater Sustainability Plan (GSP) for the Enterprise and Anderson subbasins by 2022.

Through the efforts of the EAGSA, the GSP will identify the long-term management and use of groundwater within the Enterprise and Anderson subbasins in a manner that can be maintained without causing undesirable results. Undesirable results are generally defined with these sustainability indicators: (a) chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed); (b) significant and unreasonable reductions in groundwater storage; (c) significant and unreasonable seawater intrusion; (d) significant and unreasonable degradation of water quality; (e) significant and unreasonable land subsidence; and (f) surface water depletions that have significant and unreasonable adverse impacts on beneficial uses (Water Code Section 10721[w]).

Each of these indicators will be evaluated in the GSP. The GSP will also document the minimum threshold conditions at which a sustainability indicator becomes significant and unreasonable. Then, the GSP must establish a measurable objective reflecting the basin's desired groundwater conditions, and provide for achievement of the sustainability goal within 20 years.

Given the current and foreseeable status of the RGWB as a non-adjudicated basin, coupled with the requirements of the SGMA Act, MS4 permits and federal, State, and local regulations and policies regarding water conservation, impacts to groundwater supplies and groundwater recharge within the RGWB, implementation of the proposed project would not result in adverse impacts to groundwater resources. Impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Hydrology and Water Quality*.

## Documentation and References

- COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Health and Safety Element*. October 3, 2000.
- COR. 2016a. *2015 City of Redding Urban Water Management Plan*. June 2016.
- COR. 2016b. *Water Utility Master Plan*. Update 2016.
- COR. 2019. *City of Redding Stormwater Resource Plan*. March 2019.
- CVRWQCB (Central Valley Regional Water Quality Control Board). 2018. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region (Fifth Edition), The Sacramento River Basin and The San Joaquin River Basin*. Revised May 2018.
- DWR (California Department of Water Resources). 2021. *Sustainable Groundwater Management Act (SGMA) Data Viewer*. [Online]: <https://sgma.water.ca.gov/webgis/>. Accessed September 30, 2021.
- DWR. 2004. *Sacramento River Hydrologic Region, Redding Groundwater Basin, Enterprise Subbasin Groundwater Bulletin 118*. Updated February 27, 2004.
- FEMA (Federal Emergency Management Agency). 2011. *Flood Insurance Rate Map Panel #06089C1570G*. March 17, 2011.
- MTA (Moore Twining Associates, Inc.) 2021. *Preliminary Information for In-Progress Geotechnical Engineering Investigation for Proposed Distribution Center in Redding, California*. May 5, 2021.
- SWRCB (California State Water Resources Control Board). 2012. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2012-0006-DWQ, NPDES No. CAS000002*. July 17, 2012.
- SWRCB. 2013. *State Water Resources Control Board Water Quality Order No. 2013-0001 DWQ NPDES General Permit No. CAS000004, Waste Discharge Requirements (WDRs) for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) (General Permit)*. February 5, 2013.

## XI. LAND USE AND PLANNING

This section of the Initial Study describes the impacts on land use and planning that would result from implementation of the proposed project, including consistency with relevant local land use plans and compatibility with surrounding land uses.

### Environmental Setting

The project site lies within a semi-developed area of southeast Redding immediately west of the Redding Municipal Airport. Redding Municipal Airport provides services to commercial, air cargo, military, and private aircraft. Services and facilities available on the airfield include hangar storage, tie-downs, fixed base operator services, flight instruction, aircraft rental, aircraft maintenance, and fueling. The Airport encompasses approximately 1,500 acres of land.

The land use designation of the project site and adjoining properties are provided in Table 11. An existing light industrial business park is located immediately to the north. A self-storage project was approved in July 2020 for the parcel immediately to the south of the project site. An existing mini storage development and other industrial uses are located farther to the south in and around the Redding Municipal Airport. Vacant industrial land lies immediately to the west across Airport Road. The nearest residential uses to the site are located approximately 800 feet to the west along Bogie Lane, west of Airport Road.

**Table 11**  
**LAND USE AND ZONING DESIGNATIONS**

Direction from Site	Land Use Designation	Zoning
Project Site	"General Industrial" (GI); "Acquisition Overlay" (AO)	"General Industrial" (GI)
North	"General Industrial" (GI); "Acquisition Overlay" (AO)	"General Industrial" (GI); "Public Facility" (PF)
East	"General Industrial" (GI); "Airport Service" (AS)	"General Industrial" (GI); "Public Facility" (PF)
South	"General Industrial" (GI)	"General Industrial" (GI); "Public Facility" (PF)
West	"General Industrial" (GI)	"General Industrial" (GI)

Source: City of Redding. 2021.

As noted above, land to the north and east have a General Plan classification of "General Industrial" (GI) and "Acquisition Overlay" (AO) with a corresponding zoning designation of "General Industrial" (GI) and "Public Facility" (PF); land to the south has a General Plan classification of "General Industrial" (GI) and a zoning designation of "General Industrial" (GI) and "Public Facility" (PF); land west of the site is designated "General Industrial" (GI) in the General Plan with a corresponding zoning designation of "General Industrial" (GI).

### Impact Analysis

The following includes an analysis of environmental parameters related to *Land Use and Planning* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

- a) The proposed project is consistent with the “General Industrial” (GI) zoning of the site and with surrounding zoning designations and uses. The project does not have the potential to physically divide an established community; the project does not propose to divide land or rezone the parcel. Access to the site is limited to Airport Road and the land surrounding the property to the north and east has been developed. No impact would occur in this regard.
- b) As discussed in each resource section of this Initial Study, the proposed project is consistent with applicable policies and objectives of the City’s General Plan and regulations of the regulatory agencies identified in Environmental Checklist Form of this Initial Study. Where necessary, mitigation measures are included to reduce impacts to less than significant levels. Therefore, the proposed project would not conflict with any plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur in this regard.

### **Mitigation Measures**

No mitigation measures are required.

### **Findings**

In the course of the above evaluation, impacts associated with *Land Use and Planning* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

### **Documentation and References**

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Community and Design Element*. October 3, 2000.

## XII. MINERAL RESOURCES

The purpose of this section of the Initial Study is to address potential impacts of the proposed project on mineral resources. This section also discusses the proposed project in the context of regional and local mineral resources and addresses the potential impacts to mineral resource deposits that may occur as a result of implementation of the proposed project.

### Environmental Setting

A mineral resource is land on which known deposits of commercially viable mineral or aggregate deposits exist. This designation is applied to sites determined by the State Division of Mines and Geology as being a resource of regional significance and is intended to help maintain any quarrying operations and protect them from encroachment of incompatible uses.

The California Department of Conservation's (DOC) Division of Mine Reclamation (DMR) compiles data on the current status of mines and the commodities produced. The California Geological Survey (CGS) produces Mineral Land Classification (MLC) studies that identify areas with potentially important mineral resources that should be considered in local and regional planning. According to the CGS Information Warehouse, areas of significant mineral resources or areas of locally important minerals have been identified and mapped by the DOC for Shasta County (DOC, 2021; 1997).

Based upon the mineral land classification conducted by the DMR, the project site is located within an area designated as alluvial deposits of the Red Bluff Formation (DOC, 1997). In addition, based on mapping prepared by the DOC, this area of the City does not contain oil, natural gas, geothermal fields, or mineral resource zones (MRZ). The project site and surrounding area is not identified in the City's General Plan as being located within any "Critical Mineral Resource Overlay" area (COR, 2000).

### Impact Analysis

The following includes an analysis of environmental parameters related to *Mineral Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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?				X
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, specific plan, or other land use plan?				X

a) The 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. There are no known mineral resources of regional value located on or near the proposed project site. No impact would occur in this regard.

b) The proposed project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a City's General Plan or other land use plan. The proposed project is not located within or adjacent to a specific plan adopted by the City. The proposed project is not identified in the General Plan as having any known mineral resource value, or as being located within any "Critical Mineral Resource Overlay" area. No impact would occur in this regard.

### Mitigation Measures

No mitigation measures are required.

## Findings

In the course of the above evaluation, impacts associated with *Mineral Resources* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

## Documentation and References

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Natural Resources Element*. October 3, 2000.

DOC (California Department of Conservation). 2021. *The CGS Information Warehouse: MLC*. [Online]:  
<https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/>. Accessed September 29, 2021.

DOC. 1997. *Mineral Land Classification of Alluvial Sand and Gravel, Crushed Stone, Volcanic Cinders, Limestone, and Diatomite within Shasta County, California – DMG Open File Report 97-03*. 1997.



## XII. NOISE

The purpose of this section of the Initial Study is to evaluate noise source impacts to onsite and surrounding land uses as a result of project implementation.

### Environmental Setting

The dominant noise environment in the project area is defined by traffic noise, primarily Airport Road located adjacent to the westerly boundary of the project site, and the adjacent Redding Municipal Airport. Redding Municipal Airport provides services to commercial, air cargo, military, and private aircraft. Services and facilities available on the airfield include hangar storage, tie-downs, fixed base operator services, flight instruction, aircraft rental, aircraft maintenance, and fueling. The airfield also provides support to CAL FIRE and the US Forest Service (USFS). The Airport encompasses approximately 1,500 acres of land. The current runway system consists of two runways, with the primary instrument runway at 7,003 feet. The Airport averages 290 operations (takeoffs and landings) each day (COR, 2015). The eastern portion of the site is located within the Approach Clear Zone for the Redding Municipal Airport. The site is also within the 55 dB to 60 dB noise contours of the airport (COR, 2015).

The nearest sensitive receptors to the site are located approximately 800 feet to the west along Bogie Lane. The site and surrounding area are relatively flat with some rolling hills, with variations in elevation of approximately 30 feet over the study area (CT, 2021).

### Impact Analysis

The following includes an analysis of environmental parameters related to *Noise* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<b>Would the project result in:</b>				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive ground-borne vibration or ground-borne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	

- a) The majority of construction would occur throughout the project site and would not be concentrated at a single point near sensitive receptors. Additionally, construction activities would be limited to daytime hours and would conform to the time-of-day restrictions as contained in Redding Municipal Code (RMC) Section 18.40.100. The proposed project would be required to adhere to the Standard Permit Conditions which would ensure that all construction equipment is equipped with properly operating and maintained mufflers and other State required noise attenuation devices, helping to reduce noise at the source. Additionally, project construction would be more than 50 feet from the closest structure. Therefore, following compliance Standard Permit Conditions, construction noise levels would not exceed the City's standards.

Project implementation would create new sources of noise in the project vicinity, but would be located approximately 800 feet from the nearest sensitive receptors. New sources of noise associated with the project that could potentially impact the nearest residences include offsite traffic, mechanical equipment, delivery trucks, loading, parking areas, and landscape maintenance. However, the project would be compatible with land uses in the surrounding area and would not generate a substantial increase in the ambient noise environment over existing conditions. Furthermore, the City's Grading Ordinance (RMC Section 16.12.120.H) limits grading-permit-authorized activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. No operations are allowed on Sunday. Since heavy construction work associated with the project is limited in scope and by existing regulation, the anticipated noise impact to neighboring residents is considered less than significant.

The City of Redding General Plan Noise Element establishes 55 dB Ldn as the standard acceptable exterior noise level for residential land use and 45dB Ldn for interior noise levels (40dB in sleeping areas). With the installation of an appropriate sound walls, as determined by the project noise analysis (CT, 2021), traffic noise would be attenuated to an acceptable level. The Noise Element of the General Plan allows for higher exterior noise level than 60dB, provided that practical noise-level reduction measures are implemented and that interior noise levels are 45dB or less (Table 5-4, Noise Element of General Plan).

### Construction

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect the residential neighborhoods surrounding the construction site. Project construction would occur approximately 800 feet from existing single-family residences to the west. Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources, such as industrial machinery.

Construction activities associated with development of the proposed project would include site preparation, minor grading, paving, building construction, and architectural coating. Such activities would require graders, scrapers, and tractors during site preparation; graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, tractors, and paving equipment during paving; and air compressors during architectural coating. Grading and excavation phases of project construction tend to be the shortest in duration and create the highest construction noise levels due to the operation of heavy equipment required to complete these activities. It should be noted that only a limited amount of equipment can operate near a given location at a particular time. Equipment typically used during this stage includes heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, and scrapers. Operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of noise would be shorter-duration incidents, such as dropping large pieces of equipment or the hydraulic movement of machinery lifts, which would last less than one minute. Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical noise levels associated with individual construction equipment are listed in Table 12, below.

**Table 12**  
**TYPICAL CONSTRUCTION NOISE LEVELS**

Equipment	Typical Noise Level (dBA) at 50 feet from Source	Typical Noise Level (dBA) at 800 feet from Source
Air Compressor	80	56
Backhoe	80	56
Compactor	82	58
Concrete Mixer	85	61
Concrete Pump	82	58
Concrete Vibrator	76	52
Crane, Derrick	88	64
Crane, Mobile	83	59
Dozer	85	61
Generator	82	58
Grader	85	61
Impact Wrench	85	61
Jack Hammer	88	64
Loader	80	56
Paver	85	61
Pneumatic Tool	85	61
Pump	77	53
Roller	85	61
Saw	76	52
Scraper	85	61
Shovel	82	58
Truck	84	60

Note: Calculated using the inverse square law formula for sound attenuation:  $dBA_2 = dBA_1 + 20\log(d_1/d_2)$ , where:  $dBA_2$  = estimated noise level at receptor;  $dBA_1$  = reference noise level;  $d_1$  = reference distance;  $d_2$  = receptor location distance.

Source: Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

The nearest sensitive receptor to the project site is located approximately 800 feet west of the site. The highest anticipated construction noise level of 64 dBA at 800 feet is expected to occur (crane, derrick, and jack hammer). Additionally, the majority of construction would occur throughout the project site and would not be concentrated at a single point near sensitive receptors. Construction would comply with Section City's Grading Ordinance (RMC Section 16.12.120.H) limits grading-permit-authorized activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. Based on the noise levels discussed above and the distance to nearest receptors, construction noise would result in a less than significant impact.

*Construction Traffic Noise.* Construction noise may be generated by large trucks moving materials to and from the project site. Large trucks would be necessary to deliver building materials as well as remove dump materials. Excavation and cut and fill would be required. Based on the California Emissions Estimator Model (CalEEMod) default assumptions for this project, the project would generate the highest number of daily trips during the building construction phase (Attachment C). The model estimates that the project would generate up to 722 worker trips and 282 vendor trips per day for building construction. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and vehicle mix do not also change) would result in a noise level increase of 3 dBA. The 1,004 project construction trips (722 worker trips plus 282 vendor trip) would not double the existing traffic volume per day. Construction related traffic noise would not be noticeable and would not create a significant noise impact.

California establishes noise limits for vehicles licensed to operate on public roads using a pass-by test procedure. Pass-by noise refers to the noise level produced by an individual vehicle as it travels past a fixed location. The pass-by procedure measures the total noise emissions of a moving vehicle with a microphone. When the vehicle reaches the microphone, the vehicle is at full throttle acceleration at an engine speed calculated for its displacement.

For heavy trucks, the State pass-by standard is consistent with the federal limit of 80 dB. The State pass-by standard for light trucks and passenger cars (less than 4.5 tons gross vehicle rating) is also 80 dB at 15 meters from the centerline. According to the FHWA, dump trucks typically generate noise levels of 77 dBA and flatbed trucks typically generate noise levels of 74 dBA, at a distance of 50 feet from the truck (FHWA, 2006).

### Operational

Project operations, including shipping and distribution, would occur indoors within structures and within the loading docks. This would include truck noise and tonal back up alarms along with other typical noises for a 24-hour shipping facility. No significant noise sources are predicted or planned for this use. Other noise sources would include increased vehicle traffic to the site. However, with up to 375 total employees on site and associated traffic, this represents a minimal increase in an environment that has existing industrial noise from nearby uses as well as from the nearby airport. As a result, this impact would be less than significant.

Additionally, a *Facility Acoustical Analysis* was conducted for the project by Cavanaugh Tocci and describes how in order to further mitigate the operational noise from the project, a series of barrier walls would be implemented (CT, 2021). The barrier walls would be implemented on the west side of the facility and would lower the noise levels from the facility. This would lower the noise levels from the facility to the nearby residential areas.

*Traffic Noise.* Implementation of the project would generate increased traffic volumes along study roadway segments. The project is expected to generate 1,086 average daily trips, which would result in noise increases on project area roadways. In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5-dBA increase is readily noticeable (Caltrans, 2013). Generally, traffic volumes on project area roadways would have to approximately double for the resulting traffic noise levels to increase by 3 dBA. Therefore, permanent increases in ambient noise levels of less than 3 dBA are considered to be less than significant.

Table 5-2 of the City's Noise Element presents projected noise contours from the major road segments throughout the City. This table indicates that the 60dB and 65dB noise contours are approximately 500 feet away from the nearest sensitive receptors. Therefore, the additional project trips would not generate a noticeable difference in traffic noise levels. Project traffic would traverse and disperse over project area roadways, where existing ambient noise levels already exist. This level is below the perceptible noise level change of 3.0 dBA. Impacts would be less than significant.

*Stationary Noise Sources.* Implementation of the project would create new sources of noise in the project vicinity from mechanical equipment, parking lot noise, and landscape maintenance.

*Loading Area Noise.* The project is an industrial development that would include deliveries. The primary noise associated with deliveries is the arrival and departure of trucks. Operations of proposed project would potentially require a mixture of deliveries from vans, light trucks, and heavy-duty trucks. Normal deliveries typically occur during daytime hours. During loading and unloading activities, noise would be generated by the trucks' diesel engines, exhaust systems, and brakes during low gear shifting' braking activities; backing up toward the docks/loading areas; dropping down the dock ramps; and maneuvering away from the docks. The project is surrounded by industrial uses. The closest that the proposed project could be located to sensitive receptors would be approximately 800 feet from the dock doors. While there would be temporary noise increases during truck maneuvering and engine idling, these impacts would be of short duration and infrequent. Typically, heavy truck operations generate a noise level of 64 dBA at a distance of 50 feet. At 800 feet, loading area noise levels would be 39.9 dBA. This noise level is below the City's 55 dBA exterior standard.

*Mechanical Equipment.* Regarding mechanical equipment, the project would generate stationary-source noise associated with heating, ventilation, and air conditioning (HVAC) units. HVAC units typically generate noise levels of approximately 52 dBA at 50 feet (Berger et al., 2010). The nearest existing sensitive receptor's property lines are located approximately 800 feet from the project site. At 800 feet, mechanical equipment noise levels would be 27.9 dBA. This noise level is below the City's 55 dBA exterior standard. The project would not place mechanical equipment near residential uses, and noise from this equipment would not be perceptible at the closest sensitive receptor (existing single-family residences to the west of the project site). Impacts from mechanical equipment would be less than significant.

*Parking Areas.* Traffic associated with parking areas is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up and car pass-bys range from 53 to 61 dBA at 50 feet (Kariel, 1991). This may be an annoyance to noise-sensitive receptors. Parking lot noise can also be considered a "stationary" noise source.

Conversations in parking areas may also be an annoyance to sensitive receptors. Sound levels of speech typically range from 33 dBA at 48 feet for normal speech to 50 dBA at 50 feet for very loud speech (Berger et al., 2010). It should be noted that parking lot noise are instantaneous noise levels compared to noise standards in the CNEL scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower.

The proposed project includes a surface parking area. Noise impacts associated with parking would be a maximum of 36.9 dBA. In addition, parking lot noise would also be partially masked by the background noise from traffic along Airport Road. Noise associated with parking lot activities is not anticipated to exceed the City's noise standards or the California Land use Compatibility Standards during operation. Therefore, noise impacts from parking lots would be less than significant.

#### Landscape Maintenance Activities

Development and operation of the project includes new landscaping that would require periodic maintenance. Noise generated by a gasoline-powered lawnmower is estimated to be approximately 70 dBA at a distance of 5 feet. Landscape Maintenance activities would be 25.9 dBA at the closest sensitive receptor approximately 500 feet away. Noise from landscaping equipment is generated at the surrounding uses under existing conditions. Maintenance activities would operate during daytime hours for brief periods of time as allowed by the RMC and would not permanently increase ambient noise levels in the project vicinity and would be consistent with activities that currently occur at the surrounding uses. Therefore, with adherence to RMC requirements, impacts associated with landscape maintenance would be less than significant.

- b) There are no federal, State, or local regulatory standards for ground-borne vibration. However, various criteria have been established to assist in the evaluation of vibration impacts. For instance, the California Department of Transportation (Caltrans) has developed vibration criteria based on human perception and structural damage risks. For most structures, Caltrans considers a peak particle velocity (ppv) threshold of 0.2 inches per second (in/sec) to be the level at which architectural damage (i.e., minor cracking of plaster walls and ceilings) to normal structures may occur. Below 0.10 in/sec ppv there is virtually no risk of 'architectural' damage to normal buildings. Levels above 0.4 in/sec ppv may possibly cause structural damage (Caltrans, 2020). In terms of human annoyance, continuous vibrations in excess of 0.08 in/sec ppv are identified by Caltrans as readily perceptible level for ground vibration. Ground vibration in excess of 0.2 in/sec ppv can be expected to result in increased levels of annoyance to people within buildings (Caltrans, 2020).

Increases in groundborne vibration levels from the proposed project would be primarily associated with short-term construction-related activities. Project construction would require the use of off-road equipment, such as tractors, concrete mixers, and haul trucks. The proposed project is not expected to use major groundborne vibration-generating construction equipment, such as pile drivers.

Construction equipment groundborne vibration levels are summarized in Table 13. Based on the vibration levels, ground vibration generated by construction equipment would not be anticipated to exceed approximately 0.089 inches per second peak particle velocity (ppv) at 25 feet. Predicted vibration levels at the nearest on and offsite structures (100 feet for non-residential structures and 800 feet for residential structures) would not exceed the minimum recommended criteria for structural damage and human annoyance (0.2 ppv). As a result, this impact would be less than significant.

**Table 13**  
**TYPICAL CONSTRUCTION EQUIPMENT VIBRATION LEVELS**

Equipment	Peak Particle Velocity at 25 Feet (in/sec)	Peak Particle Velocity at 100 feet (in/sec) <sup>1</sup>	Peak Particle Velocity at 800 Feet (in/sec) <sup>1</sup>
Large Bulldozer	0.089	0.0111	0.0005
Loaded Trucks	0.076	0.0095	0.0004
Rock Breaker	0.059	0.0074	0.0003
Jackhammer	0.035	0.0044	0.0002
Small Bulldozer/Tractors	0.003	0.0004	0.0000

Notes: 1. Calculated using the following formula:  $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$ , where:  $PPV_{equip}$  = the peak particle velocity in in/sec of the equipment adjusted for the distance;  $PPV_{ref}$  = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018; D = the distance from the equipment to the receiver.

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

- c) As previously described above, the eastern portion of the site is located within the Approach Clear Zone for the Redding Municipal Airport. This portion of the site has been reserved as a future parking area and would not include any structures. Occupational Safety and Health Administration (OSHA) standard requires employers to implement hearing conservation programs when noise exposure is at or above 85 dBA averaged over an eight-hour time-weighted average. The site is also within the 55 dB to 60 dB noise contours of the airport. The *Airport Master Plan for Redding Municipal Airport* (November 2015) depicts the projected future noise contours for the airport in the build out year 2034. Future noise contours, even those associated with a new parallel runway, remain almost entirely on airport property. Workers at the project facility would not be exposed to noise levels at or above 85 dBA over and eight-hour time. As a result, the proposed project would not result in excessive noise levels for people working onsite. Impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Noise*.

## Documentation and References

- Caltrans (California Department of Transportation). 2013. *Technical Supplement to the Traffic Noise Analysis Protocol*. 2013.
- Caltrans. 2020. *Transportation and Construction Vibration Guidance Manual*. 2020.
- COR (City of Redding). 2015. *Airport Master Plan for Redding Municipal Airport*. November 2015.
- COR. 2000. *City of Redding General Plan 2000 – 2020, Noise Element*. October 3, 2000.
- COR. 1999. *Redding Municipal Code Section 16.12.120*. 1999.
- COR. 2018. *Redding Municipal Code Section 18.40.100*. August 21, 2018.
- CT (Cavanaugh Tocci). 2021. *FXG Redding California Facility Acoustical Analysis*. June 1, 2021.

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Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden. 2010. *Noise Navigator Sound Level Database with Over 1700 Measurement Values*. 2010.

FHWA (Federal Highway Administration) 2006. *Roadway Construction Noise Model*. 2006.

Kariel, H. G. 1991. *Noise in Rural Recreational Environments*, Canadian Acoustics 19(5), 3-10, 1991.

## XIV. POPULATION AND HOUSING

This section addresses potential impacts of the project on population, housing, and employment at the project site and provides an overview of current population estimates and projected population growth.

### Environmental Setting

According to the Shasta Regional Transportation Agency's 2018 *Regional Transportation Plan* (RTP) for Shasta County, population in the County is anticipated to grow at a rate of 0.8 percent per year, with an estimated population of 214,364 persons in Shasta County by 2035. The population for the City of Redding is estimated to increase to 111,002 persons by 2035 (SRTA, 2015).

The City of Redding's 2021 population is 91,715 people. Between January 2020 and January 2021, the City's population grew from 91,503 to 91,715 (DOF, 2021a). This reflects a growth by about 0.2% compared to about 0.1% for all of Shasta County. Redding's population consists of approximately 52% of the County's population (DOF, 2021a). In the 3-year period between 2019-2021, the City grew by 94 residents, which resulted in a less than 1% in population (DOF, 2021b). Compared to other areas, the City of Redding is experiencing a growth in population consistent with the rest of Shasta County. The City currently maintains an average of 2.42 persons per household (DOF, 2021b). Median household income for the City in 2021 was \$63,165 (US Census, 2021).

### Impact Analysis

The following includes an analysis of environmental parameters related to *Population and Housing* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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 (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

a, b) The proposed project would create opportunity for industrial uses in the southeast quadrant of the City as planned and anticipated by the General Plan. The project would not induce unplanned population growth and does not propose the extension of any new roads or utilities not anticipated by the General Plan. The project does not displace people or housing. No impact would occur in this regard.

### Mitigation Measures

No mitigation measures are required.

### Findings

In the course of the above evaluation, impacts associated with *Population and Housing* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

### Documentation and References

COR (City of Redding). 2020. *City of Redding General Plan Housing Element 2020-2028*. June 2, 2020.

DOF (California Department of Finance). 2020a. *Table E-1: City/County Population Estimates with Annual Percent Change*. May 2021.

DOF. 2020b. *Table E-5: City/County Population and Housing Estimates*. May 2021.

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SRTA (Shasta Regional Transportation Agency). 2018. *Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region*. October 9, 2018.

US Census (United States Census Bureau). 2021. *American Community Survey 5-Year Estimates*. Retrieved from *Census Reporter Profile Page for Redding, CA*. [Online]: <https://censusreporter.org>. Accessed September 29, 2021.



## XV. PUBLIC SERVICES

This section of the Initial Study describes the affected environment for public services that serve the project area. It also describes the impacts on existing public services that would result from implementation of the proposed project and mitigation measures, if necessary, that would reduce these impacts.

### Environmental Setting

The proposed project is located within the response area of Redding Fire Department (RFD) Fire Station No. 7. Fire Station No. 7 is located at 3772 Flight Avenue onsite at the Redding Municipal Airport approximately 1.1 miles south of the proposed project. The RFD has fire protection requirements and standards for new development projects, including standards for defensible space, hydrant spacing, fire flow, access and roadway requirements, and limitations on building materials, as well as requiring adequate roadway widths. The City Fire Marshall reviews all projects wherein an entitlement is being sought by the City (maps, use permits, etc.) prior to any building permit approval of construction for compliance with State and local requirements.

Law enforcement for the proposed project is provided primarily by the City of Redding Police Department (RPD), located at 777 Cypress Avenue on the west side of the City Hall building. RPD serves over 93,000 persons over 60 square miles and is divided in four divisions: administration, field operations, investigations, and service. The proposed project lies within RPD Beat 3.

The project site is located in the Pacheco Elementary School District and Anderson Union High School District. There are no existing school facilities within the vicinity of the proposed project.

The City of Redding has a variety of recreational options available to its residents and visitors. A total of 65 developed park sites on 619.9 acres, which include regional parks, natural park areas, community parks, joint-use facilities, large and small neighborhood parks, special purpose facilities, and private neighborhood parks, serve the entire City. For park and recreational planning purposes, the City is divided into four quadrants. The proposed project is located in the Southeast Quadrant of Redding, the most populous of the four quadrants. No neighborhood parks are located within the immediate area of proposed project.

### Impact Analysis

The following includes an analysis of environmental parameters related to *Public Services* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Fire Protection?				X
Police Protection?				X
Schools?				X
Parks?				X
Other Public Facilities?				X

#### *Fire Protection*

As a part of the approval process, the proposed project would be required to conform to the *Uniform Fire Code* and local amendments; Title 19, 22, and 27 of the *California Safety Code Regulations* and the *National Fire Prevention Association Standards*. These codes require projects to include specific design features such as ensuring appropriate emergency access and requiring structures to be built with approved building materials, etc. Conformance with these codes helps reduce the risks associated with fire hazards. Accordingly, all construction plans would be approved by the RFD to ensure that all fire code requirements are incorporated into the proposed project.

The proposed project is subject to Redding Municipal Code (RMC) Chapter 16.20, which requires new development to pay a citywide fire facilities-impact fee calculated to mitigate a project's fair share of cumulative impacts to the City's fire-protection infrastructure based upon improvements necessary to accommodate new development under the City's General Plan.

The provision of new or physically altered fire facilities is not associated with providing service to the proposed project. It should be noted, however, that compliance with fire safety standards and requirements such as interior sprinkler systems, fire alarms, emergency access, and adequate fire flow that would be verified during the building permit plan check process would reduce fire protection impacts and in turn, any immediate need for new or physically altered fire facilities. No impact would occur in this regard.

#### *Police Protection*

Police services are monitored by the City Council on a regular basis. If additional services are need, the City Council will allocate resources to address the need as funding is identified. There is nothing unique about the proposed project that would require significantly greater law enforcement service or result in a need for new facilities. It should be noted, however, that compliance with basic safety and security measures (i.e., well maintained, and well-lit parking areas and onsite security cameras) would help to reduce incidents requiring law enforcement involvement. The provision of new or physically altered law enforcement facilities is not associated with providing service to the proposed project. The proposed project would not result in the need to alter or construct facilities for law enforcement services. No impact would occur in this regard.

#### *Schools*

The project is located in the Pacheco Elementary School District and Anderson Union High School District. The proposed project would not result in the construction of new residential uses; therefore, the proposed project would not directly require the construction of additional school facilities and/or expansion of existing school facilities.

Developer fees for residential and commercial construction are collected by the Shasta County Office of Education (SCOE) on behalf of the school districts of Shasta County. The fees collected are used by the districts for construction and reconstruction of school facilities and may be used to pay bonds, notes, loans, leases, or other installment agreement for temporary and permanent facilities. For 2020/2021, school fees are assessed at and \$0.66 per square foot for commercial/industrial construction (SCOE, 2021). Based on the estimated square footage, the proposed project would generate approximately \$165,630 in school impact fees. These fees are collected at the building permit stage. The payment of school fee is consistent with Section 65995(3)(h) of the California Government Code and is considered adequate mitigation for indirect impacts on school facilities. No impact would occur in this regard.

#### *Parks*

Refer to discussion under Section XVI, RECREATION, below. The project will not cause a physical deterioration of an existing park facility or cause an adverse physical impact associated with a new park facility. No impact would occur in this regard.

#### *Other Public Facilities*

Other public services include libraries, roadway maintenance and transit services. The proposed project does not involve a substantial change in the land use, does not substantially increase the numbers of people employed in the region, and does not create or require new housing or related facilities, an increased demand on public facilities is unlikely to occur. Also refer to discussion under Section XIX, UTILITIES AND SERVICE SYSTEMS, below. No impact would occur in this regard.

### **Mitigation Measures**

No mitigation measures are required.

### **Findings**

In the course of the above evaluation, impacts associated with *Public Services* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

## Documentation and References

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Public Services Element*. October 3, 2000.

COR. 2013. *Redding Municipal Code Chapter 16.20*. September 3, 2013.

SCOE (Shasta County Office of Education). 2021. *Developer Fee Services*. [Online]: <https://www.shastacoe.org/administrative-services-division/business-services/devloper-fee-services>. Accessed September 28, 2021.

## XVI. RECREATION

This section of the Initial Study discusses any increased demand for various recreational facilities and identifies any potential need for new recreational facilities generated by the proposed project. This section also describes the recreational resources within the project area.

### Environmental Setting

The City of Redding's *Parks, Trails, and Open Space Master Plan* (November 2017) divides the City into four recreational quadrants. With respect to the Southeast Quadrant of the City where the proposed project is located, there are six neighborhood park sites, all of which are developed. These six sites make up 11.87 acres. Three of the six are less than two acres in size and offer only a limited range of recreational amenities. However, Alta Mesa Park, one of the City's four large neighborhood parks, contains a ballfield, playground, tennis courts and picnic areas (COR, 2017). In addition to the 6 neighborhood parks, community parks, natural area parks, open space areas, trail and pedestrian connections, and special purpose facilities, there are several National and State parkland facilities, national forests, and BLM holdings within the region available to potential park users.

### Impact Analysis

The following includes an analysis of environmental parameters related to *Recreation* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

- a) The project is an industrial warehouse and distribution facility located in an industrially zoned area of southeast Redding. It will not cause a physical deterioration of an existing recreation facility or cause an adverse physical impact associated with a new recreation facility. The proposed project would be served by the local population. Therefore, the potential increase in use at any one park is not expected to be significant or result in a detectable physical deterioration. No impact would occur in this regard.
- b) The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Implementation of the proposed project would not result in substantially increased use of any area recreational facilities, and would therefore not require construction of new or expansion of any other existing recreational facilities. No impact would occur in this regard.

### Mitigation Measures

No mitigation measures are required.

### Findings

In the course of the above evaluation, impacts associated with *Recreation* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

## Documentation and References

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Recreation Element*. October 3, 2000.  
COR. 2017. *Parks, Trails, and Open Space Master Plan*. November 17, 2017.

## XVII. TRANSPORTATION

The purpose of the evaluation is to address traffic and transportation impacts of the proposed project on surrounding streets and intersections, as well as provide an assessment of Vehicle Miles of Travel (VMT).

### Environmental Setting

Access to the proposed project site is provided by way of Airport Road. Airport Road is a two-lane north-south minor arterial that runs from State Route 44 (SR-44) to Interstate 5 (I-5). This minor arterial connects to Ranch Road, Churn Creek Road, Knighton Road, and I-5. Rancho Road is the nearest roadway to the proposed project site with existing bicycle facilities. According to the City of Redding's General Plan Transportation Element Airport Road is proposed to include a Class II bicycle facility (COR, 2000). Bicycle facility improvements connecting to Airport Road proximate to the site are supported by the City's 2010 *Bikeway Action Plan* (COR, 2010; 2018). Transit service provided by the Redding Area Bus Authority (RABA) is not currently available near the project area or along roadways anticipated to carry the majority of additional project trips (RABA, 2020).

### Impact Analysis

With the introduction of the California Governor's Office of Planning and Research (OPR) Technical Advisory, VMT has become an important indicator for determining if a new development will result in a "significant transportation impact" under the California Environmental Quality Act (CEQA). Passed in 2013, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers, to measuring the impact of driving. The change has been made by replacing level of service (LOS) with VMT. This shift in transportation impact focus is intended to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation (KHA, 2021a). Level of service or other delay metrics may still be used to evaluate the impact of projects but is not used to determine a significant impact under CEQA.

A Traffic Impact Analysis (TIA) was performed in accordance with the scope of work commonly required by the City of Redding, and in a manner consistent with the City of Redding's *Traffic Impact Analysis Guidelines* (Attachment L). The addition of the proposed 250,956 square foot distribution facility is estimated to generate 1,086 daily trips, with 176 trips occurring during the AM peak-hour, and 95 trips occurring during the PM peak-hour. The TIA found that the addition of the proposed project trips does not result in a significant impact at the evaluated facilities based on the City's TIA Guidelines, and no offsite traffic improvement measures are required (KHA, 2021b).

The following includes an analysis of environmental parameters related to *Transportation* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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?			X	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?				X
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?				X

- a) The proposed project fronts Aviation Drive and is therefore not anticipated to disrupt the City's *Bikeway Action Plan* improvements for Airport Road. The project does not propose additional bicycle facility construction along Aviation Drive. Airport Road does not currently provide sidewalks. The section of Aviation Drive presently constructed provides pedestrian sidewalks along both sides of the street. The project proposes to add sidewalk along the east side of Aviation Drive. The project is not anticipated to add a significant number of pedestrian trips to the network due to the lack of nearby development and proximate transit facilities.

The proposed project is not anticipated to affect RABA operations. Trips generated by the proposed project are not anticipated to generate sufficient demand to warrant transit network expansion. Therefore, implementation of the proposed project will not conflict with a program plan, ordinance or policy addressing the circulation systems, including transit, roadway, bicycle, and pedestrian facilities. Impacts are considered less than significant in this regard.

- b) A SB 743 compliant analysis was completed for the proposed project which considers the VMT implications of relocating the existing distribution center approximately 10 miles from its current location in the City to the subject property (refer to Attachment K). The proposed relocation of the site is assumed to bring efficiencies in the time and distance of deliveries to the service area (KHA, 2021a). Based on the results of the analysis it was determined that the average VMT per employee is lower at the proposed project site compared to the existing location; the proposed project results in a decrease in non-work VMT related to deliveries; and the proposed project can be determined to not have a significant transportation impact due to a net decrease in County-wide VMT. Therefore, the proposed project will not conflict with CEQA Guidelines Section 15064.3(b). No impact would occur in this regard.
- c) The proposed project site is anticipated to accommodate trailer lengths up to 53 feet. All project entrances and exits from Aviation Drive have been designed and evaluated to ensure adequate access for the largest design vehicle (KHA, 2021b). The proposed site plan provides adequate room for loading and unloading operations. As the proposed site plan meets the requirements for the largest anticipated vehicle, it is assumed that the access points and internal layout are sufficient to accommodate smaller vehicles. No impact would occur in this regard.
- d) Access to the site is provided at two driveways, both proposed to open onto an extended segment of Aviation Drive along the project frontage. The northern driveway is approximately 500 feet south of the existing intersection between Aviation Drive and Electro Way and is anticipated to primarily serve traffic from site employees, visitors, and delivery vans. The southern driveway is anticipated to primarily serve trailer truck traffic access onto the site. Both driveways are proposed to be full access for their respective purposes providing ingress and egress. The section of Aviation Drive fronting the project site will be staged and constructed to enable site access for both emergency services and project equipment and will serve as the primary access for emergency vehicles. Secondary access off of Old Oregon Trail is planned to be utilized by emergency vehicles only in the ultimate build-out condition. The Redding Fire Marshal has deemed this to be adequate access for emergency access and fire protection. No impact would occur in this regard.

## Mitigation Measures

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Transportation*.

## Documentation and References

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Transportation Element*. October 3, 2000.  
COR. 2010. *Bikeway Action Plan 2010-2015*. April 2010.  
COR. 2018. *Active Transportation Plan*. April 2018.  
KHA (Kimley-Horn Associates). 2021a. *Redding Distribution Facility – SB 743 Analysis*. August 13, 2021.  
KHA. 2021b. *Traffic Impact Analysis Redding Distribution Facility*. August 12, 2021.  
RABA (Redding Area Bus Authority). 2020. *Redding Area Bus Authority (RABA) Ride Guide*. 2020.

## XVIII. TRIBAL CULTURAL RESOURCES

This section of the Initial Study describes the affected environment and regulatory setting for Tribal Cultural Resources (TCRs) on the project site. Ethnographic information is presented for the Wintu, the larger cultural group identified for the project location.

### Environmental Setting

At the time of European-American contact (1830-1840), the project vicinity appears to have been inhabited by the Dau-pom (Stillwater) Wintu. The Wintu belong to the family of Penutian speakers, a linguistic language stock whose members are found throughout California within four main language families including Wintuan, Maiduan, Yokutsan, and Utian (Moratto 1984). Wintuan language subgroups consist of Wintu (Northern Wintuan), Nomlaki (Central Wintuan), and Patwin (Southern Wintuan) (Kroeber 1925). The Wintu were further divided into nine major groups based upon their geographic location, including the Dau-pom subgroup (DuBois 1935).

The Wintu diet/subsistence strategy was similar to many other California groups, and was focused on three predictable resources—acorns, deer, and salmon—all of which were of high nutritional value, easily stored, and dependably available on a seasonal basis. The Wintu lived in permanent villages along the upper Sacramento and Trinity Rivers during the winter, subsisting mainly on stored foods. In the spring and summer months, they moved upland to temporary resource procurement camps (in brush shelters) usually located no more than three to four days' walk from the main village. Food resources were periodically returned to the base camp for storage, which was guarded by those unable to participate in the gathering rounds.

### Tribal Consultation

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to any California Native American tribes that have requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include tribal cultural resources, the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Pursuant to AB 52, Section 21073 of the Public Resources Code (PRC) defines California Native American tribes as “a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004.” This includes both federally and non-federally recognized tribes.

Consultation and correspondence with various culturally affiliated Tribal groups and agencies were conducted as in accordance with PRC Section 21080.3.1. On October 27, 2021, the City initiated environmental review under CEQA for the proposed Airport Road Distribution Center project. The City sent a certified project notification letter to the Wintu Tribe of Northern California and Redding Rancheria, a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, on October 27, 2021, pursuant to PRC Section 21080.3.1, notifying that the project was under review and to provide the Tribes 30 days from the receipt of the letter to request consultation on the project in writing. No responses were received requesting initiation of consultation under the provisions of AB 52.

Tribal consultation pursuant to AB 52, as summarized above, failed to identify any TCRs within the project area. Additional information about potential impacts to TCRs was drawn from the ethnographic context, the results of the cultural resources records search and field survey, and the results of a search of the Sacred Lands File of the NAHC, which were obtained in (May 20, 2021). The Sacred Lands File failed to identify any sacred lands or tribal resources in or near the project area. The cultural resources records search and field survey also determined that there are no significant Native American archaeological sites within the project area.

### Impact Analysis

The following includes an analysis of environmental parameters related to *Tribal Cultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.



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), or		X		
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.		X		

a, b) As discussed in Section V, CULTURAL RESOURCES, impact discussion V.a, based on the project area archival research and previous surveys within and adjacent to the study area, the site is located in an area that does not appear to be sensitive for prehistoric or historic occupation and the area is considered to have a low to moderate sensitivity for surface sites and very low sensitivity for subsurface sites (ENPLAN, 2021). Despite numerous previous surveys in the project vicinity, only three cultural resources, a road, a bridge, and a prehistoric isolate (two basalt flakes), have been located within a half-mile radius of the project area. None of these surveys noted potential buried resources.

As described above, no known TCRs have been identified (as defined in PRC Section 21074) within the project area. Therefore, the project would not cause a significant adverse change in the significance of a TCR that is either listed in, or eligible for listing in, the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k). The proposed project would not cause a substantial adverse effect to a known TCR.

Although no California Native American tribe submitted a written request to the City for formal consultation pursuant to PRC Section 21080.3.1, ENPLAN contacted the NAHC and several Native American representatives and organizations and requested information related to cultural resources that could be impacted by the proposed project. A response was received by email on June 10, 2021, from Cyndie Childress of the Nor-Rel-Muk Wintu Nation requesting the project proponent engage Native American monitors during construction. No other responses were received. Mitigation Measures CR-1 and CR-2 address the inadvertent discovery of cultural resources and human remains during construction. Impacts are considered less than significant in this regard.

## Mitigation Measures

Refer to Mitigation Measure CR-1 and CR-2 in Section V, CULTURAL RESOURCES.

## Findings

In the course of the above evaluation impacts associated with *Tribal Cultural Resources* were found to be less than significant with implementation of mitigation. Mitigation measures for the protection of currently unknown but potentially discoverable resources are also provided for in Section V, CULTURAL RESOURCES.

## Documentation and References

ENPLAN. 2021. *Cultural Resources Inventory Report, Airport Road Distribution Center, City of Redding, Shasta County, California*. November 2021.

## **XIX. UTILITIES AND SERVICE SYSTEMS**

This section of the Initial Study addresses the proposed project's potential impacts on certain utilities and services: electric, water, wastewater, stormwater, and solid waste.

### **Environmental Setting**

The City of Redding provides water service to all residential, industrial, and commercial users within a 58-square-mile water service area. The water service area includes the City and the proposed project, as well as the previously unincorporated areas of Buckeye, Twin View, and Quartz Hill. The current water service area does not match exactly the City's corporate boundary, as some areas within the City are served by neighboring water systems such as the Bella Vista Water District (in the northeast area of the City) and Centerville Community Service District (on the west side of the City). Residential and commercial service connections (roughly 60 percent and 15 percent of the total connections, respectively) account for most of the annual water demand.

The Redding Groundwater Basin (RGWB) underlies approximately 544 square miles in the north end of the Sacramento Valley. The project site is located over the Enterprise Subbasin that comprises approximately 95 square miles in the northeast portion of the RGWB. As described in the City's 2015 *Urban Water Management Plan*, the RGWB is not an adjudicated basin. As the basin is not in overdraft, no legal pumping limit has been set; therefore, no overdraft mitigation efforts are currently underway. Though no safe yield has been established for the RGWB, groundwater modeling as part of the *Coordinated AB 3030 Groundwater Management Plan* indicates that the RGBW is resilient to severe drought conditions and is able to recover with one year of normal rainfall (COR, 2016a; 2016b).

The City of Redding is the sole provider of sanitary sewer service for the project area. The Stillwater Wastewater Treatment Plant (WWTP) serves approximately one-third of the current population of the City of Redding, including the area of the proposed project (COR, 2012). In 2014, the Stillwater WWTP treatment capacity was improved to 14.4 million gallons per day (mgd) with 12 million gallons available for equalization with an ultimate treatment capacity of approximately 15,495 housing equivalents (HEs). According to the City's *Wastewater Utility Master Plan 2016 Addendum* (COR, 2016c), year 2025 HEs served by the Stillwater WWTP are estimated to be approximately 3,156 HEs. Currently, there are no sewer lines serving the project site; therefore, there is no existing sewage flow.

Solid waste generated by the proposed project would be disposed of at Shasta County's Richard W. Curry/West Central Sanitary Landfill located south of the community of Igo, 9.2 miles west of State Route 273 (SR-273). Through an agreement with Shasta County, the landfill receives all residential, commercial, and industrial solid waste generated within the City. Total capacity of the landfill is 13 million cubic yards (cy) with a remaining capacity of 5.2 million cy.

Redding Electric Utility (REU) currently provides electrical services to the City of Redding, while natural gas is provided by Pacific Gas & Electric Company (PG&E). REU has overhead electric lines running north/south along Airport Road. Currently, there are lines that serve the surrounding area with the nearest gas distribution facilities located along Airport Road. The close proximity of natural gas facilities would allow services to be extended to the proposed project site.

### **Impact Analysis**

The following includes an analysis of environmental parameters related to *Utilities and Service Systems* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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 or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?			X	

a) The proposed development does not generate the need for relocation or construction of new or expanded water or wastewater treatment, electric power, natural gas, or telecommunications facilities. With respect to stormwater drainage, implementation of the proposed project includes the use of storm drain inlets to discharge runoff to the existing swale along Airport Road. Stormwater runoff from onsite buildings, impervious areas, and pervious areas will be collected and retained/treated by Best Management Practices (BMPs) in accordance with the City of Redding Post Construction Standards and the Phase II MS4 Permit. To meet the required stormwater standards, an approximate 1-acre onsite stormwater detention basin will be constructed in the southwest corner of the site. No offsite stormwater facilities will be expanded as a result of the proposed project. Impacts would be less than significant.

b) The proposed project, considering its location within the City's water service area, is represented within the projected growth of the City's 2015 *Urban Water Management Plan* (COR, 2016a; 2016b). The proposed project would use approximately 5,000 gallons per day (gpd) or 5.6 acre-feet per year (AFY) of water. Given the proposed project's demand estimate of 5.6 AFY, this demand represents less than 1 percent the total City demand between 2020 and 2035. Therefore, the demands of the proposed project can be accommodated within the City's existing water resources as sufficient water supplies are available to serve the project and reasonably foreseeable future development during normal, dry, and multiple day years (COR, 2016a).

In addition, the proposed project would also comply with the California Health and Safety Code, California Plumbing Code, California Energy Commission's proposed Appliance Efficiency Regulations, and with City rules, regulations, and policies, which include adopted shortage measures. Compliance would result in building features that would address indoor and outdoor water efficiency measures, and would ensure that the project federal, State, and local laws and regulations related to water conservation. Impacts would be less than significant.

c) Implementation of the proposed project is estimated to generate approximately 11,250 gallons per day (gpd)<sup>4</sup> of wastewater based on a 30 gpd generation rate identified within the City's *Wastewater Utility Master Plan* (2012). This wastewater generation rate is equal to 0.1 HEs. As discussed above, wastewater from the proposed project would be treated by the City of Redding Stillwater WWTP.

According to the City's *Wastewater Utility Master Plan 2016 Addendum* (COR, 2016c), year 2025 HEs served by the Stillwater WWTP were estimated at 3,156 HEs with a projected year 2035 planning period demand of 10,600 HEs. By applying a 0.29 percent annual background growth rate, which is consistent with the *Wastewater Utility Master Plan 2016 Addendum* growth rate, to the year 2020 2,468 HEs, approximately 2,482<sup>5</sup> HEs are assumed to be served by the Stillwater WWTP in 2022.

<sup>4</sup> Calculated multiplying 375 employees by 30 gpd per Table 3.1 Household Equivalent Factors for Typical Use Groups, within *Wastewater Utility Master Plan* (2012).

<sup>5</sup> Found by multiplying 2,468 by 1.0029 which gives 2,475 HEs for 2021. Then using 2,475 to again multiple by 1.0029 to find 2,482 which is HEs for 2022. Per Table 3.1 Dry Average Weather Demand and Housing Equivalent Summary within the *Wastewater Master Plan Addendum* (2016).

In 2014, the Stillwater WWTP treatment capacity was improved to 14.4 mgd with 12 million gallons available for equalization with an ultimate treatment capacity of approximately 15,495 HEs. As described above, the projected wastewater generation of the proposed project is estimated to be equivalent to 38-40 HEs. Therefore, the Stillwater WWTP has the operating and treatment capacity to accommodate the additional 38-40 HEs associated with the proposed project. Therefore, provision of wastewater treatment services would be adequately accommodated and would not adversely affect the existing and projected demand. Impacts would be less than significant.

- d) The 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 City provides solid waste disposal (curbside pick-up) service, which the proposed project would utilize. The Richard W. Curry/West Central Landfill has approximately 120 to 320 tons per day of capacity; therefore, the landfill would support the increase in solid waste during construction and operation of the proposed project. Onsite recycling would reduce the potential amount of waste disposed of at the Richard W. Curry/West Central Landfill and would contribute to the recycling goals set forth by the City, California Building Code, and Assembly Bill (AB) 939. Operational activities would be required to comply with all federal, State, and local statutes and regulations related to solid waste. Impacts would be less than significant.
- e) The proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. The City regulates and operates programs that promote the proper disposal of toxic and hazardous materials from households and businesses throughout the City, including those created by the project. In addition, the 1989 California Integrated Waste Management Act (AB 939) requires the City to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed project design. Reuse and recycling of construction debris would reduce operating expenses and save valuable landfill space.

Project implementation would generate solid waste during construction. Common construction waste may include metals, masonry, plastic pipe, rocks, dirt, cardboard, or green waste related to land development. AB 939, SB 1016, AB 341, and AB 1826 require the City to meet specific waste diversion goals. The Richard W. Curry West Central Landfill has available capacity to accommodate solid construction waste generated by the proposed project. In addition, the Anderson Landfill also has available capacity to accommodate solid construction waste generated by the proposed project. Impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Utilities and Service Systems*.

## Documentation and References

- COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Public Facilities Element*. October 3, 2000.
- COR. 2016a. *Urban Water Management Plan*. June 2016.
- COR. 2016b. *Water Utility Master Plan*. Update 2016.
- COR. 2016c. *Wastewater Utility Master Plan 2016 Addendum*. September 2016.
- COR. 2012. *Wastewater Utility Master Plan*. September 2012.

## XX. WILDFIRE

This section of the Initial Study provides an analysis of potential wildfire impacts. The analysis considers potential impacts of the project on emergency access and evacuation routes to, through, and from the project area and the exacerbation of fire risk or that may result in temporary or ongoing impacts to the environment during or following a fire.

### Environmental Setting

Human activities such as equipment operation cause the vast majority of wildland fires that occur on average each in throughout the State. According to the City's *Local Hazard Mitigation Plan*, wildland fire is an ongoing concern for City. Generally, the fire season extends from early spring through late fall of each year during the hotter, dryer months. Drought may extend the fire season in Shasta County, including the City of Redding. Fire conditions arise from a combination of high temperatures, low moisture content in the air and fuel, accumulation of vegetation, and high winds.

The California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP) designates lands in three general classifications, "Moderate", "High" and "Very High" Fire Hazard Severity Zones. The 2007 FRAP (updated May 2008) does not identify the project site or surrounding vicinity as a part of a designated fire hazard severity zone (CAL FIRE, 2008). Additionally, the project site does not fall within a State Responsibility Area (SRA) (CAL FIRE, 2021). The proposed project is within Redding Fire Department (RFD) Fire Station No. 7 response area. Fire Station No. 7 is located onsite at the Redding Municipal Airport approximately 1.1 miles south of the proposed project.

### Impact Analysis

The following includes an analysis of environmental parameters related to *Wildfire* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose projects occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?				X
c) Require installation or maintenance of associated infrastructure (such as roads, fuel sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result, post-fire slope instability, or drainage changes?				X

- a) General Plan Figure 4-9, *Evacuation Routes – Flooding*, and Figure 4-10, *Evacuations Routes – Wildland Fires* (contained in the Health and Safety Element) identify those routes in, through and out of the City that are considered the most suitable for certain mass evacuations. With the exception of Airport Road north of the project site, no other roads immediately serving the proposed project are identified as an evacuation route in the City's General Plan. No roadway closures are anticipated during construction. However, if temporary closures would be required, emergency access would be maintained at all times. Construction effects would be temporary, and all areas would be returned to pre-project conditions upon completion of construction.

Consistent with City fire requirements two proposed driveway connections are provided along the extension of Aviation Drive adjacent to Airport Road. The proposed Aviation Drive will extend from the existing southern terminus of Aviation Drive to the north of the project site and extend southward along the project frontage and will tie into Aviation Drive to the south. The

proposed project would also be fully accessible to emergency vehicles through design of parking and vehicle drive aisles. As a result, the proposed project would not impair implementation of any emergency response plan or emergency evaluation plan as it would not alter existing roadways, physically interfere with existing roadway patterns, and can be developed in accordance with City fire standards. Impacts would be less than significant.

- b) The project is located not located within a designated fire hazard severity zone or SRA. The proposed project would not result in any alterations to slope, wind, or other factors that could potentially exacerbate wildfire risks onsite or within the project vicinity. The proposed project would provide appropriate fire suppression based on the California Building Code and City requirements. Compliance with applicable regulations and regular inspection of project facilities would reduce wildfire risks and the exposure to pollutant concentrations or uncontrolled spread of wildfire. No impact would occur in this regard.
- c) As described in impact discussion XX.b above, project facilities would be constructed, designed, inspected, and maintained in accordance with applicable regulations to reduce fire risk. No new utilities will be extended to the project site, although the project will require to connect to existing adjacent power sources. Implementation of the proposed project would not require the installation of any other infrastructure or utilities that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. No impact would occur in this regard.
- d) The proposed project would not 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. The location of the proposed project does not fall within a Federal Emergency Management Agency (FEMA) flood zone, nor are there any sheer or unstable cliffs in the immediate area (FEMA, 2011). There is no reason to believe that the proposed project would be exposed to significant risks from flooding or landslides as a result of post fire runoff. No impact would occur in this regard.

## Mitigation Measures

No mitigation measures are required.

## Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Wildfire*.

## Documentation and References

CAL FIRE (California Department of Forestry and Fire Protection). 2021. *State Responsibility Area Viewer*. [Online]: <https://calfire-forestry.maps.arcgis.com>. Accessed: September 27, 2021.

CAL FIRE. 2008. *Fire Hazard Severity Zones*. [Online]: <https://osfm.fire.ca.gov/media/5992/redding.pdf>. Accessed September 27, 2021.

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Health and Safety Element*. October 3, 2000.

COR. 2015. *Local Hazard Mitigation Plan*. November 2015.

FEMA (Federal Emergency Management Agency). 2011. *Flood Insurance Rate Map Panel #06089C1570G*. March 17, 2011.

## XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Based on the analysis undertaken as part of this Initial Study, the following findings can be made:

Would the Project:	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 the self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number, or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have potential environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly?				X

### Impact Analysis

- a) Evaluation of the proposed project as provided in Section IV, BIOLOGICAL RESOURCES, has shown that the activities of the proposed project do not have the potential to degrade the quality of the environment and will not substantially reduce the habitat or cause wildlife populations to drop below self-sustaining levels. Mitigation measures for biological resources have been developed to reduce potential impacts on sensitive habitats and species to less than significant levels. Refer to Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4 and BIO-5 in Section IV, BIOLOGICAL RESOURCES.

Also, based on the discussion and findings in Section V, CULTURAL RESOURCES, there is evidence to support a finding that the proposed project is not eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR) under any significance criteria. The project is located in an area that does not appear to be sensitive for prehistoric or historic occupation and is considered to have a low to moderate sensitivity for surface sites and very low sensitivity for subsurface sites. Although no archaeological deposits or features were found during the *Cultural Resources Inventory Report* (ENPLAN, 2021), implementation of mitigation measures will ensure that any additional archaeological deposits or features may be discovered are fully protected during implementation of the project. Refer to Mitigation Measures CR-1 and CR-2 in Section V, CULTURAL RESOURCES.

- b) As discussed throughout this document, implementation of the proposed project has the potential to result in impacts to the environment that are individually limited, but are not cumulatively considerable, including impacts to biological and cultural resources. In addition, as discussed in Section III, AIR QUALITY, the project will contribute to regionwide cumulative air quality impacts. However, under policy of the General Plan, application of Standard Mitigation Measures (SMMs) and Best Available Mitigation Measures (BAMMS) will reduce potential impacts from this project to a level less than significant level.

In all instances where the project has the potential to contribute to cumulatively considerable impacts to the environment (including the resources listed above) mitigation measures have been imposed to reduce the potential effects to less than significant levels. As such, with incorporation of the mitigation measures imposed throughout this Initial Study, the proposed project would not contribute to environmental effects that are individually limited, but cumulatively considerable, and impacts would be less than significant.

- c) Based on the discussion and findings in all sections of this Initial Study, there is no evidence to support a finding that the proposed project has potential environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly.

## Mitigation Measures

**Mitigation Measure BIO-1.** Prior to issuance of a grading permit affecting the onsite vernal pool, as identified in the *Aquatic Resources Delineation Report, Airport Road Distribution Center Project* (Attachment D), the project applicant shall obtain the following resource agency permits from the Corps and CVRWQCB, or any other applicable agency (i.e., USFWS) identified through the permitting process:

- Prior to any discharge of dredged or fill material into “waters of the U.S.”, including wetlands, authorization under a Nationwide Permit or Individual Permit shall be obtained from the Corps. For any features determined to not be subject to Corps jurisdiction during the verification process, authorization to discharge (or a waiver from regulation) shall be obtained from the CVRWQCB. For fill requiring a Corps permit, water quality certification shall be obtained from the CVRWQCB prior to discharge of dredged or fill material.
- To offset the loss of onsite wetlands, the applicant shall purchase vernal pool creation credits (or other credit types as may be approved by the resource agencies) at a minimum 1:1 ratio at a Corps- or CDFW-approved mitigation bank, or pay in-lieu fees in accordance with the Corps’ In-Lieu Fee Program. Proof of purchase of credits or payment of fees shall be provided to the City of Redding prior to fill or disturbance of the onsite wetland.
- All measures contained in the permits or associated with any agency approvals shall be implemented to the satisfaction of the lead regulatory agency.

**Mitigation Measure BIO-2.** Prior to conducting work within 50 meters of the onsite elderberry shrubs, consultation shall be completed with the USFWS, resulting in a determination from the USFWS as to whether the shrubs provide habitat for the federally listed beetle. If the USFWS determines that the project may adversely affect the beetle or its habitat, conservation or mitigation measures shall be implemented as required by the USFWS.

**Mitigation Measure BIO-3.** Prior to conducting work within 50 meters of the onsite vernal pool, consultation shall be completed with the USFWS, resulting in a determination from the USFWS as to whether the onsite wetland provides habitat for federally listed vernal pool branchiopods. If the USFWS determines that the project may affect federally listed vernal pool branchiopods or their habitat, conservation or mitigation measures shall be implemented as required by the USFWS.

**Mitigation Measure BIO-4.** The potential for introduction and spread of noxious weeds shall be avoided/minimized by the following: 1) Using only certified weed-free erosion control materials, mulch, and seed; 2) Limiting any import or export of fill material to material that is known to be weed free; and 3) Requiring the construction contractor to thoroughly wash all equipment at a commercial wash facility prior to entering and upon leaving the job site.

**Mitigation Measure BIO-5.** In order to avoid impacts to nesting birds, including raptors, protected under the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 and Section 3503.5, including their nests and eggs, one of the following shall be implemented:

- Vegetation removal and other ground-disturbance activities associated with construction shall occur between September 1 and January 31 when birds are not nesting; or
- If vegetation removal or ground disturbance activities occur during the nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area. Surveys shall begin prior to sunrise and continue until vegetation and nests have been sufficiently observed. The survey shall take into account acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds.

At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.). The results of the survey shall be submitted to the CDFW upon completion. The survey shall be conducted no more than one week prior to the initiation of



construction. If construction activities are delayed or suspended for more than one week after the preconstruction survey, the site shall be resurveyed.

If active nests are found, the City shall contact the CDFW and the USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.

Mitigation Measure CR-1. If cultural resources, such as chipped or ground stone, or bone are inadvertently discovered during ground-disturbance activities, work shall be stopped within 50 feet of the discovery, as required by the California Environmental Quality Act (CEQA; January 1999 Revised Guidelines, Title 14 California Code of Regulations [CCR] Section 15064.5 [f]). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the material, and offered recommendations for further action.

Mitigation Measure CR-2. If In the event that previously unidentified evidence of human burial or human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie human remains (Public Resources Code, Section 7050.5) the Shasta County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. when the commission is unable to identify a descendant or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.

## Findings

Based upon the review of the information above, implementation of the proposed project is not anticipated to have a substantial adverse effect on the environment. Therefore, there is no significant impact.

## Documentation and References

Refer to Sections I through XX of this Initial Study.

## List of Attachments

**Attachment A**

Location Maps

**Attachment B**

Project Site Plan and Facility Exhibits

**Attachment C**

Air Quality, Greenhouse Gas, and Energy Model Outputs

**Attachment D**

Biological Resource Assessment

**Attachment E**

Aquatic Resources Delineation Report

**Attachment F**

Tree Survey Report

**Attachment G**

Cultural Resources Inventory Report

**Attachment H**

Preliminary Geotechnical Engineering Investigation

**Attachment I**

Phase I Environmental Site Assessment

**Attachment J**

Facility Acoustical Analysis

**Attachment K**

SB 743 Analysis

**Attachment L**

Traffic Impact Analysis

## **Attachment A**

### **Location Maps**

**Attachment B**  
Project Site Plan and Facility Exhibits

**Attachment C**  
Air Quality, Greenhouse Gas, and Energy Model Outputs

**Attachment D**  
Biological Resource Assessment

**Attachment E**  
**Aquatic Resources Delineation Report**

**Attachment F**  
Tree Survey Report



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## **Attachment G**

### **Cultural Resources Inventory Report**

NOTE TO REVIEWER: Information contained in the *Cultural Resources Inventory for the Airport Road Distribution Center Project* (ENPLA, 2021) related on the specific location of prehistoric and historic sites is confidential and exempt from the Freedom of Information Act (FOIA) and the California Public Records Act (CPRA); therefore, site specific cultural resource investigations are not appended to this initial Study. Professionally qualified individuals, as determined by the California Office of Historic Preservation, may contact the City of Redding Development Services Department, Planning Division directly in order to inquire about its availability.

**Attachment H**  
Preliminary Geotechnical Engineering Investigation

**Attachment I**  
Phase I Environmental Site Assessment

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**Attachment J**  
Facility Acoustical Analysis

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## **Attachment K**

### **SB 743 Analysis**

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## **Attachment L**

### Traffic Impact Analysis