PUBLIC REVIEW DRAFT

ENVIRONMENTAL IMPACT REPORT

FOR THE

SANCHEZ-HOGGAN ANNEXATION

Stockton, CA

March 6, 2020

Prepared for:

City of Stockton
Department of Community Development
345 N. El Dorado Street
Stockton, CA 95202

Prepared by:

BaseCamp Environmental, Inc.
115 S. School Street, Suite 14
Lodi, CA 95240
209-224-8213

BaseCamp Environmental

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ACRONYMS AND ABBREVIATIONS USED IN THIS DOCUMENT

AB	Assembly Bill
AIA	Airport Influence Area
ALUCP	Airport Land Use Compatibility Plan
APN	Assessor's Parcel Number
ARB	California Air Resources Board
BMP	Best Management Practice
BNSF	Burlington Northern Santa Fe
BTU	British Thermal Unit
CalEEMod	California Emissions Estimator Model
CalEnviroScreen	California Communities Environmental Health Screening Tool
Cal Fire	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CDCR	California Department of Corrections and Rehabilitation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
Corps	U.S. Army Corps of Engineers
COSMUD	City of Stockton Municipal Utilities Department
dB	decibel
dBA	A-weighted decibel
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
EPAP	Existing Plus Approved Projects
ESFR	Early Suppression Fast Response
ETRIP	Employer Trip Reduction Implementation Plan
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
HVAC	heating, ventilating, and air conditioning
ITMM	Incidental Take Minimization Measure
kV	kilovolt

kWh	kilowatt-hour
LAFCo	Local Agency Formation Commission
L_{dn}	Day-Night Average Level
L_{eq}	equivalent noise level
LOS	Level of Service
mgd	million gallons per day
MRZ	Mineral Resource Zone
MS4	municipal separate storm sewer system
NAHC	Native American Heritage Commission
NO_x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
PG&E	Pacific Gas and Electric Company
PM	particulate matter
$PM_{2.5}$	particulate matter less than 2.5 micrometers in diameter
PM_{10}	particulate matter less than 10 micrometers in diameter
RCMP	Regional Congestion Management Plan
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SEWD	Stockton East Water District
SJCOG	San Joaquin Council of Governments
SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SJRTD	San Joaquin Regional Transit District
SJVAPCD	San Joaquin Valley Air Pollution Control District
SR	State Route
STAA	Surface Transportation Assistance Act
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled

1.0 INTRODUCTION

1.1 PROJECT AND EIR OVERVIEW

This document is an Environmental Impact Report (EIR) that analyzes the potential environmental impacts of the proposed Sanchez-Hoggan Annexation project, hereinafter referred to as the "project." CT Realty is the project applicant. This EIR was prepared in accordance with the California Environmental Quality Act (CEQA) and generally follows the analysis sequence of the latest Environmental Checklist in the State CEQA Guidelines (California Code of Regulations Title 14, Division 6, Chapter 3). The City of Stockton is the CEQA lead agency for this project.

The EIR evaluates the potential environmental effects of the project, which proposes the annexation and pre-zoning of two parcels by the City of Stockton for the purposes of light industrial development. The Sanchez property of 149.01 acres is located at the northwest corner of Arch Road and Austin Road, and the 20.76-acre Hoggan property is located at the northern end of Frontier Way and south of North Littlejohns Creek. Both properties, which are hereinafter referred to collectively as the "project site," are in the unincorporated area of San Joaquin County adjacent to the southeastern Stockton city limits (Figures 1-1 through 1-5)..

Proposed future development of the project site involves light industrial development of both the Sanchez and Hoggan sites, mainly with "high-cube" warehouses, which would involve a total building area of 3,087,388 square feet. The Sanchez property would accommodate 2,796,948 square feet of high-cube development in four buildings, while the Hoggan property would accommodate 290,440 square feet of high-cube development in one building. Alternatively, the Hoggan property may be used as a truck/trailer storage area for adjoining portions of the Norcal development. This EIR also considers different Anticipated Development and Market Driven intensities for the Sanchez property. Anticipated development includes proposed industrial intensities as defined by the Institute of Transportation (ITE) Transportation Manual and per the proposed industrial uses. Market Driven intensities reflect current market trends and requirements for higher intensity industrial users and distribution center activities. The purpose of presenting these options is to broaden the scope of CEQA review to encompass potential development intensities and to allow the project proponent to find an appropriate tenant based on allowed uses and current market trends.

Construction of buildings and associated improvements would require additional City approvals, assuming the proposed annexation is approved. The project would require discretionary approvals from the City of Stockton consisting of pre-zoning, parcel map, site plan review, cancellation of Williamson Act contract on the Sanchez parcel, and authorization to apply for annexation. The annexation would require approval from the San Joaquin Local Agency Formation Commission (LAFCo).

1.2 PROJECT BACKGROUND

The project site is presently within the jurisdiction of San Joaquin County. Both parcels have been utilized for agricultural services. The Hoggan parcel is current vacant while the Sanchez parcel has been utilized for row-crops in recent years. Weber Slough, a channelized stream, traverses the center of the Sanchez property in an east-west orientation. North Littlejohns Creek forms the northern boundary of the Hoggan property. The Sanchez property is accessible by several roads, but there is currently no access to the Hoggan property other than by a dirt road from a driveway to the south. Light industrial development has occurred south of the Hoggan property and west of the Sanchez property. Two California Department of Corrections and Rehabilitation (CDCR) facilities, the O. H. Close Youth Correctional Facility and the California Health Care Facility, are south of the Sanchez property.

The project site is located southeast of the City of Stockton in an area that has been traditionally envisioned for industrial development since at least 1990 and that has been developing progressively since that time. Figure 1-6 shows the location of the two properties that comprise the project site in the context of surrounding industrial development and land planned to be developed for industrial use. The project site is adjacent to a 495-acre area known initially as the Arch Road Industrial Park, which was subject to environmental review in a 1988 EIR. Supplemental documents associated with site-specific development projects in that area were subsequently prepared.

Recently, Arch Road LP received approval of a subdivision of approximately 325 vacant acres of its property that consisted of two non-contiguous parcels: an approximately 50-acre area adjacent to Arch Road, and an approximately 275-acre area adjacent to Mariposa Road. The parcels are the location of the Norcal Logistics Center project, which was the subject of an updated EIR certified by the City in 2015. Vesting Tentative Maps for the Norcal Logistics Center site, already zoned for industrial development, were subsequently approved with conditions. CT Realty proposes to expand this existing development onto the Sanchez and Hoggan properties.

Substantial industrial and transportation-related development has occurred on surrounding lands. This includes the Burlington Northern Santa Fe (BNSF) Intermodal Facility east of Austin Road, a 423-acre facility consisting of two 7,700-foot long strip tracks, 20,000 square feet of administration and maintenance buildings, 900 container and trailer parking spaces, and various support mechanical facilities. The facility has a capacity of 300,000 lifts per year using four rubber tire gantry cranes (DMJM+Harris and BNSF 2001). The nature of existing and planned non-residential development in the project vicinity is shown on Figure 1-6. In addition, there have been substantial recent improvements to the transportation infrastructure in the area, including Interstate 5 and State Route (SR) 99 interchange improvements, the Arch-Airport Road connector linking the two highways, and the widening of SR 99.

1.3 EIR REQUIREMENTS AND INTENDED USES

CEQA, enacted in 1970, requires that public agencies document and consider the potential environmental effects of the agency's actions that meet CEQA's definition of a "project." Briefly summarized, a "project" is an action that has the potential to result in direct or indirect physical changes in the environment. A project includes the agency's direct activities as well as related or closely related activities that involve public agency approvals or funding. The proposed project, including the annexation, pre-zoning, subdivision map, site approvals, and development, is considered a "project" as defined by CEQA and thus requires environmental review.

This EIR has been prepared in accordance with the requirements of CEQA and the State CEQA Guidelines. The CEQA Guidelines contain advisory and mandatory requirements for the application of CEQA to development projects. CEQA requires the designation of a "lead agency" for a project. As defined in the CEQA Guidelines, the lead agency is the public agency that has the principal responsibility for carrying out or approving a project. Since the City has the primary approval authority over the project, it is the lead agency for CEQA purposes. The San Joaquin Local Agency Formation Commission (LAFCo) has the authority to approve annexations; under CEQA, it is a "responsible agency" that would consider the information in this EIR in its review of the proposed annexation.

An EIR is intended to inform decision-makers and the public about the potentially significant adverse environmental effects of a project and to describe mitigation measures that would reduce or avoid these effects. The EIR also evaluates cumulative impacts, growth-inducing impacts, irreversible environmental effects, and alternatives to the proposed project.

As noted, this EIR generally follows the analysis sequence of the latest Environmental Checklist in CEQA Guidelines Appendix G. A revised Appendix G took effect at the beginning of 2019. The revised Appendix G has two new categories – Energy and Wildfire. Project impacts on both these issues are analyzed in this EIR. For other areas of environmental impact addressed in Appendix G, checklist questions have been revised or eliminated. The updated list of questions is addressed within this EIR in the Significance Thresholds section of each technical chapter.

Tiering is a CEQA streamlining tool that encourages use of analysis of larger-scale environmental issues addressed in previously certified EIRs for project-level CEQA documents. CEQA strongly encourages the tiering of EIRs, which "shall be tiered whenever feasible, as determined by the lead agency." CEQA Guidelines Section 15152, which describes tiering, provides that lead agencies should limit the EIR on the later project to effects that:

> Were not examined as significant effects on the environment in the prior EIR; or
>
> Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.

Those previously certified EIRs are typically programmatic documents such as General Plan EIRs, Program EIRs or Master EIRs. The previous document or analysis is incorporated into the project-level CEQA document by reference.

The City of Stockton's 2019 Envision Stockton 2040 General Plan EIR (GPEIR) considered the anticipated growth and build-out of the City as a whole, including the project site and vicinity, both of which are designated "Industrial" in the General Plan. The proposed project is consistent with this land use designation and project's proposed pre-zoning. The GPEIR found that impacts of planned 2040 development would result in significant and unavoidable impacts on agricultural land conversion, air quality, greenhouse gas emissions, traffic noise, employment growth, and traffic. In each of these cases, a Statement of Overriding Considerations was adopted where mitigation was not available or sufficient to reduce impacts to a level that would be less than significant.

CEQA Guidelines Section 15183 also provides that projects which are consistent with the development density established by existing zoning, community plan, or general plan for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The proposed project qualifies for consideration under Section 15183 requirements in that proposed industrial development is consistent in type and intensity with the General Plan's Industrial designation, and the GPEIR was certified by the Stockton City Council.

This EIR is tiered to the GPEIR with respect to previous analyses of these significant and unavoidable environmental impacts. The certified GPEIR and the adopted Statement of Overriding Considerations, listed below, are hereby incorporated by reference. These documents can be reviewed at the City of Stockton Community Development Department office at 345 N El Dorado Street, Stockton, CA.

> City of Stockton 2018. Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements, Final EIR and Mitigation Monitoring and Reporting Program. October 10, 2018. Certified by the Stockton City Council December 4, 2018.
>
> City of Stockton 2018. Findings of Fact and Statement of Overriding Considerations, Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Final EIR. Adopted by the Stockton City Council December 4, 2018.

1.4 CEQA PROCEDURES FOR THE EIR

On January 30, 2020, the City circulated a Notice of Preparation (NOP) inviting comments from interested agencies and the public as to environmental concerns that should be considered in the EIR. The 30-day comment period closed on Friday February 28, 2020 and scoping meeting was held at the Cesar Chavez Library on February 19, 2020. That meeting was attended by City staff, the applicant, and one member of the public. Appendix A contains the Notice of Preparation, NOP comments submitted to the

City, and brief discussion of topics discussed at the Scoping Meeting. The seven comment letters from agencies and interest groups received during the NOP review period are summarized in Table 1-1.

TABLE 1-1
NOP LETTERS RECEIVED

#	Date	Commenter	Concern
1	2/3/2020	California Office of Planning and Research (OPR)	Confirmation of NOP filing.
2	2/6/2020	San Joaquin County Multi-Species Habitat Conservation and Open Space	Construction must conform to Incidental Take Minimization Measures
3	2/10/2020	Caltrans District 10	Requests subsequent review once construction plans have been submitted.
4	2/24/2020	Mary Elizabeth, Sierra Club	• Growth-inducing impacts • Cumulative vs. project-specific impacts (for transportation and air quality) • Defined truck routes and travel on roads sufficiently designed to have a 50-year life. • Stormwater plan – on- and off-site • Signals – timing and location • Air quality and GHG impacts, possible use of fuel-efficient trucks, compliance with City's CAP • Zone 9 flooding and road improvement mitigations • Is detention basin unlined? If so, measures to ensure no impact to groundwater quality • Retention timing for basin, means to avoid bugs from pooling, check design • Habitat mitigation and streamflow alteration
5	2/18/20	California Valley Miwok Tribe	No issues or concerns regarding the proposed project
6	2/4/20	Native American Heritage Commission	Provides information related to California AB 52 notification and consultation requirements and other requirements related to cultural resources.
7	2/18/20	Central Valley Flood Protection Board	Describes Board's regulatory authority, identifies Littlejohns Creek as a regulated stream and notes that a Board permit may be required.

With the release of this Public Review Draft EIR and accompanying Notice of Availability, regulatory agencies and members of the public can comment on the adequacy of the environmental review during a 45-day review period. After the close of the public review period, the City is obligated to provide written responses to the comments received, and these responses, along with any necessary changes to the EIR, will be published in a Final EIR.

The Final EIR must be considered by City decision-makers prior to a decision on the project. Before the City can approve the project, it must first certify that the Final EIR was completed in compliance with the provisions of CEQA, that the City has reviewed and considered the information in the Final EIR, and that the Final EIR reflects the independent judgment of the City on the environmental impacts of the project. The City is also required to make specific findings related to each of the significant effects identified in the EIR. If the project involves any significant and unavoidable environmental effects, the CEQA findings will need to include a Statement of Overriding Considerations. Mitigation measures described in the Final EIR will be identified in a Mitigation Monitoring and Reporting Program that will ensure the mitigation measures are implemented.

In accordance with CEQA Guidelines Section 15163(c), this EIR is available for public review and comment on the dates specified in the EIR Notice of Availability, located inside of the cover of this document. Any comments or questions regarding this EIR should be submitted to the City at the following address before the close of the public review period:

City of Stockton
Community Development Department
Attention: Matt Diaz, Planning Manager
345 N. El Dorado Street
Stockton, CA 95202
E-mail: Matt.Diaz@stocktonca.gov

1.5 RELATED PROJECTS

As noted above, the Norcal Logistics Center has been approved for development of industrial uses on a subdivision of approximately 325 acres, an approximately 50-acre area adjacent to Arch Road, and an approximately 275-acre area adjacent to Mariposa Road. To date, three buildings totaling 1,696,468 square feet have been completed on the Norcal Logistics Center site, and another building of 709,556 square feet is under construction.

The City has approved changes to the Conditions of Approval for the Norcal Logistics Center as they relate to required improvements to Mariposa Road. One of the condition changes eliminates a required extension of Newcastle Road from its current terminus to Mariposa Road. The need for the extension had been based on projected traffic from buildout of the Norcal Logistics Center. However, as described in a 2018 addendum to the Norcal Logistics Center EIR, actual traffic generated by development has rendered

the extension unnecessary. Another condition would be modified such that additional access points off Mariposa Road would be allowed. A third condition would be modified so that specific frontage improvements needed to minimize traffic conflicts at the proposed Mariposa Road access points would be allowed. These access points and improvements would be interim facilities, in place until the planned widening of Mariposa Road to four lanes is implemented.

The Mariposa Lakes Specific Plan was approved by the Stockton City Council in 2008. The Mariposa Lakes site is comprised of approximately 3,810 acres of unincorporated lands north of Mariposa Road near the Sanchez property. The site is bounded by SR 4 (Farmington Road) on the north, Kaiser Road on the east, and Mariposa Road and the BNSF Railroad on the south and the west.

The Archtown Industrial Project (P09-148) has been approved on a property totaling 79 acres near the southwest corner of the intersection of Arch Road and Newcastle Road. The project consists of an approved annexation and prezone to establish industrial warehouse space, along with detention basins and other supporting infrastructure. An Initial Study/Mitigated Negative Declaration (IS/MND) for the project was adopted by the City in 2011, concurrently with approval of the project. No action has been taken subsequent to the approval; however, an application to LAFCo to annex the property to the City is currently being prepared.

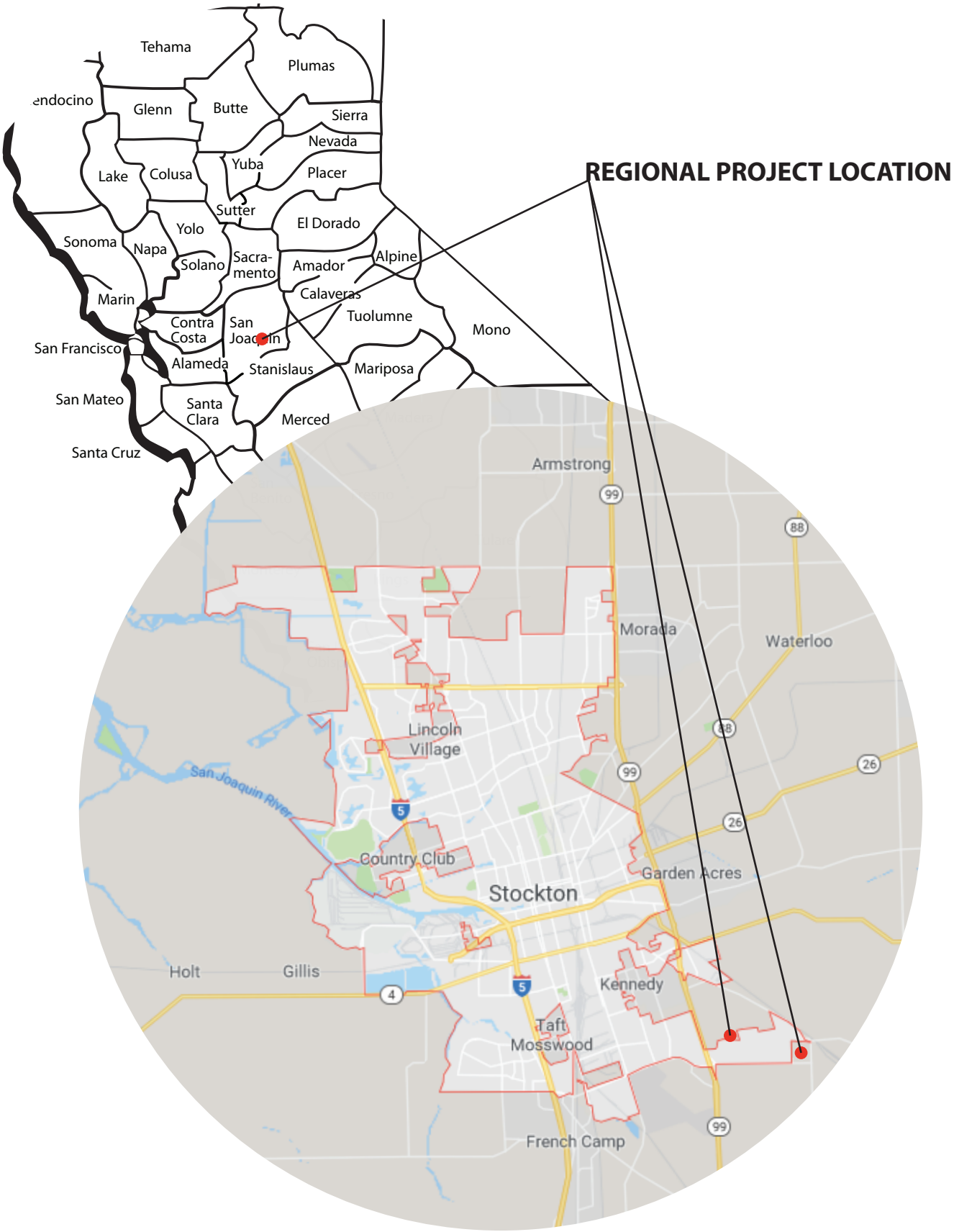

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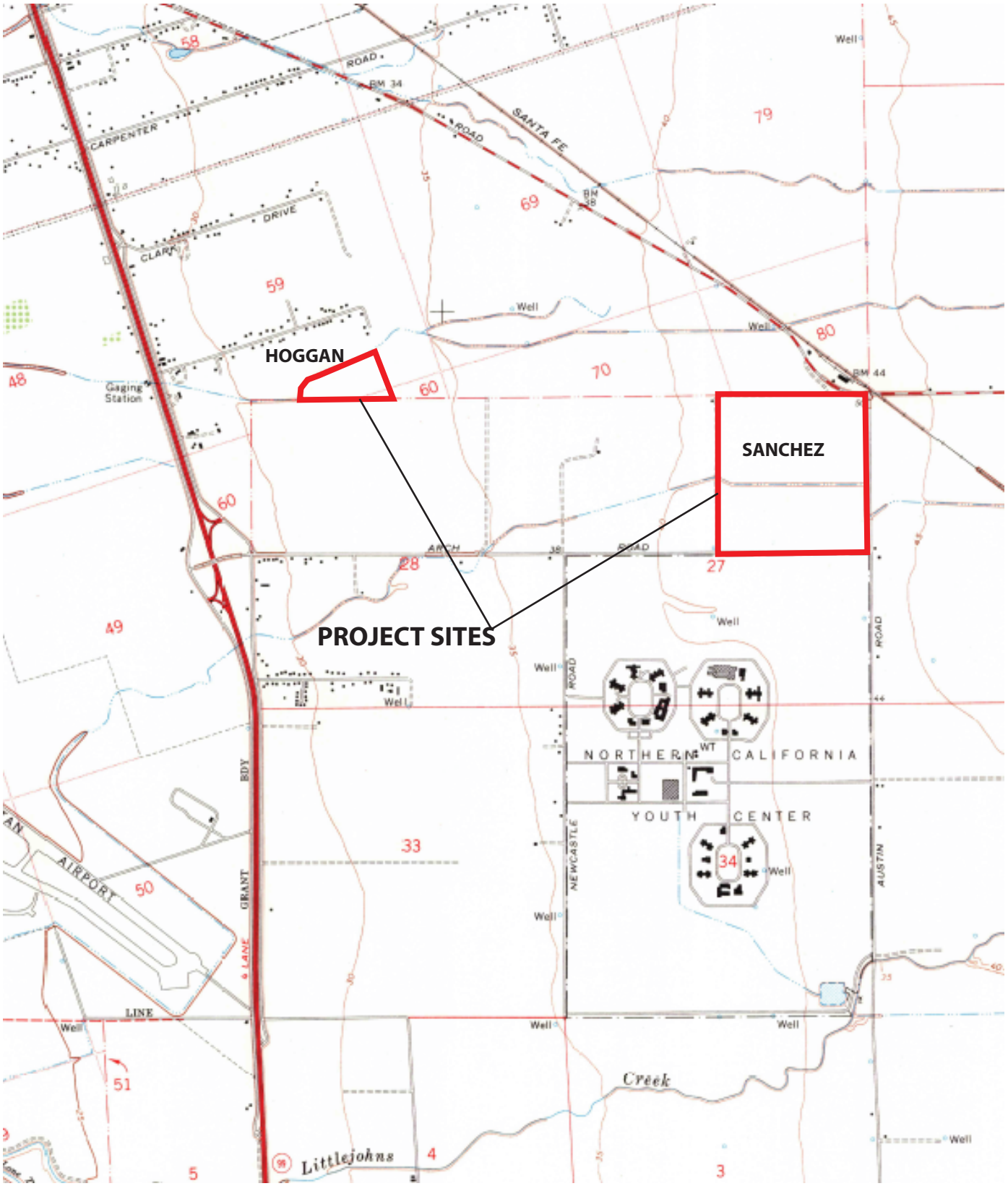
Figure 1-1
REGIONAL PROJECT LOCATION

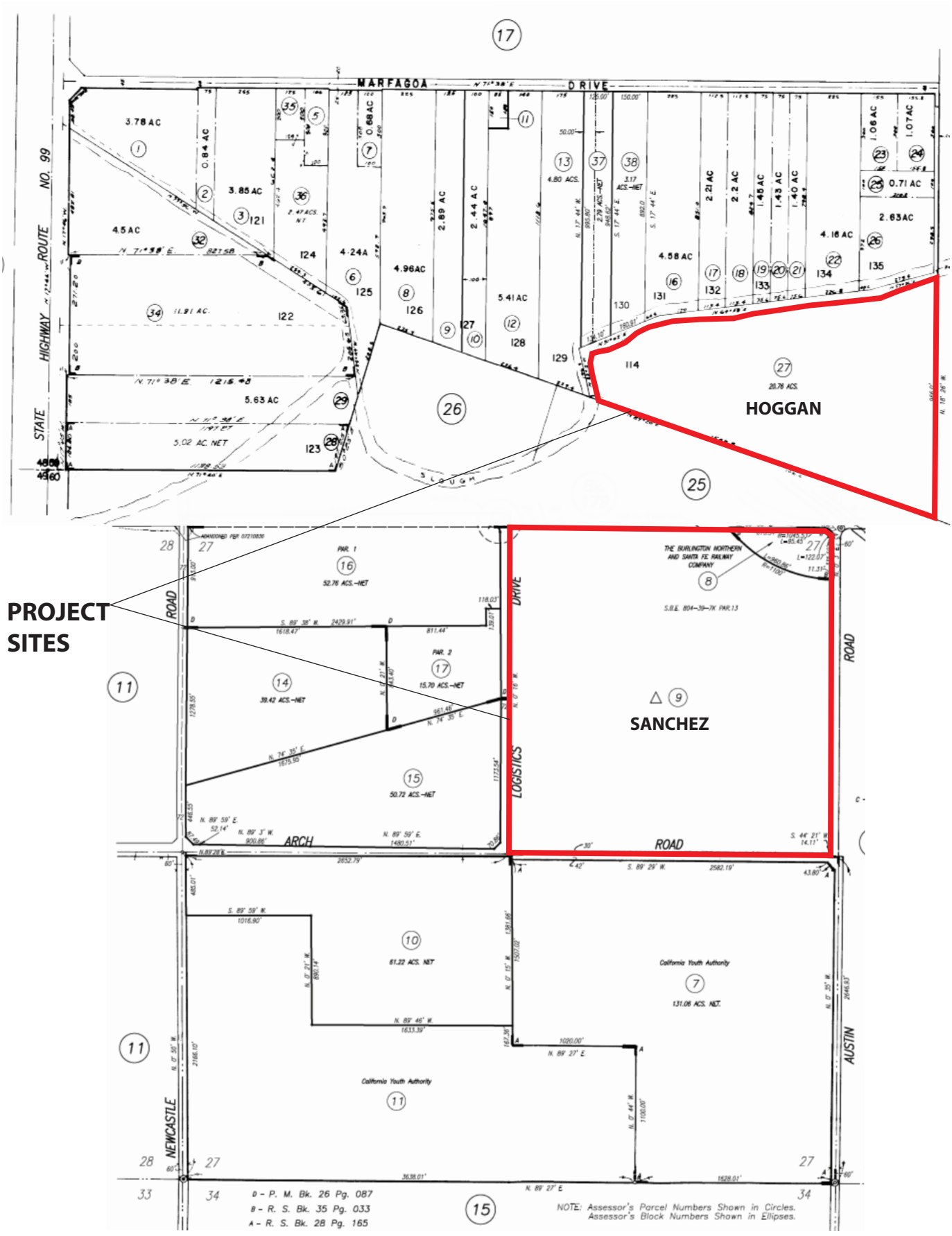
Figure 1-2
STREET MAP



SOURCE: Stockton East Quadrangle Map, 7.5 Minute Series, 1968.

SOURCE: Google Maps

Figure 1-4
AERIAL PHOTO



SOURCE: San Joaquin County Assessor's Office

Figure 1-5
ASSESSOR PARCEL MAP

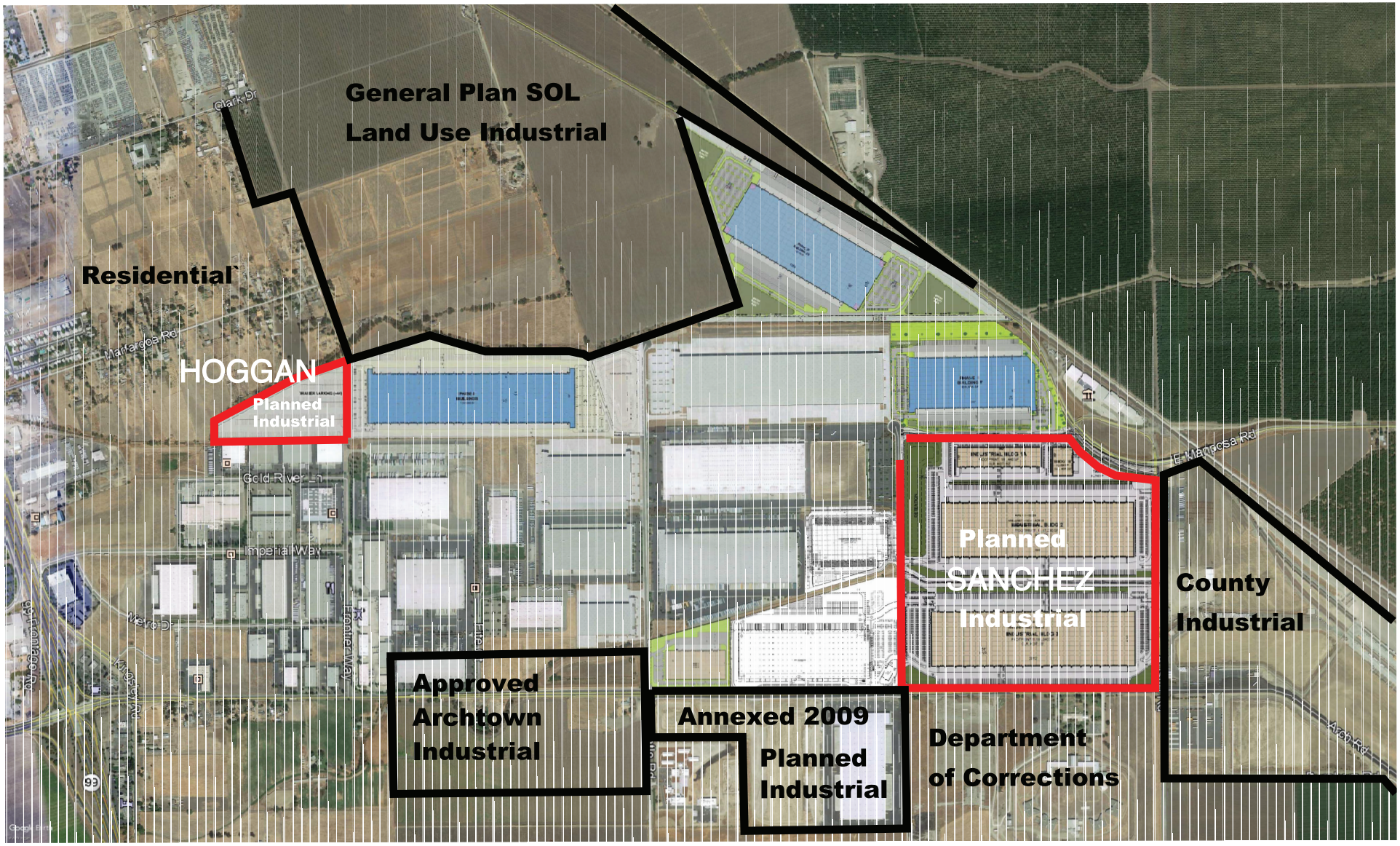


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Figure 1-6
PROJECT VICINITY INDUSTRIAL DEVELOPMENT

2.0 SUMMARY

2.1 PROJECT DESCRIPTION

The project proposes the annexation of approximately 169.77 acres into the City of Stockton (Figure 3-1). The annexation area consists of two properties: the 149.01-acre Sanchez property and the 20.76-acre Hoggan property. Both properties are in the San Joaquin County unincorporated area, adjacent to the southeastern limits of the City of Stockton. To satisfy San Joaquin LAFCo requirements regarding annexation requests, the City would pre-zone the entire project site IL - Industrial, Limited. This pre-zoning would be consistent with the proposed uses of the properties and the land uses on the adjacent Norcal Logistics Center site. The project also proposes to submit a Tentative Parcel Map for the Sanchez property, along with cancellation of the existing Williamson Act contract on that property.

Upon annexation, the project proposes to develop the Sanchez property with industrial buildings that would accommodate mainly "high cube" warehouses. A site plan for this property proposes the construction of four industrial buildings with a total building area of 2,796,948 square feet. Property development also would provide parking areas with a total of 2,726 automobile parking stalls and 154 trailer parking stalls. Approximately seven acres would be used for a detention basin at the northwest corner of the property to collect storm water runoff, which would be discharged into Weber Slough. Other portions of the property would be developed with roads or would be left undeveloped near Weber Slough. Access would be available from Logistics Drive and Austin Road adjacent to the property, as well as from an access point from Mariposa Road north of the property.

This EIR also considers different Anticipated Development and Market Driven intensities for the Sanchez property. Anticipated development includes proposed industrial intensities as defined by the ITE Transportation Manual and per the proposed industrial uses. Market Driven intensities reflect current market trends and requirements for higher intensity industrial users and distribution center activities.

The Hoggan property would be developed with one high-cube warehouse approximately 290,440 square feet in floor area, along with parking areas for 237 automobiles and 41 trailers. Two detention basins to collect runoff would be installed on the west and east sides of the property, which would be sent to the drainage system of the Norcal Logistics Center. Access would be provided by a new extension from Frontier Way to the south and from the adjacent Norcal Logistics Center site.

The City would be responsible for all the local government approvals associated with the project, except for the annexation, which would require approval by the San Joaquin LAFCo. Other agencies from whom permits or approvals would be required include the San Joaquin County Department of Public Works, the State Water Resources Control

Board, the Regional Water Quality Control Board, the Central Valley Flood Protection Board, the U.S. Army Corps of Engineers, and the California Department of Fish and Wildlife.

2.2 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The potentially environmental effects of the project are summarized in Table 2-1 at the end of this chapter, along with mitigation measures proposed to minimize these effects when required. Table 2-1 provides an indication of the significance of impacts, both before and after application of mitigation measures. As documented herein, with proposed mitigation measures, all the potential environmental effects of the project would be reduced to a level that is less than significant. The project would not involve any significant and unavoidable environmental impacts, other than traffic impacts at two intersections for which no feasible mitigation is available.

2.3 AREAS OF CONTROVERSY

A NOP for this EIR was issued with a request for comment from public agencies. Table 1-1 lists the seven comment letters received in response to the NOP. Issues brought up in the comment letters included the following:

- Conformance of construction to Incidental Take Minimization Measures
- Growth-inducing impacts
- Cumulative vs. project-specific impacts (for transportation and air quality)
- Defined truck routes and travel on roads sufficiently designed to have a 50-year life.
- Stormwater plan – on- and off-site
- Signals – timing and location
- Air quality and GHG impacts, possible use of fuel-efficient trucks, compliance with City's Climate Action Plan
- Zone 9 flooding and road improvement mitigations
- Detention basin and impact on groundwater quality
- Retention timing for basin, means to avoid bugs from pooling, check design
- Habitat mitigation and streamflow alteration
- Central Valley Flood Protection Board permit may be required

2.4 SUMMARY OF ALTERNATIVES

Chapter 19.0, Alternatives, identifies and discusses a range of reasonable alternatives to the project, including the "no project" alternative. The alternatives addressed in detail include:

- No Project
- Alternative Sanchez Property Development
- Alternative Hoggan Light Industrial Development
- Hoggan Truck/Trailer Storage Area
- Reduced Development

The No Project alternative is defined as the continuation of existing conditions on the project site, which means the site would not be annexed to the City and would remain undeveloped. This alternative would involve no action on the part of the City of Stockton, LAFCo, or other agencies. Existing zoning would remain Agriculture, and any future land uses would be consistent with this zoning. Selection of this alternative would eliminate all the significant environmental effects of the project. However, the continuation of the undeveloped state of the project site does not fulfill any of the basic objectives of the proposed project, and it would be inconsistent with the designation of the City of Stockton and San Joaquin County General Plans, both of which anticipate urban development. Also, this alternative may have potentially significant impacts such as contamination by agricultural chemicals and possible illegal dumping.

The Alternative Sanchez Property Development alternative proposes development of the Sanchez property other than the high-cube warehousing proposed by the project. For this alternative, it is assumed that the City would annex the Sanchez property and pre-zone the property as General Industrial (IG). The Hoggan property would be annexed and developed as described by the proposed project. Development under this alternative would generally have similar impacts to the proposed project. However, this alternative would not meet the objectives of the proposed project related to warehouse development. Depending on the type of industrial activity located on the Sanchez property, this alternative may have new or more severe impacts than the proposed project.

The Alternative Hoggan Light Industrial Development alternative proposes development of the Hoggan property other than the high-cube warehousing proposed by the project. For this alternative, it is assumed that the City would annex the Hoggan property and pre-zone the property as Limited Industrial (IL), as under the proposed project. The Sanchez property would be annexed and developed as described by the proposed project. Development under this alternative would have similar impacts to the proposed project. However, this alternative would not meet the objectives of the proposed project related to warehouse development. Since the Hoggan property is near rural residences, this alternative may have new or more severe impacts than the proposed project on these residences, depending on the type of industrial activity.

The Hoggan Truck/Trailer Storage Area alternative proposes development of the Hoggan property as a truck/trailer storage area for the adjacent Norcal Logistics Center. Other features of this alternative would remain the same as the proposed project, including annexation of the Hoggan and Sanchez properties and high-cube warehouse development of the Sanchez property. In general, development under this alternative would have similar impacts to those of the proposed project. Some impacts, such as visual landscapes and traffic, may be reduced. However, the alternative could involve changes in some environmental impacts, such as increased noise and diesel particulate matter emissions from trucks. With available information, it appears that these potential effects would be reduced to a less than significant level with mitigation measures. This alternative would not meet the total square footage objectives of the project, but it would expand opportunities to accommodate new industrial users into the Norcal Logistic Center development as a whole.

The Reduced Development alternative would have the project site annexed to the City of Stockton and pre-zoned as under the proposed project. Also, proposed development of the project site would be like the proposed project. However, proposed development would be reduced; specifically, the proposed light industrial development on the Sanchez property would be reduced in floor area. This alternative would be consistent with the objectives of the proposed project. The significant environmental effects of the proposed project would be lessened by this alternative. Air pollutant emissions would be reduced, as would the amount of traffic that would be generated, which would reduce traffic and noise impacts. Effects on biological resources, cultural resources, soils, hydrology, and construction noise would be the same as the proposed project and would likely require mitigation to reduce impacts.

Since the No Project Alternative would eliminate or avoid all potential environmental effects associated with the proposed project, it would be considered the environmentally superior alternative. CEQA Guidelines Section 15126.6(e)(2) requires that, if a No Project Alternative is identified as the environmentally superior alternative, then an EIR shall identify an environmentally superior alternative from the other alternatives. In accordance with this section, the Reduced Development Alternative would be considered the environmentally superior alternative after the No Project Alternative.

2.5 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

CEQA Guidelines Section 15126.2(b) states that an EIR shall discuss significant environmental effects that cannot be avoided if a proposed project is implemented. This includes significant impacts that can be mitigated but not reduce to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, the implications of these impacts, and the reasons why the project is being proposed notwithstanding their effects, should be described.

Table 2-1 of this EIR identifies all the potentially significant environmental effects of the project and the mitigation measures to address these effects. In all but one case, the proposed mitigation measures would be effective in reducing potential environmental

effects to levels that would be less than significant. Traffic impacts of the project were considered significant and unavoidable at the Arch-Airport Road and State Route 99 Ramps and Arch Road and SR 99 East Frontage Road intersections. No feasible mitigation measures were identified that could reduce this impact to a level that would be less than significant.

2.6 SUMMARY OF OTHER CEQA ISSUES

Chapter 20.0, Other CEQA Issues, discusses irreversible environmental commitments, including energy consumption for project construction and operations. The project would involve the irreversible commitment of construction materials to the construction of buildings, parking spaces, and supporting infrastructure. Also, the project would involve an essentially irreversible loss of open space and the potential biological resource values associated with it. However, construction materials would not be used in highly significant or unusual quantities when compared to similar projects, and biological resource impacts would be less than significant.

Chapter 20.0 also discusses the potential growth-inducing impacts of the project. Project impacts on population and housing would be less than significant, as the project is unlikely to induce population growth; employees would be drawn from the existing Stockton metropolitan area population. Infrastructure already exists on the Norcal Logistics Center site to which future development on the project site can connect; no major utility lines need to be extended. Because of this, the project would not have a growth-inducing impact.

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.0 AESTHETICS AND VISUAL RESOURCES			
Impact AES-1: Scenic Vistas. There are no scenic vistas available from the project site, so the project would have no impact.	NI	None required.	-
Impact AES-2: Scenic Resources. There are no significant scenic resources on the Sanchez property. Potential riparian area along North Littlejohns Creek adjacent to the Hoggan property would not be affected. No other scenic resources or scenic highways are in the area.	NI	None required.	-
Impact AES-3: Visual Character and Quality. Urban development would replace existing open space areas. New structures, landscaping and site improvements would be designed and constructed to meet the aesthetic standards of the City of Stockton as encapsulated in its design review process and adopted City design standards. Compliance with these standards would minimize project impacts.	LS	None required.	-
Impact AES-4: Light and Glare. Lighting would be installed on properties that currently have none. Compliance with Stockton Municipal Code Sections 16.36.060(B) and 16.32.070 would minimize light and glare impacts.	LS	None required.	.
5.0 AGRICULTURAL RESOURCES			
Impact AG-1: Conversion of Farmland. The Hoggan property is classified as Farmland of Local Importance, which is not Farmland as defined by the CEQA Guidelines. However, the Sanchez property is classified as Prime Farmland. Stockton General Plan 2040 EIR discusses conversion impacts. The City's Agricultural Lands Mitigation Program would compensate for loss of Prime Farmland.	LS	None required.	-
Impact AG-2: Agricultural Zoning and Williamson Act. The project site is zoned AU-20 (Agriculture-Urban Reserve), which holds land for future urban development. The Sanchez property is under a Williamson Act contract, but mitigation would remove potential conflict.	LS	None required.	.

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TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact AG-3: Indirect Conversion of Agricultural Lands. The project is in an area designated for urban development, and such development has occurred. The project would not involve any activity that would indirectly convert other agricultural land to non-agricultural uses.	LS	None required.	-
6.0 AIR QUALITY			
Impact AIR-1: Air Quality Plans and Standards – Construction Emissions. Project construction emissions would not exceed SJVAPCD significance thresholds, thereby being consistent with adopted air quality plans. Dust emissions would be reduced through the required implementation of SJVAPCD Regulation VIII, and future development would be subject to SJVAPCD's Indirect Source Rule.	LS	None required.	-
Impact AIR-2: Air Quality Plans and Standards – Operational Emissions. Project operational emissions would not exceed SJVAPCD significance thresholds.	LS	None required.	-
Impact AIR-3: Exposure of Sensitive Receptors to Criteria Pollutants. Rural residences north of Hoggan property are unlikely to be exposed to high pollutant concentrations. There are no sensitive receptors near Sanchez property. CO concentrations at street intersections would not affect sensitive receptors.	LS	None required.	-
Impact AIR-4: Exposure of Sensitive Receptors to Toxic Air Contaminants. Limited amounts of diesel PM generated by operations at Hoggan property would not affect rural residences to the north, based on facility prioritization score.	LS	None required.	-
Impact AIR-5: Odors and Other Emissions. Main odor source would be vehicle emissions, which would be localized and would dissipate rapidly.	LS	None required.	-
7.0 BIOLOGICAL RESOURCES			
Impact BIO-1: Special-Status Species and Habitats. Project development would involve the potential for impacts on foraging habitat for Swainson's hawk and burrowing owl and	PS	BIO-1: The developer shall apply to the San Joaquin Council of Governments (SJCOG) for coverage under the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan (SJMSCP). The project site shall be inspected by the SJMSCP	LS

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TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
some potential for nesting impacts.		biologist, who will recommend which Incidental Take Minimization Measures (ITMMs) set forth in the SJMSCP should be implemented. The project applicant shall pay the required SJMSCP fee, if any, and be responsible for the implementation of the specified ITMMs.	
Impact BIO-2: Riparian and Other Sensitive Habitats. No riparian areas or sensitive vegetation communities were identified on the project site.	NI	None required	-
Impact BIO-3: State and Federally Protected Wetlands. No wetlands or Waters of the U.S. were identified on the project site.	PS	BIO-2 Prior to issuance of City permits for the proposed pump station and outfall, the project applicant shall delineate wetland areas, obtain required federal and state permits and demonstrate that the project would result in "no net loss" of wetlands and/or Waters of the U.S. Wetland mitigation necessary to make this demonstration shall be included in the project or project conditions of approval	LS
Impact BIO-4: Migratory Fish and Wildlife Habitats. The presence of trees and shrubs on the project site as well as potential foraging habitat to the east of the project site may attract migratory birds. Otherwise, no impacts would occur on migratory corridors or nesting habitats.	PS	BIO-3: If vegetation removal or construction commences during the general avian nesting season (February 1 through September 15), a pre-construction survey for all species of nesting birds is recommended. If active nests are found, work in the vicinity of the nests shall be delayed until the young have fledged.	LS
Impact BIO-5: Local Biological Requirements. A Heritage Tree (oak) protected by Stockton Municipal Code Chapter 16.130 was identified on the project site. Compliance with Municipal Code would reduce impacts to a level that would be less than significant.	PS	BIO-4: Project development on the Hoggan property (APN 179-200-27) shall avoid removal of existing oak trees to the extent feasible. If removal of oak trees is required, a certified arborist shall survey the oak trees proposed for removal to determine if they are Heritage Trees as defined in Stockton Municipal Code Chapter 16.130. The arborist report with its findings shall be submitted to the City's Community Development Department. If Heritage Trees are determined to exist on the property, removal of any such tree shall require a permit to be issued by the City in accordance with Stockton Municipal Code Chapter 16.130. The permittee shall comply with all permit conditions, including tree replacement.	LS
Impact BIO-6: Habitat Conservation Plans. Project would participate in the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan	PS	Implement Mitigation Measure BIO-1.	LS

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TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
8.0 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES			
Impact CULT-1: Historical Resources. Two historical resources have been recorded on the project site, but neither were determined to be eligible for CRHR listing.	LS	None required.	-
Impact CULT-2: Archaeological and Tribal Cultural Resources. Project site is considered sensitive for archaeological and tribal cultural resources. It is possible that unknown cultural resources may be uncovered during project construction.	PS	CULT-1: Prior to construction, construction personnel shall receive brief "tailgate" training by a qualified archaeologist in the identification of buried cultural resources, including human remains, and protocol for notification should such resources be discovered during construction work. A Yokuts tribal representative shall be invited to this training to provide information on potential tribal cultural resources. CULT-2: If any subsurface historical or archaeological, resources, including human burials and associated funerary objects, are encountered during construction, all construction activities within a 50-foot radius of the encounter shall be immediately halted until a qualified archaeologist can examine these materials, initially evaluate their significance and, if potentially significant, recommend measures on the disposition of the resource. The City shall be immediately notified in the event of a discovery, and if burial resources or tribal cultural resources are discovered, the City shall notify the appropriate Native American representatives. The contractor shall be responsible for retaining qualified professionals, implementing recommended mitigation measures and documenting mitigation efforts in written reports to the City. CULT-3: If tribal cultural resources other than human remains and associated funerary objects are encountered, the City shall be immediately notified of the find, and the City shall notify the Yokuts tribal representative. The qualified archaeologist and tribal representative shall examine the materials and determine their "uniqueness" or significance as tribal cultural resources and shall recommend mitigation measures needed to reduce potential cultural resource effects to a level that is less than significant in a written report to the City, with a copy to the Yokuts tribal representative. The City will be responsible for implementing the report recommendations. Avoidance is the preferred means of disposition of tribal cultural resources.	LS

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TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact CULT-3: Human Burials. CEQA Guidelines Section 15064.5(e) describes the procedure to be followed when human remains are uncovered in a location outside a dedicated cemetery. Additional mitigation is prescribed for treatment of Native American remains.	PS	CULT-4: If project construction encounters evidence of human burial or scattered human remains, the contractor shall immediately notify the County Coroner and the City, which shall in turn notify the Yokuts tribal representative. The City shall notify other federal and State agencies as required. The City will be responsible for compliance with the requirements of California Health and Safety Code Section 7050.5 and with any direction provided by the County Coroner. If the human remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission, which will notify and appoint a Most Likely Descendant. The Most Likely Descendant will work with the archaeologist to decide the proper treatment of the human remains and any associated funerary objects in accordance with California Public Resources Code Sections 5097.98 and 5097.991. Avoidance is the preferred means of disposition of the burial resources.	LS
9.0 GEOLOGY, SOILS, AND MINERAL RESOURCES			
Impact GEO-1: Faulting and Seismicity. There are no active or potentially active faults within or near the project site. The project site would be exposed to seismic shaking, but compliance with the adopted California Building Code would minimize seismic hazards.	LS	None required.	-
Impact GEO-2: Other Geologic Hazards. The project site is not prone to landslide hazards or subsidence. Liquefaction on the project site is considered unlikely. The soils underlying the project site have not been identified as inherently unstable or prone to failure.	NI	None required.	-
Impact GEO-3: Soil Erosion. Project construction activities would loosen the soil, leaving it exposed to potential water and wind erosion. Project would be required to obtain a Construction General Permit, which has conditions that would reduce soil erosion impact, as would Stockton Municipal Code provisions.	LS	None required.	-
Impact GEO-4: Expansive Soils. Project site soils have high shrink-swell potential.	PS	GEO-1: Prior to site development plan approval, a site-specific, design-level geotechnical study shall be completed for the proposed construction areas. The study shall include an evaluation of potential geologic and soil hazards, including the presence of expansive soils. The study shall recommend design and construction features to	LS

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Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		reduce the potential impact of identified hazards on the proposed development if the hazard is considered significant. The recommendations included in the study shall be incorporated in design and construction documents and implemented during development.	
Impact GEO-5: Paleontological Resources and Unique Geological Features. The project site does not contain unique geological features any known paleontological resources; however, project construction could unearth paleontological materials of unknown significance.	PS	GEO-2: If any subsurface paleontological resources are encountered during construction, all construction activities within a 50-foot radius of the encounter shall be immediately halted until a qualified paleontologist can examine these materials, initially evaluate their significance and, if potentially significant, recommend measures on the disposition of the resource. The City shall be immediately notified in the event of a discovery. The contractor shall be responsible for retaining qualified professionals, implementing recommended mitigation measures and documenting mitigation efforts in written reports to the City.	LS
Impact GEO-6: Access to Mineral Resources. There are no identified mineral resource areas on the project site.	NI	None required.	-
10.0 GREENHOUSE GAS EMISSIONS			
Impact GHG-1: Project GHG Construction Emissions and Consistency with Applicable Plans and Policies. Unmitigated construction GHG emissions would be reduced by mitigation and by compliance with applicable State and SJVAPCD rules and regulations.	PS	GHG-1: The project shall implement the Off-Road Vehicles Best Management Practices specified in the Stockton Climate Action Plan. At least three (3) percent of the construction vehicle and equipment fleet shall be powered by electricity. Construction equipment and vehicles shall not idle their engines for longer than three (3) minutes.	
Impact GHG-2: Project GHG Operational Emissions and Consistency with Applicable Plans and Policies. Unmitigated operational GHG emissions would be reduced by project features and compliance with regulations consistent with Stockton Climate Action Plan and with State and SJVAPCD plans.	LS	None required.	-
11.0 HAZARDS AND HAZARDOUS MATERIALS			
Impact HAZ-1: Hazardous Material Transportation and Storage. Proposed warehouses may store finished goods or raw materials considered hazardous. Compliance with	LS	None required.	-

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Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
applicable local, state, and federal regulations would minimize impacts.			
Impact HAZ-2: Hazardous Material Releases. Project construction and operations create a potential for hazardous material releases. The required SWPPP and other typical contractor practices shall minimize construction impacts. Compliance with applicable local, state, and federal regulations would minimize operational impacts. No schools are located within one-quarter mile of the project site.	LS	None required.	-
Impact HAZ-3: Hazardous Material Sites. No hazardous material sites were identified on or adjacent to project site. However, residual agricultural chemicals may exist on the Sanchez property. Mitigation would require assessment of the property and remediation if necessary.	LS	None required.	.
Impact HAZ-4: Airport Hazards. Proposed development would be consistent with allowable land uses in safety zones established in the Stockton Metropolitan Airport ALUCP.	LS	None required.	-
Impact HAZ-5: Interference with Emergency Vehicle Access and Evacuations. Neither project construction nor operations would require closure or any major restriction on use of adjacent streets.	LS	None required.	-
Impact HAZ-6: Wildfire Hazards. Project is in an urbanizing area that has been farmed intensively and has not been designated a fire hazard area by Cal Fire.	LS	None required.	-
12.0 HYDROLOGY AND WATER QUALITY			
Impact HYDRO-1: Surface Water Resources and Quality. Construction activities could loosen soils that could eventually enter nearby surface waters. Compliance with local water quality plans, permits, and regulations would minimize impacts.	LS	None required.	-
Impact HYDRO-2: Groundwater Resources and Quality. Project would be served by the City's water system, which relies in part om groundwater. Project can be accommodated from City's existing supplies without requiring additional	LS	None required.	-

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Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
groundwater. The project would not significantly affect recharge of local subbasin.			
Impact HYDRO-3: Drainage Patterns and Runoff. Project would alter existing drainage patterns and runoff volumes, but project features and connection to existing City storm drainage system would reduce impacts. Issues associated with water quality of runoff would be mitigated.	LS	None required.	-
Impact HYDRO-4: Release of Pollutants in Flood, Tsunami, and Seiche Zones. The project site is within a FEMA-designated 100-year floodplain; however, preparation and implementation of Hazardous Materials Business Plan would reduce potential release of hazardous materials during any floods. Project site is not within a 200-year flood zone. The project site would not be subject to flooding from dam or levee failure or from seiches or tsunamis.	LS	None required.	-
Impact HYDRO-5: Consistency with Water Quality and Groundwater Management Plans. The project would comply with applicable water quality plans. It is expected that future development would be required to comply with any adopted sustainable groundwater management plans.	LS	None required.	-
13.0 LAND USE, POPULATION, AND HOUSING			
Impact LUP-1: Division of Communities. The area surrounding the project site is a combination of vacant parcels, agricultural uses, and light industrial development. This does not constitute a community that could be divided by the project. The proposed project would not separate any similar land uses from one another.	NI	None required.	-
Impact LUP-2: Conflict with Applicable Plans, Policies, and Regulations. The project would be consistent with applicable land use plans of the City and County. Project may conflict with LAFCo policies preserving agricultural land, but property would be subject to the City's Agricultural Lands Mitigation Program. Also, the project site is within the City's sphere of influence, and the Sanchez property is within the 10-year planning horizon for the City of Stockton.	LS	None required.	-

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TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact LUP-3: Inducement of Population Growth. While the commercial development would provide employment opportunities, these opportunities would be limited in number and are expected to be filled mainly by existing residents.	LS	None required.	-
Impact LUP-4: Displacement of Housing and People. The project site is vacant and has no housing or residents.	NI	None required.	-
14.0 NOISE			
Impact NOISE-1: Increase in Noise Levels in Excess of Standards-Traffic. Traffic generated under Existing Plus Approved Projects Plus Project conditions would minimally increase traffic noise levels along local roads.	LS	None required.	-
Impact NOISE-2: Increase in Noise Levels in Excess of Standards-Other Project Noise. Noise from trailer parking and truck loading/unloading would not substantially affect any nearby sensitive land uses.	LS	None required.	-
Impact NOISE-3: Increase in Noise Levels in Excess of Standards-Construction. Construction activities may potentially increase ambient noise at residences near the Hoggan property above City standards.	PS	NOISE-1: Construction activities shall adhere to the requirements of the City of Stockton Municipal Code with respect to hours of operation. The City shall limit construction activities on the Hoggan property to the hours of 7:00 a.m. to 10:00 p.m., Monday through Saturday, except for concrete pouring related to building construction. No construction shall occur on Sundays or national holidays without a written permit from the city. All equipment shall be in good working order and shall be fitted with factory-equipped mufflers. Should the project necessitate construction outside of the specified hours, the applicant shall request the Community Development Director's approval of such activities. The applicant shall accompany the request with evidence that the proposed activity will not create a noise disturbance across a residential property line	LS
Impact NOISE-4: Groundborne Vibrations. Earth-moving equipment may generate some groundborne vibrations, but not at levels perceptible by sensitive receptors.	LS	None required.	-
Impact NOISE-5: Airport and Airstrip Noise. The project site is outside noise contours established by the Stockton	NI	None required.	-

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Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Metropolitan Airport ALUCP. No private airstrips are in the vicinity.			
15.0 PUBLIC SERVICES AND RECREATION			
Impact PSR-1: Fire Protection Service. New or expanded facilities may be required in the future, but project would not trigger this requirement. Public Facility Fees will be paid, and future facilities would be subject to CEQA review. Sprinkler systems required by mitigation would control potential fires while Stockton Fire Department responds to calls.	PS	PSR-1: The developer shall incorporate Early Suppression Fast Response fire sprinkler systems in the project building design and construction. The Stockton Fire Department shall review and approve such systems prior to their installation.	LS
Impact PSR-2: Police Protection Services. New or expanded facilities may be required in the future, but project would not trigger this requirement. Public Facility Fees will be paid, and future facilities would be subject to CEQA review.	LS	None required.	-
Impact PSR-3: Schools. The project involves industrial development, which does not directly generate new student load. New industrial development would be responsible for the payment of school impact fees.	LS	None required.	-
Impact PSR-4: Parks and Recreational Services. The project would not involve any direct effects on parks or recreational facilities, nor would it generate a demand for new or expanded recreational facilities or services.	LS	None required.	-
Impact PSR-5: Other Public Facilities. The project would not generate additional demand for library, hospital, and courthouse services, and therefore would not require new or expanded facilities.	LS	None required.	-
16.0 TRANSPORTATION			
Impact TRANS-1: Consistency with CEQA Guidelines Section 15064.3(b). Compared with existing land use designations, the project would generate less VMT and would therefore be consistent with CEQA Guidelines.	LS	None required.	-
Impact TRANS-2: Motor Vehicle Transportation Plans-Intersections. Under Existing Plus Approved Projects Plus Project conditions, only three intersections affected by the	LS/PS	Less than significant (proposed project), Significant and unavoidable (Market Driven Project)	LS/SU

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Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
project would not operate at LOS above minimally acceptable City of Stockton standards. However, one of these facilities would operate within standards of the City's Transportation Impact Guidelines with implementation of mitigation. Mitigation is not feasible at the other two facilities, so impacts at these facilities would be significant and unavoidable.		TRANS-1: The project applicant shall contribute fair-share costs to the installation of a traffic signal at the intersection of Arch Road and Frontier Way and related improvements. If needed to meet short-term traffic needs, the City may require applicant to design and construct the signal, subject to reimbursement. The project applicant shall submit a traffic analysis for the City's approval to determine if the intersection improvements can be aligned with development related impacts should the proposed site be constructed in phases. Significance After Mitigation (Market Driven Project): Less than significant at the Arch Road/Frontier Way intersection, but significant and unavoidable at the Arch-Airport Road & State Route 99 Ramps and Arch Road & SR 99 East Frontage Road intersections.	
Impact TRANS-3: Motor Vehicle Transportation Plans-Roadway Segments. Under Existing Plus Approved Projects Plus Project conditions, only two roadway segments affected by the project would not operate at LOS above minimally acceptable City of Stockton standards. However, these facilities would operate within standards of the City's Transportation Impact Guidelines. No mitigation is required, and project would not conflict significantly with motor vehicle transportation plans.	LS	None required.	-
Impact TRANS-4: Motor Vehicle Transportation Plans-Ramp Junctions. Under Existing Plus Approved Projects Plus Project conditions, three ramp junctions affected by the project would not operate at LOS above minimally acceptable City of Stockton standards. However, these facilities would operate within standards of the City's Transportation Impact Guidelines. No mitigation is required, and project would not conflict significantly with motor vehicle transportation plans.	LS	None required.	-
Impact TRANS-5: Motor Vehicle Transportation Plans-Truck Routes. Project would not affect existing truck routes and would not conflict significantly with motor vehicle transportation plans applicable to trucks.	LS	None required.	-
Impact TRANS-6: Conflicts with Non-Motor Vehicle Transportation Plans. The project would not conflict with	LS	None required.	-

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Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
non-motor vehicle transportation plans or their implementation.			
Impact TRANS-7: Safety Hazards. The traffic impact study did not identify any traffic hazards that would result from the project. Project construction would involve routine but potential traffic hazards, but contractors will be required to provide traffic safety control as warranted.	LS	None required.	-
Impact TRANS-8: Emergency Access. Adequate emergency access would be provided to the project site.	LS	None required.	-
17.0 UTILITIES AND ENERGY			
Impact UTIL-1: Wastewater Services and Facilities. City has adequate capacity at its treatment plant to accommodate project. Existing sewer lines are in vicinity and are adequately sized.	LS	None required.	-
Impact UTIL-2: Water Services and Facilities. City has adequate water supplies for project. Existing water lines are in vicinity.	LS	None required.	-
Impact UTIL-3: Stormwater Services and Facilities. Additional drainage can be accommodated with no significant impacts.	LS	None required.	-
Impact UTIL-4: Solid Waste. The project would not generate a substantial demand for solid waste services. Existing landfills in the County would have adequate capacity to accommodate project solid waste. The project would comply with applicable federal, state and local statutes and regulations related to solid waste.	LS	None required.	-
Impact UTIL-5: Energy and Telecommunications Facilities. Existing electrical, natural gas, and telephone lines are available near the project site.	LS	None required.	-
Impact UTIL-6: Project Energy Consumption. The project would not consume energy in a manner that is wasteful, inefficient, or unnecessary.	LS	None required.	-

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3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The project site, consisting of two properties, is in the San Joaquin County unincorporated area, adjacent to the southeastern limits of the City of Stockton (Figures 1-1 through 1-5). The 149.01-acre Sanchez property, consisting of Assessor's Parcel Number (APN) 181-100-09, is at the northwest corner of the intersection of Arch Road and Austin Road. The 20.76-acre Hoggan property, consisting of APN 179-200-27, is between North Littlejohns Creek and existing development along the north side of Gold River Lane. The two properties are separated by approximately one mile.

The Sanchez property is shown on the Stockton East U.S. Geological Survey 7.5-minute quadrangle map within Section 27 of Township 1 North, Range 7 East, Mt. Diablo Baseline and Meridian. The Hoggan property is shown on the Stockton East 7.5-minute quadrangle map within Sections 59 and 60 of the Campo de los Franceses land grant of Township 1 North, Range 7 East, Mt. Diablo Baseline and Meridian. The approximate latitude of the Sanchez property portion of the project site is 37° 54′ 30″ North, and the approximate longitude is 121° 11′ 18″ West.

3.2 PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) requires that the project description contain a clearly written statement of project objectives, including the underlying purpose of the project. The statement of project objectives is an important determinant for the lead agency when it develops a reasonable range of alternatives to evaluate in the EIR.

The primary private-sector objectives for the proposed project include:

- The expansion and further development of the existing Norcal Logistics Center area in southeast Stockton by adding suitable land area for development of industrial warehousing and distribution uses.
- To provide industrial development with the proposed project site as contemplated by the Stockton General Plan 2040. Stockton General Plan Policy LU-4.1 encourages large-scale development proposals in appropriate locations that include significant numbers of higher-wage jobs and local revenue generation.
- The proposed project would take advantage of existing development-ready infrastructure and providing for project design flexibility in the allowable number and size of parcels and industrial structures, thereby maximizing the industrial development potential of the site.

- The project seeks to comply with the natural resource management objectives of the Stockton General Plan 2040 by placing new industrial development in an area where potential impacts to sensitive natural resources are or can be reduced or avoided through site design, phasing and landscaping.

3.3 PROJECT DETAILS

The project proposes to annex two properties to the City of Stockton and pre-zone these properties for future development of light industrial land uses, primarily "high-cube" warehouses. While a formal site plan submittal for the Sanchez parcel is included as part of the requested entitlements, a detailed site plan for the Hoggan parcel has not been submitted. Potential development of the Hoggan parcel, illustrated on Figure 3-5, is likely to be related to surrounding industrial uses. The details of both are discussed below.

3.3.1 Annexation and Pre-zoning

The proposed project includes the annexation of approximately 169.77 acres into the City of Stockton (see Figure 1-2). The annexation area includes APN 181-100-09, which is the 149.01-acre Sanchez property (Figure 3-1), and APN 179-200-27, which is the 20.76-acre Hoggan property (Figure 3-2). Also proposed for annexation are the segment of Arch Road adjacent to the Sanchez property and the segment of Austin Road from the intersection with Arch Road to the intersection with Mariposa Road.

The City would submit an annexation application to the San Joaquin Local Agency Formation Commission (LAFCo), which would be responsible for a decision on the annexation. LAFCo's policies with respect to proposed annexations are specified in its Change of Organization Policies and Procedures, adopted in 2007 and subsequently amended. Key considerations of LAFCo in determining the appropriateness of an annexation include if the annexation would constitute a logical expansion of a city boundary and if the annexation area would be provided with public utilities and services in an efficient manner.

Both the Sanchez and Hoggan properties are currently zoned by the County as AG-40 – General Agriculture with a 40-acre minimum parcel size. The project would include a request that the City pre-zone the entire project site Industrial, Limited (IL). This pre-zoning would be consistent with the zoning of the adjacent Norcal Logistics Center site, as well as with the current Industrial designation of the properties under the Stockton General Plan. The IL zone generally allows light manufacturing uses that may generate more nuisance impacts than acceptable in commercial zoning districts and whose operations are totally conducted indoors. Stockton Municipal Code Section 16.20.020 has a table indicating allowable land uses within the IL zoning district.

Pre-zoning would require a recommendation for approval from the Stockton Planning Commission and final approval by the City Council. The pre-zoning would take effect upon annexation of the project site.

3.3.2 Tentative Parcel Map

The proposed project includes a request for City approval of a Tentative Parcel Map for the Sanchez property (Figure 3-3). The proposed Tentative Parcel Map would divide the Sanchez property into four parcels. One parcel would include the entire area south of Weber Slough. The other three parcels would be north of Weber Slough, divided in a manner reflecting the proposed industrial structure development. Approximately 7.32 acres would be a remainder parcel.

The proposed Tentative Parcel Map also defines a 25-foot maintenance easement dedication from the top of bank along both sides of Weber Slough, along with street dedications for Arch Road, Austin Road, and the proposed street extension from the Austin Road/Mariposa Road intersection onto the project site. It also dedicates sanitary sewer and storm drainage easements, including one for the proposed storm drainage pump station adjacent to Weber Slough.

3.3.3 Cancellation of Williamson Act

The Sanchez parcel is currently under Williamson Act contract. This contract must be terminated by the City prior to the conversion of land from agricultural use to industrial. Per Stockton's Municipal Code Chapter 16.236, the Stockton City Council is the reviewing authority for Williamson Act Cancellation requests. An application for cancellation of the Williamson Act contract will be submitted following City certification of this EIR and its subsequent decisions on the project.

3.3.4 Site Plan Review

The project includes a formally submitted site plan for development of the Sanchez parcel (Figure 3-4). A site plan for development of the Hoggan parcel is expected to be submitted later, although conceptual plans for development of this parcel are shown on Figure 3-5. Proposed site development on the Sanchez parcel and potential development on the Hoggan parcel are detailed in Section 3.3.5 below. Subsequent engineering and architectural design submittals to the City will be required for the review of the building architecture and construction of onsite and offsite improvements consistent with the proposed site plans.

3.3.5 Project Details

Upon annexation, the project site is proposed to be developed with light industrial land uses, mainly high-cube warehouses. A "high-cube warehouse" is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of approximately 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and, to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical high-cube warehouse has a high level of on-site automation and logistics management, which enable highly efficient processing of goods through the warehouse. There are five types of high-cube warehouses (ITE 2016):

- Transload – usually pallet loads or larger handling products of manufacturers, wholesalers/distributors, or retailers with little or no storage durations.
- Short-Term Storage – products held on-site for a short time.
- Cold Storage – warehouse with permanent cold storage in at least part of the building.
- Fulfillment Center – storage and direct distribution of e-commerce products to end users (e.g., Amazon).
- Parcel Hub – transload function for a parcel delivery company.

The project proposes a total of 3,087,388 square feet of building area for high-cube warehouse and ancillary office space, with potential maximum development of 3,088,416 square feet, along with 2,963 automobile parking stalls and 195 truck/trailer parking stalls. Detailed information on the development of each property that constitutes the project site is provided below. It should be noted that the type and timing of development that would actually occur will depend upon market conditions, and the actual businesses that occupy the proposed buildings will be determined by the transactions that occur between the building owners and the tenants/purchasers of the building space.

Sanchez Property Development

Figure 3-4 shows a proposed site plan for development of the Sanchez property. Table 3-1 shows the proposed Sanchez property development. Of the total 2,796,948 square feet proposed for development, 419,543 square feet would be for ancillary office space; the remainder would be for light industrial/warehouse use.

TABLE 3-1
PROPOSED SANCHEZ PROPERTY DEVELOPMENT

Land Use	**Site Acres**	**Building Footprint (square feet)**	**Building Floor Area (square feet)**	**Auto Parking Stalls**	**Trailer Parking Stalls**
Industrial Buildings 1A and 1B	17.84	244,440	268,884	380	0
Industrial Building 2	56.07	1,117,200	1,228,920	1,162	72
Industrial Building 3	60.33	1,181,040	1,299,144	1,184	82
Detention Basin	7.21	-	-	-	-
Roads	0.24	-	-	-	-
Weber Slough (not developed)	7.32	-	-	-	-
Total	**149.01**	**2,542,680**	**2,796,948**	**2,726**	**154**

A total of 2,726 automobile parking stalls, 55 of which would be accessible to drivers with disabilities, and 154 truck/trailer parking stalls would be provided throughout the property. A detention basin to collect storm water drainage, 7.21 acres in area, would be constructed at the northwest corner of the property within the remainder parcel designated on the proposed Tentative Parcel Map. Another 7.32 acres is occupied by a corridor along Weber Slough approximately 100 feet in width that would not be developed. The remaining acreage would be used for on-site roads.

Landscaping would occupy approximately 5% of the property area. The landscaping would be installed at specific locations on the property, including a strip along Arch Road, strips bordering the north and south banks of Weber Slough, and areas surrounding Industrial Buildings 1A and 1B. Landscape plans would be submitted to the City, and the plans shall be consistent with the standards set forth in Stockton Municipal Code Section 16.56.040.

Access to the property would be from the existing Logistics Drive, with three driveways providing access to the parking and loading areas of the buildings. Four driveways providing access to the property are proposed off the existing Austin Road. In addition, the Sanchez property would be accessible from the north via a driveway from Mariposa Road. All driveways would allow for all turns except for the southernmost driveway off Austin Road, which is anticipated to be a "right-in, right-out" driveway. Curb, gutter and sidewalk would be installed along existing undeveloped street frontage in accordance with City standards.

Utility service for the property, including sewer, water and storm drainage, would be provided by the City of Stockton from existing lines in the adjacent public streets. As noted, a detention basin would be constructed at the northwest corner of the property, with other interconnected sub-basins, which would accommodate runoff from the property. Collected runoff within the basin would be discharged into Weber Slough. A pump station and outfall would be constructed adjacent to the slough, and an electronic device would control discharges from the basin. Regulated electrical, gas, and communication utilities would be extended to the property from existing facilities in the area. Street lighting has been installed along Logistics Drive, and existing utility poles and lines are along Arch Road and Austin Road.

Sanchez Construction

Construction on the Sanchez property would involve grading and excavation as required to accommodate the proposed new buildings and site improvements. No trees are on the property, so no removal of trees or shrubs would occur. The project would be graded and recompacted as required to establish desired subgrades for proposed aggregate base and pavement, which would be imported and placed on the site. Building, signage, and light standard foundations, the detention basin, and underground utility lines would be excavated where needed. Construction of buildings, site improvements, and landscaping would proceed as sequenced by the contractor, in accordance with plans and specifications approved by the City. Project construction would be accomplished using conventional equipment.

As noted, property development would involve the construction of required frontage improvements, including signalization improvements, concrete curb, gutter, and sidewalk along the adjacent public roads. Onsite wastewater and water lines would be installed and connected to offsite mains. Onsite storm drainage lines would be provided by a network of drainage swales and pipes that connect to the proposed detention basin and pump station discharging to Weber Slough. At this time, no specific utility or infrastructure plans have been prepared for the property.

Hoggan Property Development

Figure 3-5 shows anticipated development for development of the Hoggan property. As indicated on Figure 3-5, the property is adjacent to and west of the Building 8 area of the Norcal Logistics Center site. Table 3-2 shows the potential Hoggan property development. This amount is consistent with development in the surrounding area. The site plan proposes the construction of one industrial building, named Building 9 on Figure 3-5, with a total building area of 290,440 square feet. The amount of square footage dedicated to any warehouse use or office use on the Hoggan property is not known at this time. Clearance height would be 36 feet.

TABLE 3-2
ANTICIPATED HOGGAN PROPERTY DEVELOPMENT

Land Use	**Acres**	**Building Floor Area (square feet)**	**Auto Parking Stalls**	**Trailer Parking Stalls**
Industrial Building 9	14.35	290,440	237	41
Detention Basins	4.60	-	-	-
Undeveloped	1.81	-	-	-
Total	**20.76**	**290,440**	**237**	**41**

Anticipated development on the Hoggan property could accommodate a total of 237 automobile parking stalls, eight of which would be for drivers with disabilities, and 41 trailer parking stalls. The remaining acreage is within a 50-foot setback from the south bank of North Littlejohns Creek that would remain undeveloped, as required by an agreement with the U.S. Fish and Wildlife Service (USFWS - see Chapter 7.0, Biological Resources).

Access to the property would be provided by an extension from Frontier Way to the south. The extension would start from the endpoint of Frontier Way, where it turns westward and becomes Gold River Lane. It would be constructed within an existing access easement to the Hoggan property. A secondary entrance is proposed to be constructed to the site from the Building 8 area, subject to availability of access rights, and would intersect with the extension from the existing driveway.

Sewer and water utility services for the property would be provided by the City of Stockton from existing lines near the site. As noted, two detention basins approximately 4.6 acres in area would be constructed on the property to collect storm drainage. These basins would be connected to the drainage system serving the Norcal Logistics Center site via an existing drainage main that extends along the southern boundary of the Building 8 area, ending at the area's western boundary. Regulated electrical, gas, and communication utilities would be extended to the property from existing facilities in the area.

As an alternative to warehouse development, the Hoggan property could be used as a truck/trailer storage area for adjacent industrial development at the Norcal Logistics Center. Chapter 19.0, Alternatives, describes this development alternative. In brief, the Hoggan property would accommodate as many as 489 truck and trailer parking spaces. No buildings or other structures would be constructed. Access to this truck/trailer storage area would be the same as that for the proposed warehouse development, although the primary point of access would likely be from the Norcal Logistics Center. For the purposes of this CEQA analysis, the warehouse development of the Hoggan property is assumed. However, Chapter 19.0, Alternatives, discusses the potential environmental impacts of the truck/trailer storage area as compared to the warehouse development.

Hoggan Construction

As with the Sanchez property, construction on the Hoggan property would involve grading and excavation as required to accommodate the proposed new building and site improvements, including drainage. No trees are on the property, except along North Littlejohns Creek within the setback area, so no removal of trees or shrubs would be required. The project would be graded and recompacted as required to establish desired subgrades for proposed aggregate base and pavement, which would be imported and placed on the site. Building, signage, and light standard foundations, the detention basins, and underground utility lines would be excavated where needed. Construction of the building and site improvements would proceed as sequenced by the contractor, in accordance with plans and specifications approved by the City. Project construction would be accomplished using conventional equipment.

As noted, an extension from Frontier Way would be constructed. The extension would be consistent with City standards and specifications. Onsite wastewater and water lines would be installed and connected to offsite mains. Onsite storm drainage lines would be part of a network that connects to the proposed detention basins, which in turn would be connected to the Norcal Logistics Center drainage system. As with the proposed Sanchez development, no specific utility or infrastructure plans have been prepared for the Hoggan property at this time.

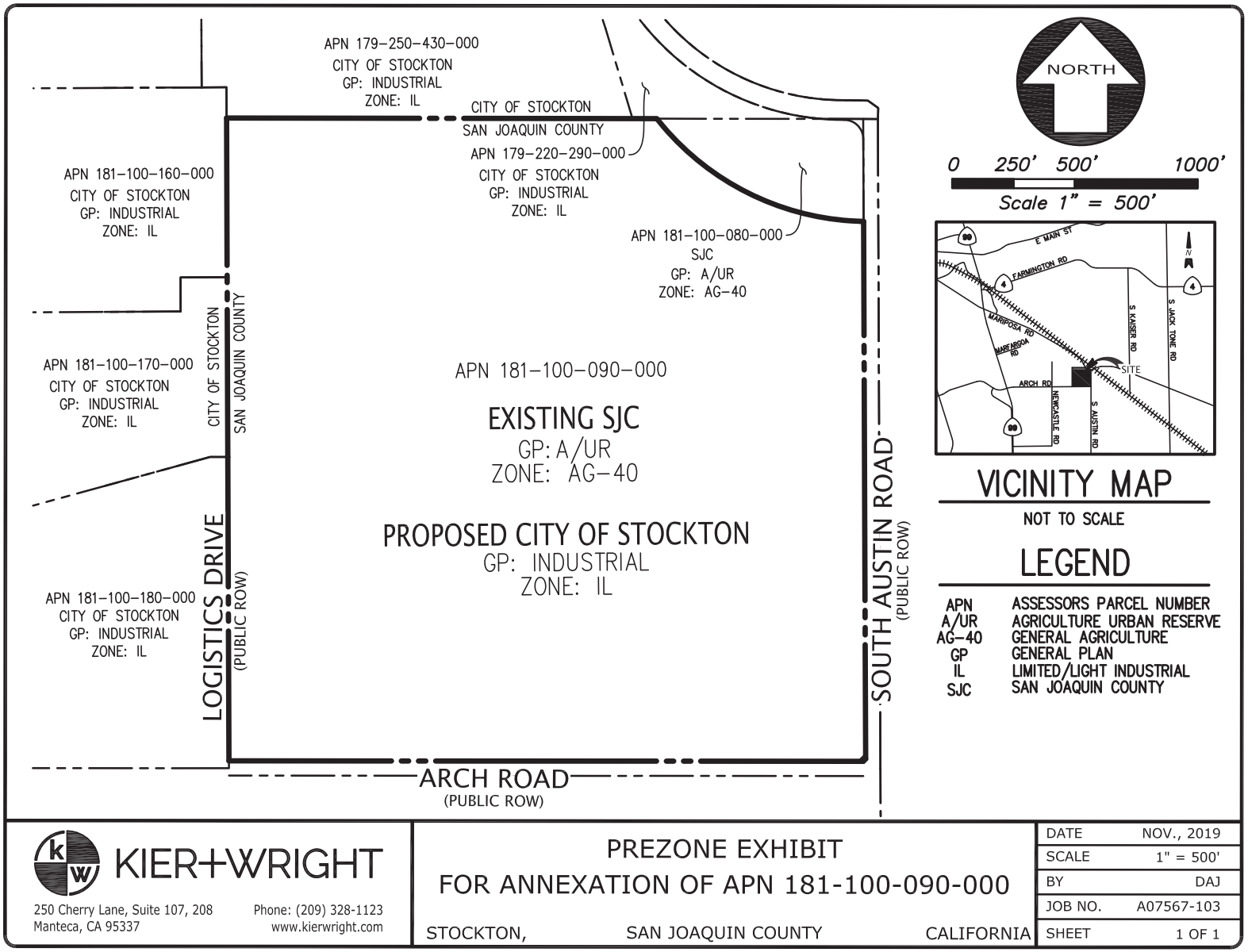
3.4 PERMITS AND APPROVALS

Table 3-4 provides a summary of permits and approvals that would be required for the project.

TABLE 3-3
REQUIRED PERMITS AND APPROVALS FOR PROJECT

Agency	Permit/Approval
City of Stockton, City Council	Certification of Final Environmental Impact Report, adoption of CEQA findings and mitigation monitoring program Approval of Tentative Parcel Map Approval of application for annexation, including pre-zoning of project site Approval of Williamson Act contract cancellation
City of Stockton, Planning Commission	Recommendations to the City Council on all land use and development actions Land Development Permit approval for future development
City of Stockton, Public Works Department	Approval of subdivision improvement plans Approval of site improvement plans Encroachment permits for road work (City roads) Approval of storm drainage facilities
City of Stockton, Municipal Utilities Department	Compliance with City of Stockton construction and post-construction storm water quality requirements Connections to City's water, sewer, and storm drainage systems
San Joaquin Local Agency Formation Commission	Approval of annexation application, including a City Service Plan showing capability of providing municipal services to the properties
San Joaquin County Department of Public Works	Encroachment permit for road work (County roads)

State Water Resources Control Board	Compliance with Construction General Permit and Industrial General Permit requirements through City MS4 permit requirements.
Regional Water Quality Control Board, Central Valley Region	Section 401 Water Quality certification in connection with U. S. Army Corps of Engineers Section 404 Permit
Central Valley Flood Protection Board	Permit for construction activities within Board jurisdiction
U. S. Army Corps of Engineers	Section 404 Permit for Storm Drainage Pump Station Discharge and other modifications to Weber Slough.
California Department of Fish and Wildlife	Section 1600 (LSAA) Permit for Storm Drainage Pump Station Discharge and other modifications to Weber Slough



KIER+WRIGHT

250 Cherry Lane, Suite 107, 208
Manteca, CA 95337

Phone: (209) 328-1123
www.kierwright.com

PREZONE EXHIBIT
FOR ANNEXATION OF APN 181-100-090-000
STOCKTON, SAN JOAQUIN COUNTY CALIFORNIA

DATE	NOV., 2019
SCALE	1" = 500'
BY	DAJ
JOB NO.	A07567-103
SHEET	1 OF 1

Z:\2007\A07567-103\DWG\SURVEY\MAPPING\A07567-103 EXHIBITS.dwg 11-15-19 02:05:23 PM kwilkins

Figure 3-1
ANNEXATION AND PREZONING, SANCHEZ

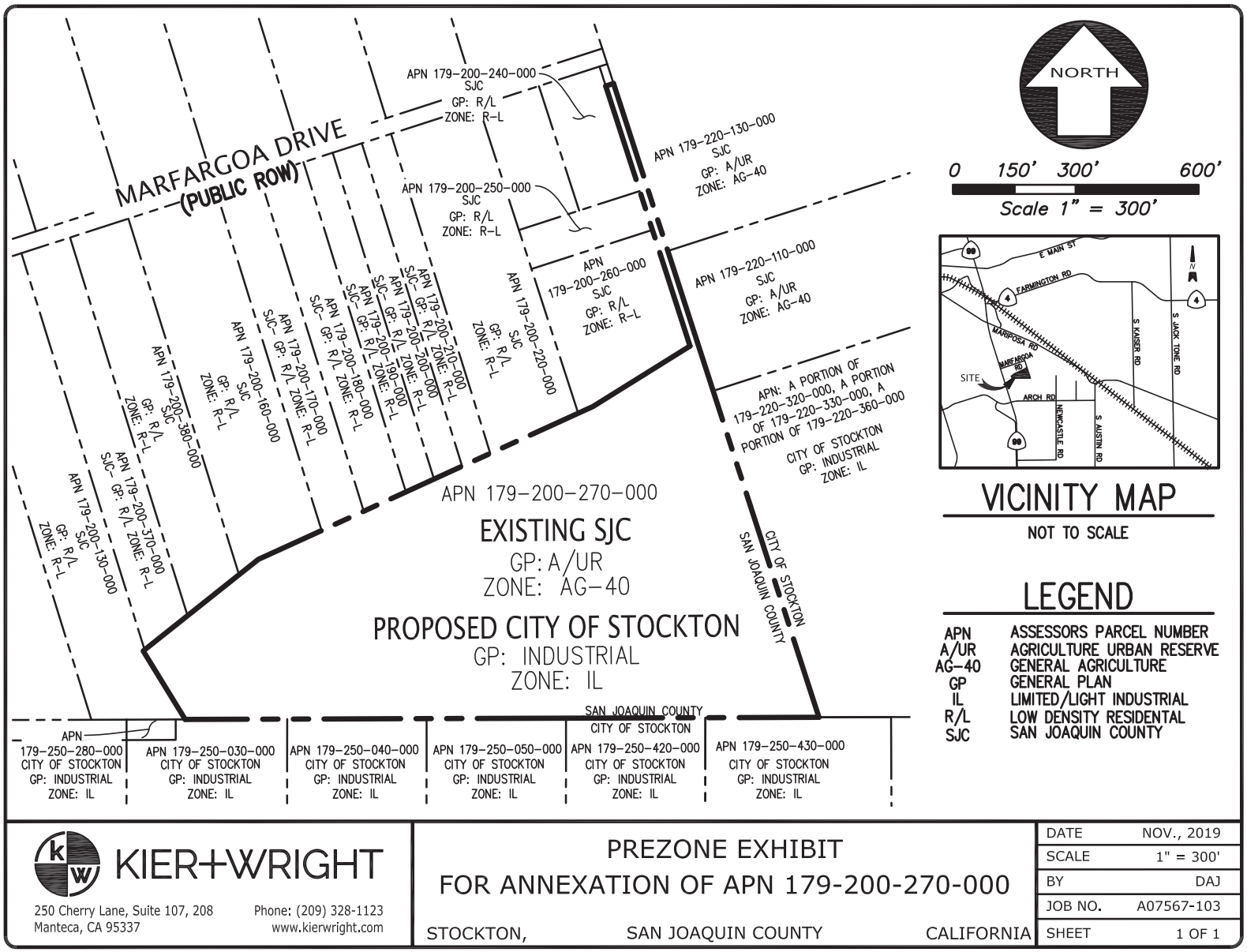
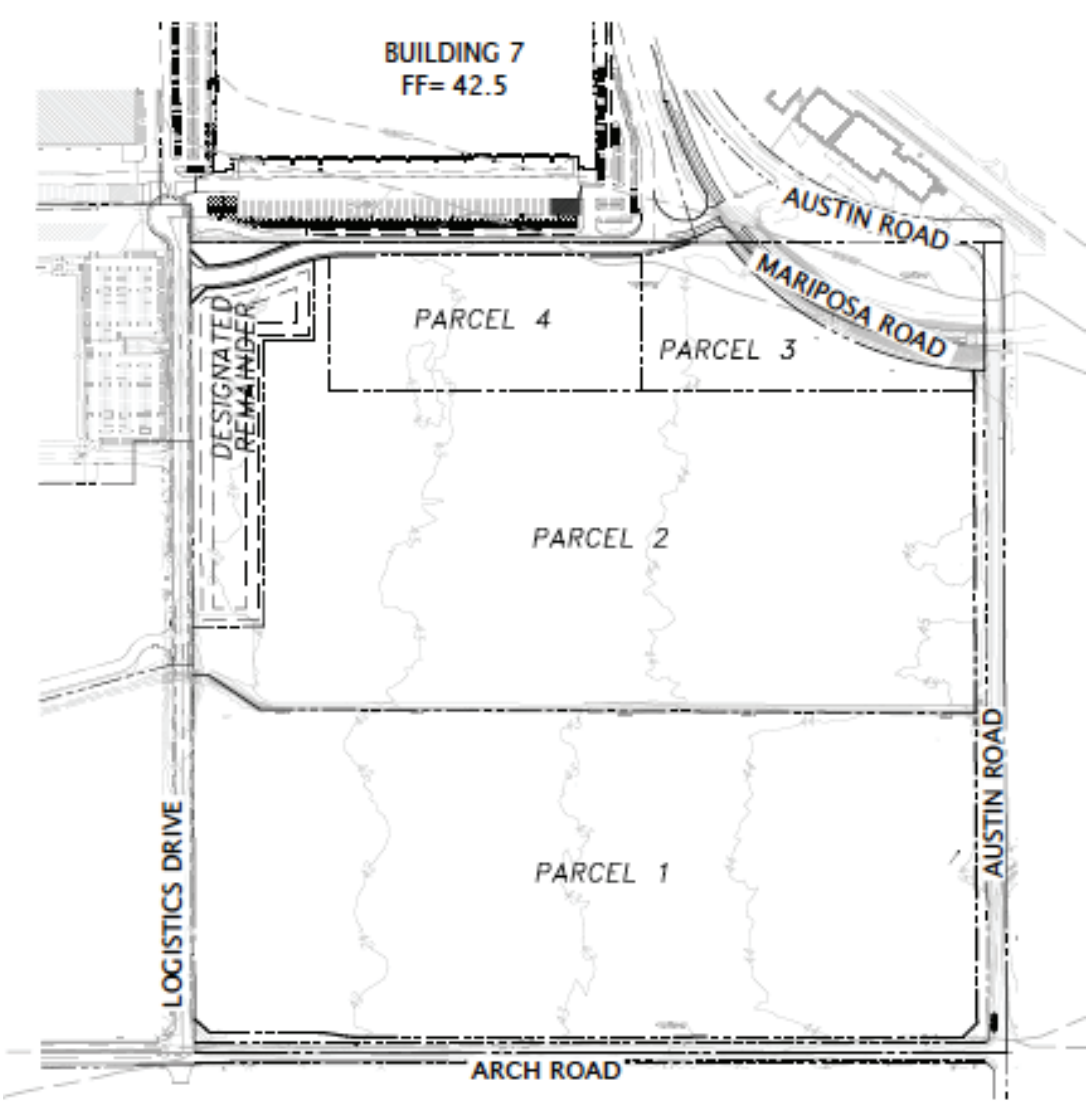


Figure 3-2
ANNEXATION AND PREZONING, HOGGAN



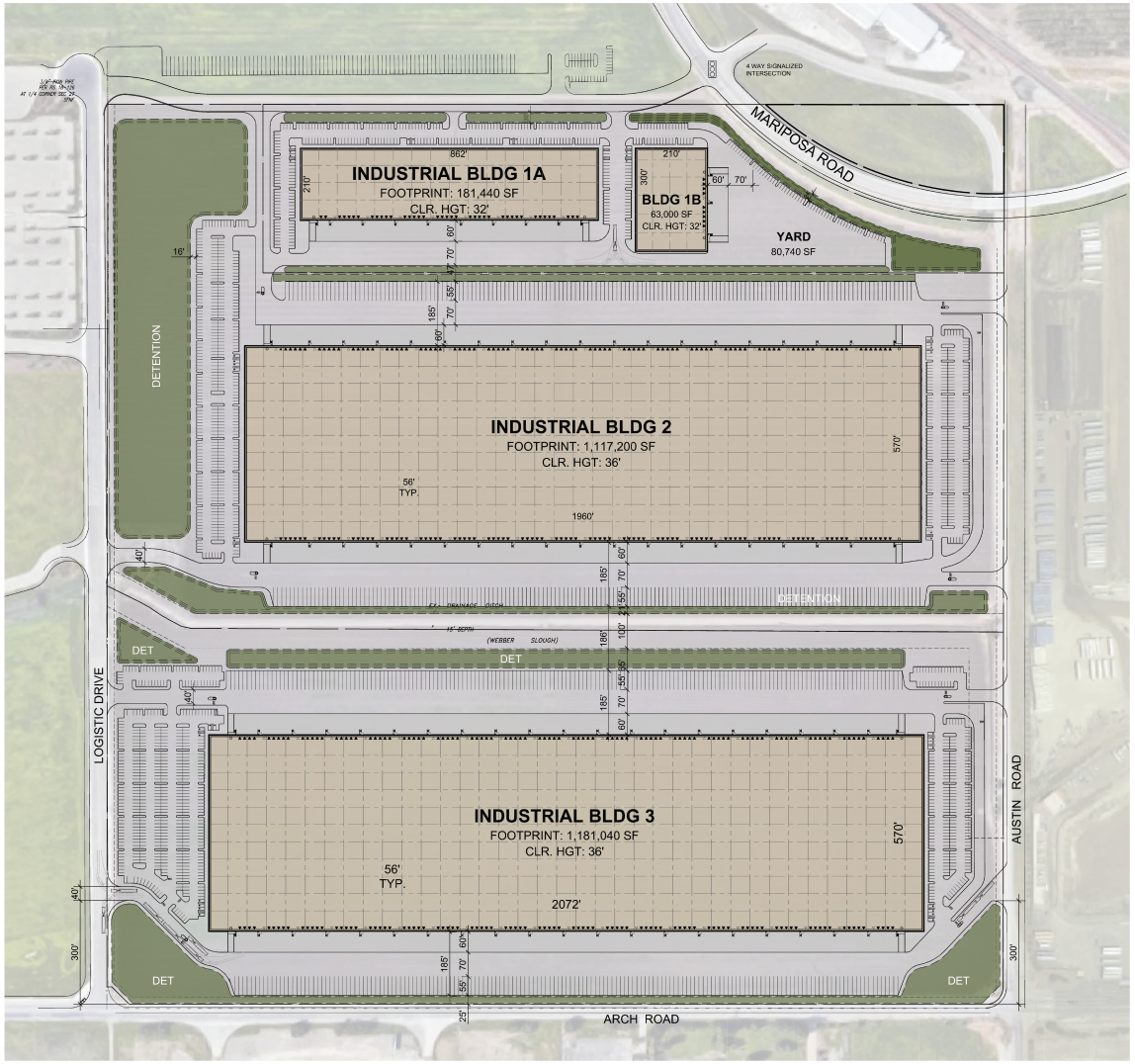
BOUNDARY/ EXISTING & PROPOSED EASEMENTS

TOTAL AREA OF SUBDIVISION = 145.41 AC

LEGEND

PROPOSED	EXISTING	
		FEMA FLOOD ZONE BOUNDARY
		EASEMENT AS NOTED
		ADJOINING BOUNDARY
		ASPHALT BERM
		BLOCK/RETAINING WALL
		BUILDING LINE
		CONCRETE CURB
		CONCRETE CURB & GUTTER
		CONTOUR LINE
		DRIVEWAY
		EDGE OF PAVEMENT
		FENCE LINE
		LOT LINE
		MONUMENT/MONUMENT LINE
		PROPERTY LINE
		FIBER OPTIC LINE
		GAS LINE
		OVERHEAD ELECTRIC LINE
		UNDERGROUND ELECTRIC LINE
		SANITARY SEWER-MANHOLE
		STORM DRAIN-MANHOLE & CATCH BASIN
		WATER LINE & VALVE
		JOINT TRENCH
		STREET RIGHT OF WAY
		ELECTROLIER
		POWER POLE/JOINT POLE
		SPOT ELEVATION
		TRAFFIC SIGN
		TREES OR BUSHES
		TREE ON TREE TABLE
		UTILITY BOX
		FIRE HYDRANT
		BLOW OFF VALVE
		STUB
AD	AD	AREA DRAIN
B.N. & S.F.R.R.	B.N. & S.F.R.R.	BURLINGTON NORTHERN & SANTA FAY RAIL ROAD
B.S.I.	B.S.I.	INDICATES EASEMENT OR RIGHT-OF-WAY DEDICATION BY SEPARATE INSTRUMENT
B/W	B/W	BOTTOM OF WALL
BL	BL	BUILDING LINE
CB	CB	CATCH BASIN
ESMT	ESMT	EASEMENT
C	C	CONCRETE
I.N.	I.N.	INSTRUMENT NUMBER
LLA	LLA	LOT LINE ADJUSTMENT
LLC	LLC	LIMITED LIABILITY COMPANY
O.R.	O.R.	OFFICIAL RECORD
PAE	PAE	PRIVATE ACCESS EASEMENT
PG&E	PG&E	PACIFIC GAS & ELECTRIC
PM	PM	PARCEL MAP
PUE	PUE	PUBLIC UTILITY EASEMENT
R/W	R/W	RIGHT OF WAY
RS	RS	RECORD OF SURVEY
SDMH	SDMH	STORM DRAIN MANHOLE
SDE	SDE	STORM DRAIN EASEMENT
SEC	SEC	SECTION
S.S.E	S.S.E	SANITARY SEWER EASEMENT
WLE	WLE	WATERLINE EASEMENT

Figure 3-3
TENTATIVE SUBDIVISION MAP



CT

scheme: 5

Conceptual Site Plan

Austin Road
Stockton, CA

WARE MALCOMB

SHEET 1

BaseCamp Environmental

Figure 3-4
SANCHEZ SITE PLAN

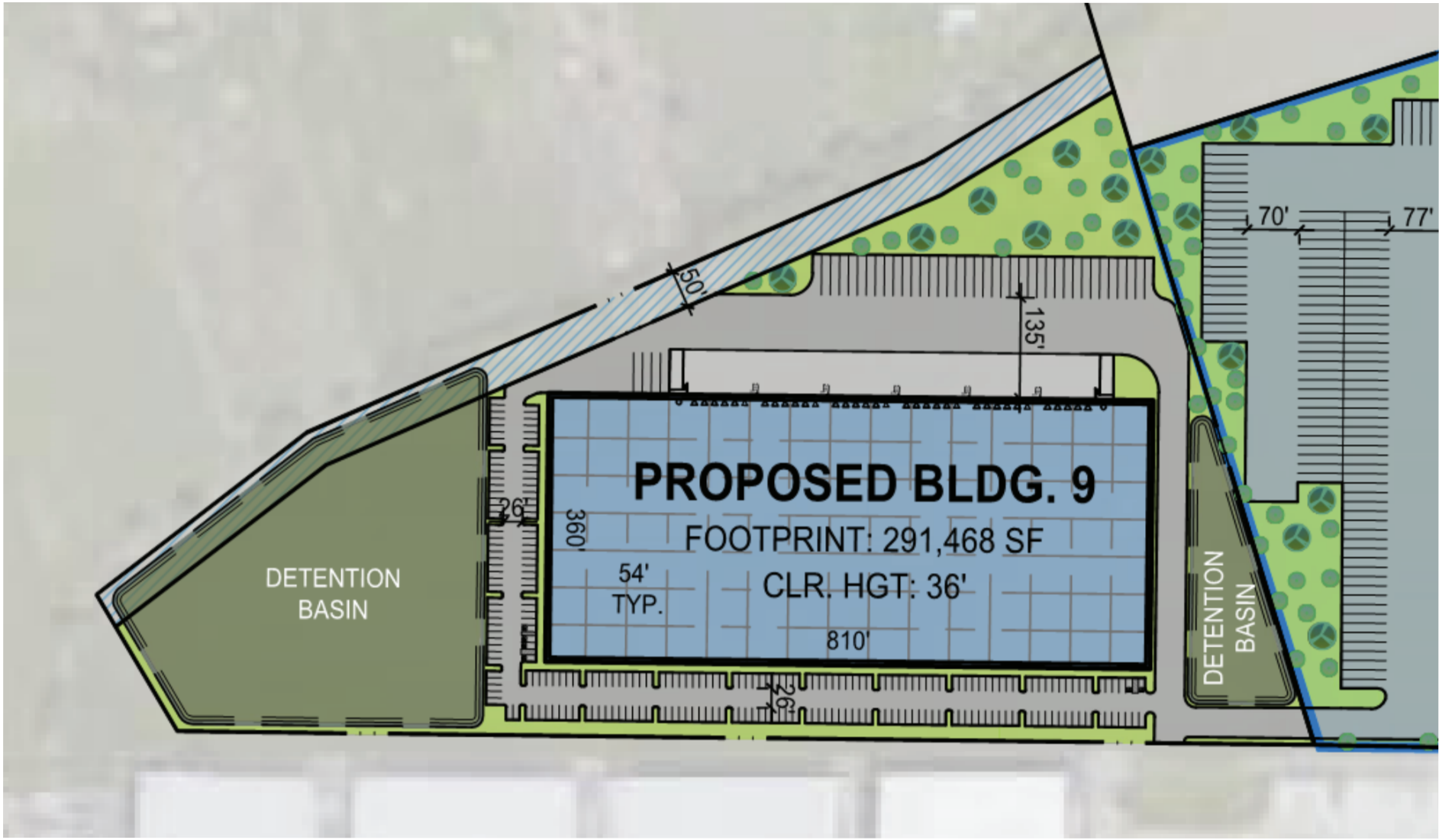


Figure 3-5
HOGGAN SITE PLAN

4.0 AESTHETICS AND VISUAL RESOURCES

ENVIRONMENTAL SETTING

Aesthetics/Visual Resource Background

The aesthetic value assigned to a resource varies significantly from person to person, depending on that person's ideas and perceptions. This makes aesthetic and visual resource impacts among the more complex environmental impacts to assess. Despite the inherent difficulties, quantitative methods for assessing aesthetic values have been developed. Although this analysis will not attempt a quantitative measurement of aesthetic values, it will provide an assessment of the key functions associated with aesthetics and visual resources.

In general, the value of visual resources of a geographic area is a function of the following:

- Landscape character
- Distance between the affected landscape and viewer
- Number and sensitivity of viewers

Landscape character may be defined as distinctive, common, or minimal. “Distinctive” landscapes include those with unusual topography or vegetation, or for urban landscapes unique or aesthetically pleasing design or landscaping elements. “Common” landscapes, both natural and urban, have elements that are prevalent and relatively uniform in the analysis area. “Minimal” landscapes include extensive areas of very repetitive or uninteresting elements, as well as areas highly disturbed by development activities.

The sensitivity of potential viewer areas may range from low to high, depending on the nature and expectations of users and the duration of use of the area. Areas of high sensitivity typically include recreation sites and scenic routes. Areas of moderate sensitivity include residential areas of common character but involving long exposure times of viewers. Areas of low sensitivity include high-volume and/or high-speed travel corridors through urbanized areas.

Aesthetic/Visual Resources on Project Site and in Vicinity

The Norcal Logistics Center EIR describes the visual landscape of the area, including the project site. The landscape consists of agricultural lands and facilities, recent large-scale industrial development facilities, scattered rural residences, two large-scale institutional facilities operated by the California Department of Corrections (CDCR), the Burlington

Northern Railroad (BNSF) Intermodal Facility, and local roadways (ESA 2014). Industrial and warehouse buildings of a size comparable to those proposed by the project have been constructed on the Norcal Logistics Center site. There are no significant natural landscapes, other than riparian vegetation along North Littlejohns Creek.

The Sanchez property is undeveloped and in recent years has been planted with row crops. Weber Slough, a channelized stream, runs along a portion of the eastern boundary of the property adjacent to Austin Road, then crosses the property center as it goes westward. Small trees and shrubs are found along Weber Slough near Austin Road. The Sanchez property is bordered on three sides by roads – Arch Road, Austin Road, and Logistics Drive. Utility poles are visible along the adjacent sections of Arch Road and Austin Road. Views from the Sanchez property include light industrial buildings to the west, the CDCR buildings to the south (181-100-07, 7170 E Arch Road), and BNSF intermodal facilities to the east of Austin Road.

The Hoggan property is vacant and covered with grasses and weeds. North Littlejohns Creek, which forms the northern boundary of the property, is lined with trees and shrubs along its banks. Utility poles are located along the eastern boundary of the property. On one site visit, some trash and debris were found at the property entrance from the south, but this was not seen on a subsequent visit. Several houses on Marfargoa Road north of the property are visible from the site, although these views are partially obscured by the vegetation along North Littlejohns Creek. Light industrial buildings are prominent features of views south of the Hoggan property, including one building adjacent to the southern property boundary.

As the project site is undeveloped, it contains no existing sources of light or glare. Sources of light and glare in the project vicinity include security, parking, and circulation lighting from nearby existing light industrial and logistical operations, institutional uses (the CDCR facilities), and to a lesser extent rural residences and nighttime vehicle traffic on local roadways (ESA 2014). Street lighting has been installed along Logistics Drive, the western boundary of the Sanchez property, and along Frontier Way south of the Hoggan property.

REGULATORY FRAMEWORK

California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The State laws governing the Scenic Highway Program are in the California Streets and Highways Code, Section 260 *et seq*. A highway may be designated scenic based upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

The State Scenic Highway System includes a list of highways that are either designated as scenic highways or are eligible for designation. According to the California Department of Transportation (Caltrans) list of designated scenic highways under the California Scenic Highway Program, there are only two officially designated state scenic highways within San Joaquin County: Interstate 5 from the Stanislaus County Line to Interstate 580 (0.7 miles), and Interstate 580 from I-5 to the Alameda County Line (15.4 miles), both in southwestern San Joaquin County (Caltrans 2017).

CALGreen

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), known as CALGreen, establishes building standards aimed at enhancing the design and construction of buildings through the use of building concepts that have a reduced negative impact or positive environmental impact and by encouraging sustainable construction practices. Section 5.106.8, Light Pollution Reduction, establishes backlight, uplight, and glare ratings to minimize the effects of light pollution for nonresidential development. The City of Stockton has adopted all sections of CALGreen, as stated in Stockton Municipal Code Chapter 15.72, Green Building Standards.

Stockton Municipal Code

Title 16 of the Stockton Municipal Code, referred to as the Development Code, implements the City's General Plan by classifying and regulating land uses and structural development within Stockton; by protecting and promoting the public health, safety, and general welfare; and by preserving and enhancing the aesthetic quality of Stockton. The following provisions of the Development Code affect the aesthetic and visual impacts of new development projects.

Section 16.32.070, Light and Glare

This section establishes standards to prevent spillover illumination or glare onto adjoining properties and prohibit interference with the normal operation or enjoyment of adjacent property. Exterior lights shall be made up of a light source, reflector, and shielding devices so that, acting together, the light beam is controlled and not directed across a property line or upward into the sky; bare bulbs are not allowed.

Chapter 16.36, General Development Standards

This chapter sets forth standards for site planning and project design to ensure that all development produces an environment of stable and desirable character, harmonious with existing and future development, and to protect the use and enjoyment of neighboring properties, consistent with the General Plan. Section 16.36.060, Development Considerations, includes standards for all development projects intended to ensure high quality site planning and architectural design. Section 16.36.090, Height Measurement and Height Limit Exceptions, establishes maximum height standards for development within the city. Section 16.36.060(B) requires exterior lighting to be energy-efficient,

stationary, shielded, and directed away from adjoining properties and public rights-of-way, in compliance with Section 16.32.070 (see above).

Section 16.24.130, IL Zoning District Standards

This section specifies development standards in the IL (Limited Industrial) zoning district. Proposed development and new land uses within the IL zone shall be conducted entirely within an enclosed structure except for those cases in which another type of roofed enclosure is approved by the Director or Commission for use at a particular location. Outside manufacturing, fabrication, processing, assembling, or repair is prohibited. The project must comply with applicable general development standards set forth in Stockton Municipal Code Chapters 16.32 and 16.36, along with standards specified in Stockton Municipal Code Section 16.80.170 (see below).

Section 16.80.170, Industrial Uses

This section applies to development located on two or more acres in both the Limited Industrial (IL) and General Industrial (IG) zones. A development plan shall be required for new construction or expansion of the industrial use. The development plan, at a minimum, shall include the location, size, configuration, and design of any structures, including buildings, storage containers, trailers, walls/fencing, signs, etc. It also shall include circulation and parking, along with landscaping and irrigation plans. Structures, fences/walls, and parking areas abutting a public street shall be set back at least 20 feet from any street side property line. This required 20-foot setback area shall be maintained with landscaping. The number of parking spaces and parking lots shall comply with the requirements of Stockton Municipal Code Chapter 16.64 (Off-Street Parking and Loading Standards).

Chapter 16.120, Design Review

This chapter establishes procedures for the City's discretionary and nondiscretionary design review of proposed development. The review is intended to encourage development that is compatible and harmonious with the design and use of surrounding properties and with the city in general. Projects that are subject to the City's design review process include residential, commercial, business park, and industrial.

The design review authority charged with reviewing proposed development projects varies depending on the type of project. Nondiscretionary projects are reviewed by the Planning Director, and discretionary projects can be reviewed by the City Council, Planning Commission, or Planning Director as assigned. The designated design review authority reviews project features such as building design, landscaping, site planning, and signage to ensure consistency with the Citywide Design Guidelines, discussed below.

Citywide Design Guidelines

The Design Guidelines, adopted in 2004, serve as a reference point for the City's expectations for quality development and provide guidance for the designated review authority during the design review process. In general, the Design Guidelines are intended to ensure that new or modified development preserves or improves the positive characteristics of the city's image while avoiding negative impacts. The Design Guidelines are organized into seven chapters and includes objectives and design standards for each type of development project that is subject to design review. They provide minimum design criteria for the achievement of functional and attractive developments that fit within the context of their surroundings and do not clash with neighboring buildings (City of Stockton 2004).

Chapter 5 of the Design Guidelines sets forth standards for business park and industrial development. Section 5.02 provides guidelines specifically for industrial and warehouse development. The general design objectives for industrial and warehouse development are quality development, functional site arrangement, compatibility with surrounding uses, safe and convenient circulation and parking, architectural character, landscape emphasis, and safety. Subject matter includes site planning, architectural form/detail, materials and colors, accessory buildings, landscaping, parking and circulation, and public safety (City of Stockton 2004).

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

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

Regarding the third bullet point, "public views" are views that are experienced from publicly accessible vantage points. Although not specifically defined, "publicly accessible vantage points" are assumed to include, though not necessarily limited to, public roads, parks, trails, and vista turnouts.

As a result of a recent change to State law, some projects do not require an analysis of their aesthetic impacts. Under California Public Resources Code Section 21099, the aesthetic and parking impacts of residential, mixed-use residential, or employment center projects on an infill site within a transit priority area shall not be considered significant. The recently revised Appendix G of the CEQA Guidelines, which contains the Environmental Checklist, notes this new law. While the project analyzed in this EIR may be considered an employment center project, it does not meet the infill and transit priority area criteria of Public Resources Code Section 21099. Therefore, this EIR will analyze the aesthetic impacts of the project.

Impact AES-1: Scenic Vistas

The Norcal Logistics Center EIR noted that there are no scenic vistas and no notable geographic features in the vicinity of the Norcal Logistics Center site; as a result, there would be no effect on a scenic vista. Since the project shares the general character of the Norcal Logistics Center project and is adjacent to the site, the project likewise would have no adverse impact on scenic vistas.

Level of Significance: No impact

Mitigation Measures: None required

Impact AES-2: Scenic Resources

The Sanchez property is a flat area currently used for agricultural production of row crops. It contains no trees, rock outcroppings, or other scenic resources of outstanding value. Weber Slough is channelized through this property and has little riparian vegetation; as such, it has little natural scenic value. In any case, no development is proposed within Weber Slough.

The Hoggan property consists of a vacant parcel containing grasses and weeds, and some trash and debris were observed on one site visit. Trees and shrubs exist along North Littlejohns Creek on the northern boundary of the Hoggan property. However, no development would occur along the bank, due to an agreement with the USFWS establishing a setback approximately 50 feet from the creek bank (see Chapter 7.0, Biological Resources). The existing riparian vegetation would not be disturbed by Hoggan property development.

As noted, there are no existing designated or eligible state scenic roads or highways in or near the project vicinity, and there are no designated local scenic highways. The project would have no impact on scenic resources.

Level of Significance: No impact

Mitigation Measures: None required

Impact AES-3: Visual Character and Quality

The project proposes warehouse development on the project site, which is presently designated for Industrial use and proposed to be pre-zoned Limited Industrial to allow such development. Proposed industrial development of the site would replace existing views of vacant and/or farmed land with views of new industrial buildings, site improvements and widened surrounding streets. Similar to other surrounding lands, resulting views would consist of structured urban development rather than agricultural open space.

The Hoggan property is a relatively isolated parcel that is not visible from nearby public streets, and it has no publicly accessible vantage points. Under the new significance threshold established in the Environmental Checklist in the CEQA Guidelines Appendix G, development on the Hoggan property would have little impact on public views.

The Sanchez property is in agricultural use and is visible from Arch Road, Austin Road, and Logistics Drive. The project would result in a loss of the existing open space views of and across the Sanchez property from these roads. As discussed in the above section AES-2, these views do not have any substantial scenic value. As has been noted, the Sanchez property has been designated for industrial use by the Stockton General Plan. Open space views of the Sanchez property have already been compromised and confined by development in the surrounding area, including industrial and logistics buildings and the CDCR facilities. In addition, the Sanchez property may be considered an area of low sensitivity for potential viewers, as it is in an area that has experienced substantial non-agricultural development; the area has relatively high truck traffic volumes, and the traveling public in this area is associated primarily with the prevailing industrial use. As a result, project impacts on visual character and quality are considered less than significant.

The proposed buildings on the project site would be consistent in building height and mass with nearby existing buildings in the vicinity. Project development would contribute to and be consistent with the existing light industrial character of the vicinity. New structures, landscaping, and site improvements would be designed and constructed to meet the aesthetic standards of the City of Stockton in accordance with the applicable sections of its Municipal Code and its Design Guidelines. The City would use the Design Guidelines in its design review, so it is likely that the project would comply with the guidance in Section 5.02. The project would therefore result in a less than significant effect on visual character and quality.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AES-4: Light and Glare

Neither of the properties within the project site currently have existing lighting features. Future development would introduce lighting on these properties, mainly interior building and exterior security lighting and parking area lighting. The land uses

surrounding the Sanchez property, which are industrial and institutional in character, are not sensitive to changes in lighting levels.

The rural residences north of the Hoggan property could experience noticeable changes in indirect illumination, also referred to as "spill" light, from lighting that could be installed as part of Hoggan property development. Upon annexation, the project site would be required to comply with the provisions of Stockton Municipal Code Sections 16.36.060(B) and 16.32.070, which require exterior lighting to be shielded and directed away from adjoining properties and public rights-of-way. This would reduce potential indirect illumination on the residences near the Hoggan property. Also, existing riparian vegetation along North Littlejohns Creek would provide some screening between the rural residences and the Hoggan property, further reducing the amount of indirect illumination. This, plus compliance with the lighting provisions of the Stockton Municipal Code, would reduce potential indirect illumination of nearby sensitive land uses north of the Hoggan property.

The Design Guidelines state that large expanses of highly reflective surfaces and mirror glass exterior walls are strongly discouraged for industrial and warehouse development, as the glare from such surfaces can create hazards for motorists and airport aviation. Any surface with reflective surfaces would require analysis and approval from the City prior to installation. Also, outdoor lighting should be designed to satisfy functional and decorative needs while complying with City design standards. Building lighting should provide illumination of building facades and entrances while providing sufficient visibility for pedestrians (City of Stockton 2004).

Project design, including light and glare potential, will be subject to City review and approval with respect to the Stockton Design Guidelines in the Design Review process. Design review approval findings require that staff determine that the project will not be detrimental to health and safety and confirm that glare would be shielded. Staff may require a light and/or glare analysis during this process, if needed. Compliance with these guidelines would further reduce potential light and glare impacts from development on the Hoggan site. Project impacts related to light and glare would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

5.0 AGRICULTURAL RESOURCES

ENVIRONMENTAL SETTING

Agriculture has been, and continues to be, an important part of the economy in San Joaquin County. Approximately 86.7% of the county's land area was in farms as of 2017 (U.S. Department of Agriculture 2019). The gross value of agricultural production in the county was $2,594,260,000 in 2018. This represented an increase in value of 2.62% from 2017. The top five agricultural products in 2018 were almonds, grapes, milk, English walnuts, and eggs (San Joaquin County Agricultural Commissioner's Office 2019).

The project site and surrounding areas historically have been used for agriculture. In recent years, urban industrial and institutional development has displaced most of the agriculture, including nearby warehouse and light industrial development in the Norcal Logistics Center site adjacent to both the Sanchez and Hoggan properties (see Chapter 13.0, Land Use). The Sanchez property is currently used for production of row crops. Crops grown on the property have included corn, onions, peppers, and most recently hay. The Hoggan property is currently vacant and has not been in recent agricultural use. Some lands in the vicinity remain in agricultural production, primarily row crops. These lands are located mainly east of Austin Road and north of Mariposa Road, with some lands south of Arch Road near SR 99.

Important Farmland

The Important Farmland Maps, prepared by the California Department of Conservation as part of the Farmland Mapping and Monitoring Program, designate the viability of lands for farmland use, based on the physical and chemical properties of the soils. The maps categorize farmland, in decreasing order of soil quality, as "Prime Farmland," "Farmland of Statewide Importance," "Unique Farmland," and "Farmland of Local Importance." Collectively, these categories are referred to as "Important Farmland." There are also designations for grazing land and for urban/built-up areas, among others. The Important Farmland Maps are prepared for counties with a "modern" soil survey conducted by the U.S. Department of Agriculture (i.e., soil survey that addresses other soil issues besides suitability as cropland).

It should be noted that the definition of Farmland in CEQA Guidelines Appendix G is narrower than the definition of Important Farmland used by the Farmland Mapping and Monitoring Program, as Appendix G excludes Farmland of Local Importance. For the purposes of this CEQA analysis, the Appendix G definition of Farmland will be used.

As of 2016, the most recent year of available data, the total amount of Important Farmland in San Joaquin County was 615,075 acres – approximately 67.4% of the total acres inventoried in the county. The 2016 Important Farmland acreage represents an approximately 3.6% decline from the Important Farmland acreage in 1990. (California Department of Conservation 2014, 2016a). According to the 2016 Important Farmland Map of San Joaquin County, the Sanchez property contains Prime Farmland (17%) and Farmland of Statewide Importance (83%), while the Hoggan property is designated as having Farmland of Local Importance (California Department of Conservation 2016b).

REGULATORY FRAMEWORK

Williamson Act

The Land Conservation Act of 1965, commonly known as the Williamson Act, was enacted to preserve farmland in California. Under the Williamson Act, a contract is executed between landowners and local governments to voluntarily restrict development on property in exchange for lower property tax assessments based on the existing agricultural land use. Contracts are entered for a 10-year period and can be terminated only by non-renewal or cancellation process defined in the California Government Code. Additional features of the Williamson Act program include the requirement that contracted parcels be in designated "agricultural preserves" of at least 100 acres in size to encourage the concentration of enrolled land; and annual state payments ("subventions") to participating local governments as partial reimbursement for the loss of local property tax revenue.

A change in the Williamson Act in 1998 allows for the creation of a Farmland Security Zone. To create a Farmland Security Zone, a landowner enters into a contract for a minimum of 20 years. In exchange, the landowner receives an assessment on the property based on 65% of either its Williamson Act valuation or its Proposition 13 valuation, whichever is lower.

In San Joaquin County, there were 298,455 acres of prime agricultural land under Williamson Act contract in 2015, and 140,943 acres of non-prime agricultural land. In addition, there were 51,032 acres of prime agricultural land in a Farmland Security Zone, and 9,224 acres of non-prime agricultural land. The acreage has been decreasing in recent years because of non-renewals; in 2014 and 2015, contracts were not renewed for a total of 6,806 acres (California Department of Conservation 2016c). The Sanchez property is under a Williamson Act contract, but the Hoggan property is not.

As noted above, Williamson Act contracts can be ended by non-renewal or cancellation. For non-renewal, a landowner or the City/County initiates a Notice of Non-Renewal for the entire contract or a portion of the contracted land, which begins a nine-year countdown to the expiration of the contract. The land is still subject to all the requirements of the contract until it expires. A Notice of Non-Renewal was recently filed for the Sanchez property and recorded by the County on February 28, 2020 as Document No. 2020-02601.

A landowner may petition the City/County for immediate cancellation of the contract for all or part of the contracted land. The application must be referred to the state Department of Conservation for comment, and the state's comments must be taken into consideration by the City before approval of the cancellation. The City/County may grant tentative approval for cancellation only if, per California Government Code Section 51282, one of the two following findings are made: 1) the cancellation is consistent with the purposes of the Williamson Act, or 2) the cancellation is in the public interest. Cancellation of a contract can be determined to be consistent with the purposes of the Williamson Act only if all of the following findings are made:

1. The cancellation is for land on which a Notice of Non-Renewal has been served pursuant to California Government Code Section 51245.

2. The cancellation is not likely to result in the removal of adjacent lands from agricultural use.

3. The cancellation is for an alternative use which is consistent with the applicable provisions of the city or county general plan.

4. The cancellation will not result in non-contiguous patterns of urban development.

5. There is no proximate non-contracted land which is both available and suitable for the use to which it is proposed the contracted land be put, or that development of the contracted land would provide more contiguous patterns of urban development than development of proximate non-contracted land. "Proximate, non-contracted land" means land not restricted by contract pursuant to the Williamson Act, which is sufficiently close to land that is so restricted that it can serve as a practical alternative for the use which is proposed for the restricted land. "Suitable" means that salient features of the proposed use can be served by land not restricted by contract in the Williamson Act.

Cancellation of a contract is considered in the public interest only if the following findings are made: (1) other public concerns substantially outweigh the objectives of this chapter, and (2) Finding #5 above can be met. In accordance with California Government Code Section 51284, a public hearing must be conducted on the cancellation.

Right-to-Farm Ordinances

In urbanizing areas, urban development and farmlands can be in conflict. New urban residents, for example, may find noise, dust, pesticide overspray or residues objectionable, generating complaints, and new urban populations can result in increased trespass, theft and vandalism on farmlands.

Both the City of Stockton and San Joaquin County have adopted Right-to-Farm Ordinances. They require owners and builders to notify their successors-in-interest of the potential for conflicts with and effects of agricultural activities on urban development,

and the ordinances specify that typical agricultural practices shall not be considered a nuisance. These ordinances serve to protect farmers from nuisance complaints, although trespass and vandalism may continue. The City has incorporated its Right-to-Farm ordinance within Stockton Municipal Code Section 16.36.040, Agriculture Preservation.

City of Stockton Agricultural Lands Mitigation Program

The City of Stockton adopted an Agricultural Lands Mitigation Program in 2007. The program applies to projects that would convert agricultural lands that are Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, as defined on the most recent Important Farmland Maps published by the California Department of Conservation, to a non-agricultural use.

The mitigation program requires that projects provide "agricultural mitigation land" - land encumbered by an agricultural conservation easement - on a 1:1 basis for each acre of important agricultural land converted by the project. Agricultural mitigation easements will be dedicated to a qualifying management entity, such as the Central Valley Farmland Trust. Alternatively, projects may pay the City's established Agricultural Land Mitigation Fee, which is collected by the City, held in a dedicated account, and then used to acquire agricultural mitigation land or to pay for the monitoring and administrative costs of the program. The fees may also be transferred to a qualifying entity for the same purpose.

Other Agricultural Preservation Programs

San Joaquin County has adopted an Agricultural Mitigation Ordinance (San Joaquin County Code Chapter 9-1080) applies to lands under County jurisdiction. The requirements and mechanisms of the County ordinance are similar to the City's Agricultural Land Mitigation Program.

Mitigation of agricultural land conversion losses has also been provided, to a degree, through the county-wide adoption of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) and its local adoption by the City of Stockton. The SJMSCP requires the payment of a per-acre fee for loss of wildlife habitat, which, is largely integral with agricultural use in central San Joaquin County. One important use of SJMSCP fees is the acquisition of conservation easements on agricultural land to maintain their biological habitat values, as well as to preserve the agricultural use of these lands. Chapter 7.0, Biological Resources, describes the SJMSCP in more detail, along with its role in the conservation of biological resources.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program, to non-agricultural use,

- Conflict with existing zoning for agricultural use or a Williamson Act contract, or

- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

CEQA Guidelines Appendix G contains questions regarding project impacts on forestry resources along with agricultural resources. There are no designated forest lands (i.e., National Forest lands, State forests, or lands zoned for timber production) on the project site or within the County. Therefore, impacts on forestry resources will not be analyzed in this EIR.

Impact AG-1: Conversion of Farmland

The Hoggan property is classified as Farmland of Local Importance, which does not fall within the definition of Farmland in CEQA Guidelines Appendix G. Therefore, conversion of this property to non-agricultural use is not considered significant. However, the Sanchez property contains Prime Farmland and Farmland of Statewide Importance. Development of this property would convert Farmland, as defined in CEQA Guidelines Appendix G, to a non-agricultural use. This would be a potentially significant impact.

The conversion of agricultural land in conjunction with urban development as proposed in the Stockton General Plan 2040, the planning area for which included the project site, was identified in the Stockton General Plan 2040 EIR as a significant and unavoidable adverse effect. As shown in the GPEIR Figure 4.2-4, the GPEIR anticipated that certain parcels adjacent to urban uses, including the Sanchez and Hoggan parcels, were subject to potential farmland conversion, and this potential agricultural land conversion effect was addressed in the GPEIR.

No mitigation is available that would reduce this impact to a level that would be less than significant. A Statement of Overriding Considerations for this issue was adopted by the Stockton City Council in conjunction with adoption of the General Plan. This Statement of Overriding Considerations remains operative.

As discussed in Chapter 1.0 of this EIR, CEQA Guidelines Section 15152(d) states that where an EIR has been prepared and certified for a plan, a lead agency for a later project consistent with the plan should limit an EIR on the later project to effects which 1) were not examined as significant effects on the environment in the prior EIR, or 2) are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means. Discussion of the potential impacts of the Sanchez development on agricultural land conversion is pursuant to CEQA Guidelines Section 15152(d).

The Sanchez property would be subject to the City's Agricultural Lands Mitigation Program, thereby requiring developers of the property to contribute agricultural mitigation land or to pay the Agricultural Land Mitigation Fee. Also, the project is expected to participate in the SJMSCP, which would require fee payments for conversion. Compliance with the Agricultural Lands Mitigation Program and the SJMSCP would partially compensate for the impact of Farmland conversion on the Sanchez property; the loss of Farmland would still occur. As other impacts on agricultural land conversion have already been analyzed in the Stockton General Plan 2040 EIR, project impacts on this issue are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AG-2: Agricultural Zoning and Williamson Act

Both properties that constitute the project site are currently zoned by San Joaquin County as AG-40 (General Agriculture, 40-acre minimum parcel size). The project proposes that the City of Stockton annex the project site and pre-zone it to IL-Industrial, Limited. With the change in jurisdiction from the County to the City and with the application of the pre-zoning, the existing agricultural zoning of the site would be eliminated.

The elimination of the existing County agricultural zoning would not, in and of itself, involve potentially significant environmental effects apart from the potential environmental effects of industrial development as described in this EIR. The existing San Joaquin County General Plan designation for the project site is Agricultural-Urban Reserve, a designation applied generally to areas currently undeveloped or used for agricultural production but that are in the logical path of development in an urban fringe area. This designation may be applied if 1) the area identified is designated for urban development in a city general plan, and 2) the County determines that the area represents a reasonable expansion of a city. As noted, the project site has been designated for industrial use in the Stockton General Plan 2040. The GPEIR anticipated certain parcels adjacent to urban uses as having the potential for farmland conversion. GPEIR Figure 4.2-2 shows Williamson Act parcels within the city boundaries and identifies 2,464 acres of lands with active Williamson Act contracts for non-agricultural uses.

As noted, the Hoggan property is not under a Williamson Act contract, but the Sanchez property is. A Notice of Non-Renewal was recorded for the Sanchez site on February 28, 2020 (Document No. 2020-02601). Since it typically takes nine years after such notice for the contract to end, it is anticipated that the City of Stockton will succeed to the Williamson Act contract upon the proposed annexation of the Sanchez property. If the Sanchez property is to be developed prior to the end of the non-renewal period, the proposed development of the property would require the cancellation of the existing Williamson Act contract by the Stockton City Council with the consent of the California Department of Conservation.

Cancellation of a Williamson Act contract requires findings of consistency with a set of California Government Code requirements. These findings would need to be made by the Stockton City Council. City staff's assessment of the consistency of the cancellation of the Sanchez contract with the applicable Government Code requirements is shown below.

1. *Notice of Non-Renewal*: This subfinding can be made because the landowner has served a Notice of Nonrenewal pursuant to Section 51245 of the Government Code. The Notice of Nonrenewal was recorded on February 28, 2020 as Document Number2020-02601 in San Joaquin County.

2. *Removal of Adjacent Agricultural Lands:* This subfinding can be made because the property is virtually surrounded by approved and/or built out industrial and large-scale institutional development. The California Health Care Facility is to the south and the BNSF Intermodal facility is to the east and the Norcal Logistics Center is to the north and west.

3. *Consistency with City General Plan:* This subfinding can be made because the cancellation has been applied for to facilitate an approval for an annexation into the City and for a Pre-Zoning as Industrial and for a Tentative Parcel Map to permit an Industrial project which is a permitted use within the City of Stockton.

4. *Disadvantageous Urban Development Patterns:* This subfinding can be made because the underlying infill project is in an area designated by the City for industrial development, and existing approved and/or built out industrial area surrounds the project site.

5. *Proximate Non-Contracted Land:* The proposed project is for a parcel of land that is surrounded by other approved or built out industrial uses. There is no other proximate non-contracted land which is the required size of this parcel (150 +/- acres) and no other land that would provide a more contiguous pattern of urban development given that this is an infill industrial project.

Cancellation of the Sanchez Williamson Act contract does not appear to involve any substantial inconsistency with the required findings. As a result, cancellation of the Williamson Act contract is considered a less than significant impact.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AG-3: Indirect Conversion of Agricultural Lands

As described in more detail in Chapter 13.0, Land Use, the project site is in an area with a mix of agriculture and urban development. The 2016 Important Farmland Map of San Joaquin County indicates that agricultural lands in this area consist of Prime Farmland, Farmland of Statewide Importance, and Farmland of Local Importance. However, the project site is in an area designated by the Stockton General Plan for urban development,

and such development has occurred in the area, along with extensions of urban infrastructure.

The project site is within the City's Sphere of Influence, as set forth in the City's interim Municipal Service Review (City of Stockton 2019). Proposed development on the project site would support light industrial development planned in the area, particularly the Norcal Logistics Center site. The project would not involve any activity that would indirectly convert agricultural land beyond the designated light industrial lands to non-agricultural uses. Project impacts on indirect conversion of agricultural lands would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

6.0. AIR QUALITY

This chapter analyzes impacts on air quality, specifically as they relate to pollutants regulated by federal and State Clean Air Acts. Greenhouse gases (GHGs), gases that trap heat generated by the sun, are regulated separately from other air pollutants. Chapter 10.0, Greenhouse Gas Emissions, discusses the potential environmental impacts of the project as they relate to GHG emissions.

ENVIRONMENTAL SETTING

The project site is located within the northern portion of the San Joaquin Valley Air Basin (Air Basin). The Air Basin is bounded generally by the Coast Ranges to the west and the Sierra Nevada and foothills to the east. The prevailing winds are from the west and north, a result of marine breezes that enter the Air Basin primarily through the Carquinez Strait but also through the Altamont Pass. Surrounding topography results in weak air flow, which makes the Air Basin highly susceptible to pollutant accumulation over time. Summers are hot and dry, and winters are cool. Most of the annual precipitation falls from November through April. The Stockton area enjoys more than 260 days of sunshine annually, but the amount of sunshine is reduced during the winter months. Inversions occur frequently during fall and early winter (SJVAPCD 2015a).

The Air Basin has been identified by the California Air Resources Board (ARB) as impacted by air pollution transported from the San Francisco Bay Area and Broader Sacramento Air Basins (ARB 1993). It is also a contributor of air pollution to the Broader Sacramento, Mountain Counties, South Central Coast, Southeast Desert, and Great Basin Valley Air Basins. As a pollutant contributor, the Air Basin is subject to special mitigation requirements of the California Clean Air Act.

Air Pollutants

Pollutants of concern for development projects typically include ozone, particulate matter, and carbon monoxide. Pollutants of concern for industrial and logistical projects also include what are called “toxic air contaminants” (TACs).

Ozone

Ozone is not directly produced; rather, it is a secondary pollutant that is formed from reactive organic gases (ROG) and nitrogen oxides (NO_x) in the presence of sunlight. Automobile emissions represent the principal source of ROG and NO_x, referred to as “ozone precursors.” High concentrations of ground-level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments. More specifically, ground-level ozone may:

- Make it more difficult to breathe deeply and vigorously.
- Cause shortness of breath, and pain when taking a deep breath.
- Cause coughing and sore or scratchy throat.
- Inflame and damage the airways.
- Aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.
- Increase the frequency of asthma attacks.
- Make the lungs more susceptible to infection.
- Continue to damage the lungs even when the symptoms have disappeared.
- Cause chronic obstructive pulmonary disease.

People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. In addition, people with certain genetic characteristics, and people with reduced intake of certain nutrients, such as vitamins C and E, are at greater risk from ozone exposure (EPA 2018a).

Ozone also damages natural ecosystems such as forests and foothill communities, agricultural crops, and some man-made materials, such as rubber, paint, and plastics. To control ozone pollution, it is necessary to control emissions of ROG and NO_x.

Particulate Matter

Particulate matter includes any solid matter suspended in air. Standards are applied to particulates 10 micrometers in diameter or less (PM_{10}), because these particles, when inhaled, are not filtered out prior to reaching the lungs, where they can aggravate respiratory diseases. Particulates originate from automobile traffic, urban construction, grading, farm tilling, and other activities that expose soil and dust. Dry summer conditions and daily winds can increase particulate concentrations. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

- premature death in people with heart or lung disease
- nonfatal heart attacks
- irregular heartbeat
- aggravated asthma
- decreased lung function
- increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

People with heart or lung diseases, children, and older adults are the most likely to be affected by particle pollution exposure (EPA 2018b).

Separate standards have been established for particulate matter that is 2.5 micrometers or less in size ($PM_{2.5}$), sometimes referred to as "fine particulate matter." The $PM_{2.5}$ standards reflect health concerns related to respiration of smaller particles. Fine particulates include sulfates, nitrates, organics, ammonium, and lead compounds originating from some activities in urban areas.

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels. The main source of CO in the San Joaquin Valley is on-road motor vehicles. Other CO sources in the Valley include other mobile sources, miscellaneous processes, and fuel combustion from stationary sources. Because of its ability to readily combine with hemoglobin and displace oxygen in the human body, high levels of CO can produce hazardous conditions, including fatigue, headache, confusion, and dizziness, especially for elderly people or individuals with respiratory ailments.

In 2010, the most recent year for which data are available, approximately 408 tons of ROG and 363 tons of NO_x were emitted each day from sources in the Air Basin. Approximately 284 tons of PM_{10}, of which 77 tons were $PM_{2.5}$, were emitted daily. No total CO emissions were available. Areawide sources account for most of the ROG and particulate matter emissions. Emissions from areawide sources may be either from small individual sources, such as residential fireplaces, or from widely distributed sources that cannot be tied to a single location, such as consumer products and dust from unpaved roads. Most of the NO_x and CO emissions were caused primarily by mobile sources; i.e., motor vehicles (ARB 2013).

Toxic Air Contaminants (TACs)

TACs are pollutants that cause or may cause cancer or other serious health effects such as birth defects, neurological and reproductive disorders, or chronic eye, lung or skin irritation. TACs also may cause adverse environmental and ecological effects. The State's Air Toxics Inventory includes more than 250 substances considered TACs (ARB 2008a). They include such substances as volatile organic compounds, chlorinated hydrocarbons, asbestos, dioxin, toluene, gasoline engine exhaust, particulate matter emitted by diesel engines, and metals such as cadmium, mercury, chromium, and lead compounds, among many others. Most TACs are emitted as a result of specialized industrial processes.

Diesel particulate matter (diesel PM) is designated by the State of California as a TAC. A primary source of diesel PM emissions is combustion from diesel engines, such as those in trucks and other motor vehicles. Diesel PM is of concern because it is a potential source of both cancer and non-cancer health effects, and because it is present at some concentration in all developed areas of the state. The ARB has identified diesel PM as a major contributor to ambient cancer risk levels; while diesel PM accounts for only about

4% of air toxic emissions in the state, it accounted for more than 70% of the 2000 cancer risk associated with outdoor ambient levels of all TACs (ARB 2005). The ARB has estimated that cancer risks from diesel particulate average 500 cancer cases per million population statewide. These general risks can be elevated with proximity to the source.

REGULATORY FRAMEWORK

Federal

Federal air quality regulation stems from the Clean Air Act, as amended. The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to establish air quality standards for criteria pollutants, known as the National Ambient Air Quality Standards, as shown in Table 6-1. There are six criteria pollutants: ozone, carbon monoxide, particulate matter, nitrogen dioxide, lead, and sulfur dioxide. Two types of standards are established: primary standards to protect human health, based on EPA medical research and specific concentration thresholds derived therefrom; and secondary standards to protect the public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage.

Regions of the country are classified with respect to their attainment of National Ambient Air Quality Standards. Areas where these standards are exceeded are considered "nonattainment" areas and are subject to more intensive air quality management and more stringent regulation. Table 6-2 shows the attainment status of the Air Basin for federal standards. The Air Basin is designated Nonattainment/Extreme for ozone and Nonattainment for $PM_{2.5}$. The Air Basin meets all other federal standards.

The Clean Air Act requires the states to submit a State Implementation Plan for nonattainment areas. The State Implementation Plans are reviewed and approved by the EPA, subject to a determination of their adequacy in demonstrating how the federal standards will be achieved.

State

California Clean Air Act

The California Clean Air Act provides the planning framework for California air quality. It establishes the State's own set of ambient air quality standards for criteria pollutants, known as the California Ambient Air Quality Standards (see Table 6-1). The State standards cover other pollutants besides the six criteria pollutants designated by the federal Clean Air Act; additionally, the State standards are generally more stringent than the corresponding federal standards.

TABLE 6-1
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Air Pollutant	Averaging Time	California Standards	Primary National Standards[1]	Secondary National Standards[2]
Ozone	1 Hour	0.090 ppm	--	--
	8 Hour	0.070 ppm	0.070 ppm	0.070 ppm
PM_{10}	24 Hour	50 $\mu g/m^3$	150 $\mu g/m^3$	--
	Annual Mean	20 $\mu g/m^3$	--	--
$PM_{2.5}$	24 Hour	--	35 $\mu g/m^3$	35 $\mu g/m^3$
	Annual Mean	12 $\mu g/m^3$	12 $\mu g/m^3$	12 $\mu g/m^3$
Carbon Monoxide	1 Hour	20 ppm	35 ppm	--
	8 Hour	9 ppm	9 ppm	--
Nitrogen Dioxide	1 Hour	0.18 ppm	100 ppb	--
	Annual Mean	0.030 ppm	0.053 ppm	0.053 ppm
Sulfur Dioxide	1 Hour	0.25 ppm	75 ppb	--
	3 Hour	--	--	0.5 ppm
	24 Hour	0.04 ppm	0.14 ppm*	--
	Annual Mean	--	0.030 ppm*	--
Lead	30 Day Avg.	1.5 $\mu g/m^3$	--	--
	Calendar Qtr.	--	1.5 $\mu g/m^3$	1.5 $\mu g/m^3$
	3 Month Average	--	0.15 $\mu g/m^3$	0.15 $\mu g/m^3$
Sulfates	24 Hour	25 $\mu g/m^3$	N/A	N/A
Hydrogen Sulfide	1 Hour	0.03 ppm	N/A	N/A
Vinyl Chloride	24 Hour	0.01 ppm	N/A	N/A
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer.[3]	N/A	N/A

Notes: ppm – parts per million; ppb – parts per billion; $\mu g/m^3$– micrograms per cubic meter; N/A – not applicable
[1] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
[2] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
[3] The "extinction coefficient" is a measure of the diminishing of light through scattering and absorption.
* For certain areas.
Source: ARB 2016.

Table 6-2 shows the attainment status of the Air Basin for California Ambient Air Quality Standards. For ozone, the Air Basin is designated Nonattainment/Severe by the State. The State also classifies the Air Basin as Nonattainment for PM_{10} and $PM_{2.5}$. The Air Basin is in attainment of, or unclassified for, all other State standards.

TABLE 6-2
SJVAB ATTAINMENT STATUS
WITH FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

	Designation/Classification	
Pollutant	**Federal Standards**	**State Standards**
Ozone - One hour	No Federal Standard[a]	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme[b]	Nonattainment
PM_{10}	Attainment[c]	Nonattainment
$PM_{2.5}$	Nonattainment[d]	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

[a] Effective June 15, 2005, EPA revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the Air Basin as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the Air Basin.

[b] Though the San Joaquin Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[c] On September 25, 2008, the U.S. Environmental Protection Agency (EPA) redesignated the San Joaquin Valley to attainment for the PM_{10} National Ambient Air Quality Standard (NAAQS) and approved the PM_{10} Maintenance Plan.

[d] The San Joaquin Valley is designated nonattainment for the 1997 $PM_{2.5}$ NAAQS. EPA designated the Valley as nonattainment for the 2006 $PM_{2.5}$ NAAQS on November 13, 2009 (effective December 14, 2009).

Source: SJVAPCD 2018a.

Responsibility for implementation of the California Clean Air Act requirements and for preparation of the State Implementation Plan rests with the ARB; the local air pollution or air quality management districts are responsible for preparation of Air Quality Attainment Plans for their jurisdictions, which become part of the State Implementation Plan. The California Clean Air Act requires areas that are designated nonattainment to achieve a 5% annual reduction in emissions until the standards are met.

Toxic Air Contaminants

The State regulates TACs primarily through the Tanner Air Toxics Act and the Air Toxics Hot Spots Information and Assessment Act of 1987. Under these programs, the State is responsible for an inventory of TACs, for analysis of exposure and risk and for planning to reduce risk. Like other federal and state air quality requirements, the various elements of the state air toxics program are implemented by the local air districts.

San Joaquin Valley Air Pollution Control District

Projects within the Air Basin are subject to the regulatory authority of the San Joaquin Valley Air Pollution Control District (SJVAPCD), which implements and enforces air quality regulations in eight counties, from San Joaquin County in the north to western Kern County in the south. The District's responsibilities include air quality standard attainment planning, regulation of emissions from non-transportation sources, and mitigation of emissions from on-road sources.

Air Quality Plans

Air quality plans adopted by the SJVAPCD to meet Clean Air Act standards, including those designed to protect human health, are presented in Table 6-3 below. All the plans include federal, State, and local measures that would be implemented through rule making or program funding to reduce air pollutant emissions in the Air Basin.

TABLE 6-3
SJVAPCD AIR QUALITY PLANS

Pollutant	**Plan**	**Objective**
Ozone	2013 Plan for the Revoked 1-Hour Ozone Standard	Attainment of federal 1-hour ozone standard by 2017 (EPA determined Air Basin attained standard in 2016).
	2007 Ozone Plan	Attainment of 1997 federal 8-hour ozone standard for all areas of the Air Basin no later than 2023.
	2016 Ozone Plan	Attainment of 2008 federal 8-hour ozone standard for all areas of the Air Basin by end of 2031.
Particulate Matter	2007 PM_{10} Maintenance Plan and Request for Redesignation	Continued attainment of federal PM_{10} standard met by the Air Basin.
	2012 $PM_{2.5}$ Plan	Attainment of 2006 federal $PM_{2.5}$ standard, estimated to occur in 2019.
	2015 $PM_{2.5}$ Plan for the 1997 $PM_{2.5}$ Standard	Attainment of 1997 federal annual and 24-hour $PM_{2.5}$ standards by end of 2020.
	2016 Moderate Area Plan for the 2012 $PM_{2.5}$ Standard	Attainment of 2012 federal $PM_{2.5}$ standard, requested deadline of 2025.
	2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards	Consolidates previous $PM_{2.5}$ plans into a single plan that addresses attainment of the various $PM_{2.5}$ standards.

Rules and Regulations

SJVAPCD has adopted several regulations that are applicable to the project. These regulations are summarized below.

Regulation VIII (Fugitive Dust PM_{10} Prohibitions)

Rules 8011-8081 which are, together, Regulation VIII, are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, landfill operations, etc.

Rule 4101 (Visible Emissions)

Rule 4101 prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

Rule 4601 (Architectural Coatings)

Rule 4601 limits emissions of volatile organic compounds from architectural coatings by specifying storage, clean up and labeling requirements.

Rule 9410 (Employer Based Trip Reduction)

The purpose of Rule 9410 is to reduce vehicle miles traveled (VMT) from private vehicles used by employees to commute to and from their worksites, which in turn would reduce emissions of NO_x, volatile organic compounds (a component of ozone), and particulate matter. Employers are required to implement an Employer Trip Reduction Implementation Plan (ETRIP) for each worksite with 100 or more eligible employees to meet applicable targets specified in the rule. Employers are required to facilitate the participation of the development of ETRIPs by providing information to its employees explaining the requirements and applicability of this rule.

Under this rule, employers shall collect information on the modes of transportation used for each eligible employee's commutes both to and from work for every day of the commute verification period, as defined by using either the mandatory commute verification method or a representative survey method. An ETRIP for each worksite must be submitted to the SJVAPCD, and the ETRIP must be updated annually. Annual reporting includes the results of the commute verification for the previous calendar year along with the measures implemented as outlined in the ETRIP and, if necessary, any updates to the ETRIP.

Rule 9510 (Indirect Source Review)

Rule 9510, also known as the Indirect Source Rule, is intended to reduce or mitigate emissions of NO_x and PM_{10} from new development in the SJVAPCD including construction and operational emissions. This rule requires specific percentage reductions in estimated on-site construction and operation emissions, and/or payment of off-site mitigation fees for required reductions that cannot be met on the

project site. Construction emissions of NO_x and PM_{10} exhaust must be reduced by 20% and 45%, respectively. Operational emissions of NO_x and PM_{10} must be reduced by 33.3% and 50%, respectively. Rule 9510 applies to light industrial development projects of 25,000 square feet and larger, so the project would be subject to this rule.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

- Conflict with or obstruct implementation of an applicable air quality plan,
- 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 [see Chapter 18.0, Cumulative Impacts, for an analysis of potential cumulative air quality impacts],
- Expose sensitive receptors to substantial pollutant concentrations, or
- Result in other emissions, such as those leading to odors, adversely affecting a substantial number of people.

CEQA Guidelines Appendix G states that, where available, significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make significance determinations. In 2015, the SJVAPCD adopted a revised Guide for Assessing and Mitigating Air Quality Impacts, which defines methodology and thresholds of significance for the assessment of air quality impacts for projects within SJVAPCD's jurisdiction, along with mitigation measures for identified impacts. Table 6-4 shows the significance thresholds established by SJVAPCD for projects, as set forth in the Guide for Assessing and Mitigating Air Quality Impacts. The SJVAPCD's thresholds of significance for criteria pollutants are applied to evaluate regional impacts of project-specific emissions of air pollutants. Regional impacts of a project can be characterized in terms of total annual emissions of criteria pollutants and their impact on SJVAPCD's ability to reach attainment (SJVAPCD 2015a).

The SJVAPCD significance thresholds are based on offset thresholds established under the New Source Review (SJVAPCD Rule 2201). The New Source Review rule is a major component of the District's attainment strategy as it relates to growth and applies to new and modified stationary sources of air pollution. Under the New Source Review, all new permitted sources with emission increases exceeding two pounds per day, for any criteria pollutant is required to implement Best Available Control Technology. Furthermore, all permitted sources emitting more than the New Source Review offset thresholds for any criteria pollutant must offset all emission increases in excess of the thresholds. The

SJVAPCD's attainment plans, developed to meet air quality standards designed in part to protect human health, demonstrate that project-specific emissions below the offset thresholds will have a less-than-significant impact on air quality (SJVAPCD 2015a).

TABLE 6-4
SJVAPCD SIGNIFICANCE THRESHOLDS AND
PROJECT AIR POLLUTANT EMISSIONS

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
SJVAPCD Significance Thresholds[1]	**10**	**10**	**100**	**27**	**15**	**15**
Construction Emissions – Proposed Project[2]	7.28	8.54	6.92	0.03	1.88	0.58
Above Threshold?	*No*	*No*	*No*	*No*	*No*	*No*
Construction Emissions – Market Driven Project[3]	5.31	6.29	5.24	0.02	1.30	0.42
Above Threshold?	*No*	*No*	*No*	*No*	*No*	*No*
Operational Emissions – Proposed Project[3]	8.86	7.74	12.14	0.06	4.85	1.37
Above Threshold?	*No*	*No*	*No*	*No*	*No*	*No*
Operational Emissions – Market Driven Project[33]	6.69	10.30	14.01	0.07	5.43	1.52
Above Threshold?	*No*	*Yes*	*No*	*No*	*No*	*No*

[1] Applicable to both construction and operational emissions.
[2] Maximum emissions in a calendar year.
[3] Tons per year
Notes: ROG – reactive organic gases; NO_x – nitrogen oxide; CO – carbon monoxide; SO_x – sulfur oxide; PM_{10} – particulate matter 10 microns in diameter; $PM_{2.5}$ – particulate matter 2.5 microns in diameter.
Sources: CalEEMod Version 2016.3.2, SJVAPCD 2015a.

The project's construction and operational emissions were calculated using the California Emissions Estimator Model (CalEEMod) computer program, a modeling program recommended by SJVAPCD. The CalEEMod results are shown in Appendix C of this report and summarized in Table 6-4. Construction emissions are the maximum estimated for a calendar year during the construction period that extends approximately from 2021 to 2025, while operational emissions are estimates of ongoing annual emissions from the proposed development. It should be noted that CalEEMod used the optional Sanchez property development figures that were used in the traffic analysis. See Chapter 16.0, Transportation, for the trip figures.

Impact AIR-1: Air Quality Plans and Standards – Construction Emissions

As indicated in Table 6-4, project construction air pollutant emissions would be below the significance thresholds adopted by the SJVAPCD for the proposed project. This would also be true for the Market Driven Project, which would result in greater traffic

generation than the project. A description of the Market Driven Project is provided in Chapter 16.0 Transportation. Project-specific emissions below SJVAPCD significance thresholds would not interfere with attainment plans that would bring SJVAPCD into consistency with national and State ambient air quality standards. Based on this, construction impacts of the proposed project regarding consistency with the applicable air quality plans would be less than significant.

Project construction would be subject to Rule 9510, which as noted above requires construction emission reductions of NO_x and PM_{10} exhaust by 20% and 45%, respectively. The SJVAPCD will be notified of impending project construction as a part of the required filing of an application for coverage under Rule 9510. Rule 9510 is a routinely applied regulatory program that is part of the City's development review process and is routinely reflected in conditions of approval for projects.

Dust emissions would be reduced through the required implementation of SJVAPCD Regulation VIII, enforcement of which is the responsibility of the SJVAPCD. Conformance with plans and specifications is monitoring by City building inspectors. Regulation VIII contains the following dust emission control measures:

- Air emissions related to the project shall be limited to 20% opacity (opaqueness, lack of transparency) or less, as defined in SJVAPCD Rule 8011. The dust control measures specified below shall be applied as required to maintain the Visible Dust Emissions standard.

- The contractor shall pre-water all land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and phase earthmoving.

- The contractor shall apply water, chemical/organic stabilizer/suppressant, or vegetative ground cover to all disturbed areas, including unpaved roads, throughout the period of soil disturbance.

- The contractor shall restrict vehicular access to the disturbance area during periods of inactivity.

- The contractor shall apply water or chemical/organic stabilizers/suppressants, construct wind barriers and/or cover exposed potentially dust-generating materials.

- When materials are transported off-site, the contractor shall stabilize and cover all materials to be transported and maintain six inches of freeboard space from the top of the container.

- The contractor shall remove carryout and trackout of soil materials on a daily basis unless it extends more than 50 feet from site; carryout and trackout extending more than 50 feet from the site shall be removed immediately. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden. If the project would involve more than

150 construction vehicle trips per day onto the public street, additional restrictions specified in Section 5.8 of SJVAPCD Rule 8041 would apply.

Conformance with SJVAPCD dust control standards will also be facilitated by the City by the incorporation of dust control requirements in project conditions of approval. Dust control provisions are also routinely included in site improvement plans and specifications. In combination with the implementation of Rule 9510, this would further reduce project construction emissions that are considered less than significant based on the SJVAPCD significance thresholds.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AIR-2: Air Quality Plans and Standards – Operational Emissions

As indicated in Table 6-4, estimated annual project operational emissions also would be below SJVAPCD significance thresholds for the proposed project. NOx emissions for the Market Driven Project would slightly exceed the SJVAPCD threshold. As described above, project-specific emissions below SJVAPCD significance thresholds would not interfere with attainment plans that would bring SJVAPCD into consistency with national and State ambient air quality standards. Based on this, impacts of the proposed project regarding consistency with the applicable air quality plans would be less than significant.

As noted, SJVAPCD Rule 9510, a routinely applied component of the City's development review process, requires development projects to reduce operational NO_x and PM_{10} emissions by 33.3% and 50%, respectively. Application of the rule to the proposed project would further reduce its less than significant NOx emissions. Application of the same rule to the Market Driven Project would reduce the significant operational emissions of NO_x to a less than significant 6.87 tons per year, which would be below the SJVAPCD significance threshold for NO_x. With implementation of Rule 9510, then, the Market Driven Project impacts related to operational pollutant emissions would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AIR-3: Exposure of Sensitive Receptors to Criteria Pollutants

"Sensitive receptors" refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses where sensitive individuals are most likely to spend time also may be called sensitive receptors; these include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (SJVAPCD 2015a). The nearest sensitive receptors to the project site are rural residences across North Littlejohns Creek from the Hoggan property. No sensitive receptors, as defined, are near the Sanchez property.

As indicated in Table 6-4, the proposed project would have construction emissions that are below the SJVAPCD significance thresholds. However, project construction may generate localized dust emissions at levels above existing ambient conditions, which is of concern if sensitive receptors are near the project site. Implementation of SJVAPCD Regulation VIII would reduce the amount of fugitive dust emissions released into the air, thereby reducing potential exposure of these residences. Table 6-4 also indicates that project operational emissions would be below SJVAPCD significance thresholds. Therefore, project emissions would not have the potential to affect sensitive receptors.

In 2018, the California Supreme Court decided *Sierra Club v. County of Fresno*, also known as the Friant Ranch case. In its opinion, the court stated that an EIR prepared for a community plan update and specific plan inadequately described air quality impacts in part because, although it did explain the general health impacts of pollutants, it did not explain the specific impacts the project's emissions would have on health. A brief filed in the case by the SJVAPCD, along with a brief filed jointly by the California Association of Environmental Professionals (AEP) and the American Planning Association California Chapter (APA), explained that the current state of air quality modeling does not allow for assessing the specific impacts of a project's air quality emissions on human health in an area. The AEP-APA brief noted that the Court of Appeals opinion in the Friant Ranch case focused on regional concentrations of pollutants, then stated:

> "The volumes of air contained in a regional air basin are immense, and even the largest project's emissions are the proverbial 'drop in the bucket.' The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform either temporally or geographically throughout an air basin but are constantly fluctuating based upon meteorology and other environmental factors.
>
> Under these circumstances, an analysis attempting to take "tons per year" regional mass emissions data and directly translate that into precise pollutant concentrations, and hence project-specific health effects, would not be practical or meaningful." (AEP-APA 2015)

In its brief, the SJVAPCD made the following observations:

> "Although these levels [of project emissions] well exceed the Air District's CEQA significance thresholds, this does not mean that one can easily determine the concentration of ozone or PM that will be created at or near the Friant Ranch site on a particular day or month of the year, or what specific health impacts will occur. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration of ozone and PM.
>
> Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like ozone and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level." (SJVAPCD 2015b)

The California Supreme Court stated in its Friant Ranch opinion that "if it is not scientifically possible to do more than has already been done to connect air quality effects with potential human health impacts, the EIR itself must explain why, in a manner reasonably calculated to inform the public of the scope of what is and is not yet known about the Project's impacts." Based upon the information presented above, a specific connection between the project's emissions and health impacts cannot be reasonably drawn. It should be noted that, as discussed earlier, the SJVAPCD significance thresholds were developed in part to ensure attainment of primary federal ambient air quality standards, which were designed to protect human health.

CO in high concentrations would have adverse health impacts, as previously described. A CO "hotspot" is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to expose receptors to emissions that violate state and/or federal CO standard even if the broader Basin is in attainment for federal and state levels. A project would create no violations of the CO standards if neither of the following criteria are met (SJVAPCD 2015a):

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity (See Chapter 16.0, Transportation, for an explanation of LOS).

As noted in Chapter 16.0, Transportation, a traffic study for the project was conducted, in which potential impacts on LOS at 22 intersections and proposed driveways were evaluated under Existing Plus Approved Projects (EPAP) Plus Project conditions. Under EPAP Plus Project conditions, all the intersections would maintain an acceptable LOS except for three: Arch-Airport Road/Qantas Lane, Arch-Airport Road/SR 99, and Arch Road and Frontage Road. However, land adjacent to these intersections are developed with commercial uses; no sensitive receptors as defined above are near any of these intersections. The project would have no significant impact related to CO emissions. Overall, impacts related to exposure of sensitive receptors to air pollutants are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AIR-4: Exposure of Sensitive Receptors to Toxic Air Contaminants

Project construction would likely use construction equipment that would emit diesel PM, which is classified as a TAC. The CalEEMod run estimated that project construction would generate a maximum of approximately 0.15 tons per year of exhaust PM_{10} emissions, which include diesel PM (see Appendix C). Rural residences near the Hoggan property could be exposed to these emissions. However, diesel PM emissions would have

adverse effects only for people that experience long-term exposure. Diesel PM emissions would cease once construction work is completed, so potential exposure by nearby residences would be limited. In addition, diesel particulate matter emissions would likely dissipate before reaching these rural residences, plus most of these emissions would be generated by construction on the Sanchez property, which is more than one mile from these rural residences.

As with project construction, the TAC that would most likely be emitted from project operations would be diesel PM, mainly from truck traffic. The CalEEMod run estimated that project operations would generate approximately 0.11 tons per year of exhaust PM_{10} emissions, including diesel PM. Most of these emissions would be generated from activities on the Sanchez property, which is not located near any sensitive receptors. Sensitive receptors are closer to the Hoggan property, mainly the residences to the north. Project operations on the Hoggan property, mainly truck traffic, would generate diesel PM emissions. The amount of diesel PM emissions would be substantially less than that generated by Sanchez property development. Nevertheless, diesel PM emissions from Hoggan property development could affect nearby residences.

The SJVAPCD recommends that projects that could emit substantial amounts of carcinogens conduct a Health Risk Assessment if there are nearby sensitive receptors that could be exposed to carcinogenic emissions. To determine if a Health Risk Assessment would be necessary a "facility prioritization" is conducted on all sources of potential toxic emissions. If a project has a prioritization score of 10 or less, then the project is considered not to exceed the SJVAPCD significance threshold for health impacts and a Health Risk Assessment would not be required.

The facility prioritization score for the Hoggan development was calculated using the Prioritization Calculator developed by the Sacramento Air Quality Management District, based upon information contained in *Facility Prioritization Guidelines* by the California Air Pollution Control Officers Association. The facility prioritization score for Hoggan property development is zero. Therefore, the Hoggan development would not be required to prepare a Health Risk Assessment and is not considered to have a significant health impact on residents to the north. Project impacts related to TACs would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AIR-5: Odors and Other Emissions

Odors are more of a nuisance than an environmental hazard. Nevertheless, the Environmental Checklist in CEQA Guidelines Appendix G regards objectionable odors as a potentially significant environmental impact. Some industrial raw materials, processes, and products can emit odors that would be considered objectionable, sometimes intensely. Examples include waste disposal and recycling, chemical production, and wastewater treatment. The Guide for Assessing and Mitigating Air

Quality Impacts states that a project should be evaluated to determine the likelihood that it would result in nuisance odors (SJVAPCD 2015a).

Proposed project development is not expected to generate significant odors, other than from vehicle emissions. Such emissions, as indicated in the CalEEMod run, would be minimal. These emissions would be localized and would dissipate rapidly outside the project site. As noted above, the nearest sensitive receptors would be the rural residences north of the Hoggan property, and these residences would be unlikely to be exposed to substantial odors from project operations. Project impacts related to odors and other emissions are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

7.0 BIOLOGICAL RESOURCES

ENVIRONMENTAL SETTING

Information for this section was obtained primarily from a biological resource assessment prepared by Moore Biological Consultants. Appendix D contains the assessment, which was based upon a search of the California Natural Diversity Database (CNDDB) managed by the California Department of Fish and Wildlife (CDFW), a review of the IPaC Trust Resource Report of the U.S. Fish and Wildlife Service (USFWS), a review of aerial photographs and documents, and three field surveys of the project site during 2019.

The site is nearly level and ranges in elevation of approximately 30 to 45 feet above mean sea level. The Sanchez property consists of leveled fields, being used for farming of various annual. A channelized section of Weber Slough flows through the Sanchez property from east to west, with culvert crossings under Austin Road and Logistics Drive. Most of the Hoggan property is annual grassland that appears to be periodically mowed and/or disked and not used recently for farming. There is a small abandoned home site in the north tip of the Hoggan property. North Littlejohns Creek runs along the entire northern edge of the Hoggan property.

Surrounding land uses in this portion of San Joaquin County are primarily industrial and agricultural. There is cropland to the north of the Sanchez. East and west of the Sanchez property are leveled fields, areas of cropland and industrial facilities. Across Arch Road to the south of the Sanchez property are bare dirt fields and CDCR facilities. The Hoggan property is bounded to the north and west by ranchette-style homes on relatively large parcels and is bounded to the east by leveled cropland. The south edge of the Hoggan Parcel is bordered by industrial buildings. In general, the area further surrounding the Hoggan property are residential parcels, pockets of industrial areas, cropland, and open fallow fields.

Vegetation

Most of the Sanchez property is cropland that was farmed in hay in the spring of 2019, while the Hoggan property was not farmed. Beyond the cropland, vegetation on the Sanchez property is constrained to the road shoulders surrounding the site and along the edges of Weber Slough. In contrast, vegetation throughout the Hoggan property is homogenous grassland. Due to the amount of disturbance from agriculture, development, and periodic mowing, spraying and/or disking for weed abatement, vegetation on the project site is primarily annual grass and weed species. Similar annual grassland species were found on both properties.

California annual grassland series best describes the disturbed grassland vegetation in the project site. Dominant grass species include oats, ripgut brome, and foxtail barley. Other

species intermixed with these grasses include black mustard, tarweed, prickly lettuce, miner's lettuce, filaree, and common mallow. Table 7-1 lists plant species observed on the project site.

The only trees on the Sanchez property are six ornamental trees along Austin Road, adjacent to the section of Weber Slough that is channelized along the east side of the road. Although not within the Sanchez property, there are a few large trees just to the south across Arch Road. There are several trees on the Hoggan property, primarily in the North Littlejohns Creek riparian corridor along the northern edge. Dominant trees along the creek include valley oak, Fremont cottonwood, and Goodding's black willow. The understory of the riparian corridor contains patches of wild rose. Several valley oak trees surround the abandoned building in the northeast part of the parcel, and there is a lone valley oak along the southern edge of the Hoggan property. No blue elderberry shrubs, which is habitat for the listed valley elderberry longhorn beetle, were observed on or adjacent to the project site.

Wildlife

Table 7-2 lists the wildlife species observed on the project site. A limited variety of bird species were observed during the field surveys, all of which are common species found in agricultural and riparian areas of San Joaquin County. Turkey vulture, American kestrel, northern mockingbird, and white-crowned sparrow are representative of the bird species observed in the project site. There are several potential nest trees on the Hoggan property that are suitable for nesting raptors and other protected migratory birds, including Swainson's hawk. There are some large trees close to the Sanchez property that may also be used for nesting by migratory birds.

A limited variety of mammals common to agricultural areas are likely to occur on the project site. Tracks from coyote and raccoon and sign of Botta's pocket gopher were observed on the Sanchez property during the field surveys; no mammals or sign of mammals were observed on the Hoggan property. Other common species are expected to occur in the project site on occasion, such as black-tailed hare, striped skunk, desert cottontail, and Virginia opossum. California ground squirrels are widespread in agricultural areas and may occur on-site. However, no California ground squirrels or their burrows were observed.

Due to lack of suitable habitat, few amphibians and reptiles are expected to use habitats on the site, and none were observed. Common species such as western fence lizard, Pacific chorus frog, and western terrestrial garter snake may occur on the site. As Weber Slough is ephemeral and North Littlejohns Creek is dry much of the year, neither creek provides suitable aquatic habitat for fish.

TABLE 7-1
PLANT SPECIES OBSERVED IN THE PROJECT SITE

Scientific Name	Common Name
Amsinckia menziesii	Rancher's fireweed
Avena sp.	Wild oat
Brassica nigra	Black mustard
Bromus diandrus	Ripgut brome
Bromus hordeaceus	Soft brome
Capsella bursa-pastoris	Shepherd's purse
Centaurea solstitialis	Yellow star thistle
Cirsium vulgare	Bull thistle
Claytonia perfoliata	Miner's lettuce
Cynara cardunculus	Artichoke thistle
Epilobium brachycarpum	Fireweed
Erigeron bonariensis	Asthmaweed
Erodium botrys	Filaree
Erodium circutarium	Red-stem filaree
Foeniculum vulgare	Fennel
Galium aparine	Common bedstraw
Geranium dissectum	Dissected geranium
Geranium molle	Soft geranium
Helianthus annuus	Common sunflower
Holocarpha virgata	Tarweed
Hordeum murinum	Foxtail barley
Lactuca serriola	Prickly lettuce
Leontodon saxatilis	Long-beaked hawkbit
Malva neglecta	Common mallow
Populus fremontii	Fremont cottonwood
Prunus dulcis	Almond
Quercus lobata	Valley oak
Raphanus sativa	Radish
Rosa californica	California wild rose
Rumex crispus	Curly dock
Salix gooddingii	Goodding's black willow
Salsola iberica	Russian thistle
Sonchus asper	Sow thistle
Trifolium hirtum	Rose clover
Vicia americana	American purple vetch

TABLE 7-2
WILDLIFE SPECIES OBSERVED IN THE PROJECT SITE

Scientific Name	Common Name
Birds	
Cathartes aura	Turkey vulture
Buteo jamaicensis	Red-tailed hawk
Falco sparverius	American kestrel
Columba livia	Rock dove
Zenaida macroura	Mourning dove
Calypte anna	Anna's hummingbird
Colaptes auratus	Northern flicker
Sayornis nigricans	Black phoebe
Aphelocoma californica	California scrub jay
Mimus polyglottos	Northern mockingbird
Lanius ludovicianus	Loggerhead shrike
Setophaga coronata	Yellow-rumped warbler
Zonotrichia leucophrys	White-crowned sparrow
Agelaius phoeniceus	Red-winged blackbird
Mammals	
Thomomys bottae	Botta's pocket gopher
Canis latrans	Coyote
Procyon lotor	Raccoon

Waters of the U.S. and Wetlands

Waters of the U.S. include navigable waterways, their tributaries, and adjacent wetlands. More specifically, Waters of the U.S. encompass territorial seas, tidal waters, and non-tidal waters. Other jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages; lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. State and federal agencies regulate these habitats (see below). Wetlands and Waters of the U.S. provide critical habitat components, such as nest sites and a reliable source of water, for a wide variety of wildlife species.

Weber Slough is the only potentially jurisdictional Water of the U.S. on the Sanchez property. A USGS topographic map indicates that Weber Slough is an intermittent "blue-line" drainage, but the biological report considers the slough ephemeral. Weber Slough depends on winter storms for seasonal flows and may convey excess irrigation water on occasion. Weber Slough is channelized, incised below the adjacent fields, and contained no water during the field surveys. Substrates in the active channel are dirt and a little bit of gravel. There is very little wetland vegetation in or along the on-site section of Weber Slough; vegetation in the channel primarily consists of upland grasses and weeds. The

potential jurisdictional limit of this section of Weber Slough is defined by an “ordinary high water mark,” which is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris. The channel is trapezoidal and the mean width of the jurisdictional limits is approximately six feet.

North Littlejohns Creek is the only potentially jurisdictional Water of the U.S. on the Hoggan property. A USGS topographic map indicates that North Littlejohns Creek is also an intermittent "blue-line" drainage. North Littlejohns Creek primarily conveys runoff water during the winter and agricultural tail water from fields just east of the site. North Littlejohns Creek is incised approximately six to eight feet below the adjacent fields. The west end of the creek contained a few inches of water during some of the field surveys, while the east end contained no standing water during any survey. Substrates in the active channel are primarily dirt. There is essentially no vegetation in the creek bed, but there is a riparian corridor.

Special-Status Species

Special-status species are plants and animals that are legally protected under the federal and California Endangered Species Act or other regulations (see below). Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS, along with considered rare or endangered under the conditions of CEQA Guidelines Section 15380, such as plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California by the California Native Plant Society.

Table 7-3 provides a summary of the listing status and habitat requirements of special-status species in the greater project vicinity that have been documented or for which there is potentially suitable habitat. Table 7-3 also includes an assessment of the likelihood of occurrence of each of these species on the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations. More detailed information on the potential for occurrence of the special-status species is provided in Table 3 of the biological resource study in Appendix D of this EIR.

TABLE 7-3
SPECIAL-STATUS SPECIES DOCUMENTED OR POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
Plants						
Alkali milk-vetch	*Astragalus tener var. tener*	None	None	1B	Alkali vernal pools.	None: the project site does not provide suitable habitat; there are no vernal pools on the project site.
Heartscale	*Atriplex cordulata var. cordulata*	None	None	1B	Valley and foothill grassland, chenopod scrub.	Unlikely: the grassland on the project site is highly disturbed and does not provide suitable habitat.
Big tarplant	*Blepharizonia plumosa*	None	None	1B	Valley and foothill grassland.	Unlikely: the grassland on the project site is highly disturbed and does not provide suitable habitat.
Watershield	*Brasenia schreberi*	None	None	2	Marshes and swamps.	Unlikely: there are no marshes or swamps on the project site to support this species.
Palmate-bracted salty bird's-beak	*Chloropyron palmatum*	E	E	1B	Chenopod scrub, valley and foothill grassland.	Unlikely: the project site does not provide suitable habitat.
Slough thistle	*Cirsium crassicaule*	None	None	1B	Chenopod scrub, marshes and swamps, and riparian scrub.	Unlikely: the project site does not provide suitable habitat.
Recurved larkspur	*Delphinium recurvatum*	None	None	1B	Chenopod scrub in alkaline soils.	Unlikely: the project site does not provide suitable habitat.
Delta button celery	*Eryngium racemosum*	None	E	1B	Riparian scrub in seasonally inundated floodplain with clay substrates.	Unlikely: the project site does not provide suitable habitat.
San Joaquin spearscale	*Extriplex joaquinana*	None	None	1B	Chenopod scrub, alkali meadow, valley and foothill grassland.	Unlikely: the project site does not provide suitable habitat.
Woolly rose mallow	*Hibiscus lasiocarpos var. occidentalis*	None	None	2	Freshwater marshes and swamps.	Unlikely: the project site does not provide suitable habitat.

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
Delta tule pea	*Lathyrus jepsonii var. jepsonii*	None	None	1B	Marshes and swamps.	Unlikely: the project site does not provide suitable habitat.
Sanford's arrowhead	*Sagittaria sanfordii*	None	None	1B	Standing or slow-moving freshwater ponds, marshes, and ditches.	Unlikely: the project site does not provide suitable habitat.
Suisun marsh aster	*Symphotrichum lentum*	None	None	1B	Marshes and swamps.	Unlikely: the project site does not provide suitable habitat.
Wright's trichocoronis	*Trichocoronis wrightii var. wrightii*	None	None	2	Marshes and swamps, riparian forest, meadows and seeps and vernal pools.	Unlikely: the project site does not provide suitable habitat.
Saline clover	*Trifolium hydrophilum*	None	None	1B	Marshes and swamps, mesic (wet) areas in valley and foothill grassland, vernal pools.	Unlikely: the project site does not provide suitable habitat.
Birds						
Burrowing owl	*Athene cunicularia*	None	SC	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: portions of the project site provide marginally suitable habitat. However, the grassland in the site is highly disturbed, and maintained and other fields within the site are heavily cultivated.
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Breeds in stands of tall trees in open areas. Requires adjacent suitable foraging habitats such as grasslands or alfalfa fields supporting rodents.	Moderate: the project site provides suitable foraging and nesting habitat. The annual cropland in and surrounding the project site provides foraging habitat, and large trees along North Littlejohns Creek are suitable for nesting hawks.
Tricolored blackbird	*Agelaius tricolor*	None	CE	N/A	Requires open water and protected nesting substrate, usually cattails and	Low: the project site provides marginally suitable habitat. However, there is little to no emergent wetland

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
					riparian scrub with surrounding foraging habitat.	vegetation in North Littlejohns Creek on or near the site that could be used by nesting tricolored blackbirds.
White-tailed kite	*Elanus leucurus*	None	FP	N/A	Herbaceous lowlands with variable tree growth and dense population of voles.	Moderate: the project site provides marginally suitable habitat. The annual cropland surrounding the project vicinity provides foraging habitat, and trees along North Littlejohns Creek are suitable for nesting.
Loggerhead shrike	*Lanius ludovicianus*	None	SC	N/A	Annual grasslands and agricultural areas; nests in trees and shrubs.	Low: the grasslands on the site provides marginally suitable foraging habitat, and trees and shrubs in the site are suitable for nesting. However, this species is not common in the project vicinity; the nearest occurrence of loggerhead shrike in the CNDDB (2019) search area is approximately 10 miles southwest of the site.
Song sparrow ("Modesto" population)	*Melospiza melodia*	None	SC	N/A	Resident of brackish water marshes surrounding Suisun Bay. Inhabits cattails, tules, and tangles bordering sloughs.	Unlikely: the project site does not provide suitable aquatic habitat for this species. North Littlejohns Creek and Weber Slough do not provide emergent wetland vegetation for nesting by Modesto song sparrow.
Least Bell's vireo	*Vireo bellii pusillus*	E	E	N/A	Nests in willow thickets and other shrubs, primarily in southern California riparian forests.	Unlikely: there is no suitable habitat on or near the project site, and this species is not known from the area.
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	None	SC	N/A	Brackish and freshwater marshes; usually nests in expansive patches of	Unlikely: the project site does not provide suitable habitat.

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
					cattails or tules, often along borders of lakes and ponds.	
Mammals						
Riparian brush rabbit	*Sylvilagus bachmani riparius*	E	E	N/A	Riparian thickets in Stanislaus and southern San Joaquin Counties.	None: the project site and adjacent areas do not provide suitable habitat. The riparian corridor along North Littlejohns Creek does not contain well-developed riparian forest vegetation; there is no expansive scrub-shrub vegetation to support this species.
Reptiles and Amphibians						
California red-legged frog	*Rana aurora draytonii*	T	SC	N/A	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Unlikely: there is no suitable aquatic habitat on or near the project site. Species is also presumed extinct on the floor of the Central Valley of California.
California tiger salamander	*Ambystoma californiense*	T	T	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) and grassland/ woodland habitats with summer refugia (i.e., burrows).	Unlikely: there is no suitable habitat on or near the project site.
Giant garter snake	*Thamnophis gigas*	T	T	N/A	Freshwater marsh and low gradient streams; also adapted to drainage canals and irrigation ditches, primarily for dispersal or migration.	Unlikely: Weber Slough is ephemeral and does not provide suitable aquatic habitat. North Littlejohns Creek is intermittent and does not contain suitable habitat.
Western pond turtle	*Emys marmorata*	None	SC	N/A	Permanent or semi-permanent water bodies; require basking sites such as logs	Unlikely: Weber Slough is ephemeral and does not provide suitable aquatic habitat. North Littlejohns Creek is

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
						intermittent and also does not contain suitable habitat.
Fish						
Delta smelt	*Hypomesus transpacificus*	T	E	N/A	Shallow lower Delta waterways with submersed aquatic plants and other suitable refugia.	None: there is no suitable aquatic habitat on the project site. Species occurs in Delta waterways.
Longfin smelt	*Spirinchus thaleichthys*	C	T	N/A	Brackish estuarine habitats.	None: there is no suitable aquatic habitat on the project site.
Steelhead – Central Valley DPS	*Oncorhynchus mykiss irideus pop. 11*	T	None	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	None: there is no suitable aquatic habitat on the project site.
Invertebrates						
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs, usually in Central Valley riparian habitats.	Unlikely: there are no blue elderberry shrubs on or near the project site.
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools	Unlikely: there are no vernal pools on the project site.
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools	Unlikely: there are no vernal pools on the project site.

[1] T = Threatened; E = Endangered; C = Candidate.

[2] T = Threatened; E = Endangered; R = Rare; CE = Candidate for Endangered Status; SC=State of California Species of Special Concern; FP = Fully Protected Species.

[3] 1B = rare, threatened, or endangered in California and elsewhere; 2 = rare, threatened or endangered in California but more common elsewhere.

REGULATORY FRAMEWORK

Federal Endangered Species Act

The federal Endangered Species Act (ESA) protects fish and wildlife species that are listed as threatened or endangered, along with their habitats. "Endangered" species, subspecies, or distinct population segments are those that are in danger of extinction

through all or a significant portion of their range, and "threatened" species, subspecies, or distinct population segments are likely to become endangered in the near future. The USFWS and the National Marine Fisheries Service are responsible for implementation of the ESA, depending on the species. Section 9 of the ESA prohibits the "take" of any fish or wildlife species listed as endangered, including the destruction of habitat that prevents the species' recovery. "Take" is defined as an action or attempt to hunt, harm, harass, pursue, shoot, wound, capture, kill, trap, or collect a species. Section 7 of the ESA, called "Interagency Cooperation," is the mechanism by which Federal agencies ensure the actions they take, including those they fund or authorize, do not jeopardize the existence of any listed species.

As part of the Norcal Logistics Center project, consultation with the U.S. Army Corps of Engineers (Corps) and with USFWS occurred in 2007-2008 for in-channel work to complete the project's required drainage infrastructure. As part of that consultation, a biological assessment for the federally listed giant garter snake was prepared and submitted to the Corps as part of their request to consult with the USFWS under Section 7 of the ESA. At the same time, a 200-foot buffer was established along the Norcal frontage on North Littlejohns Creek. Based on information provided in the biological assessment, the Corps determined that further consultation with USFWS was not necessary, as no effects to giant garter snake were anticipated as a result of permitted work on the project site. Later, a 50-foot work buffer was established by the SJCOG along the south bank of North Littlejohns Creek where it abuts the Hoggan parcel.

California Endangered Species Act

The California Endangered Species Act (CESA) establishes State policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve projects that jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. For projects that would affect a species that is on the federal and State lists, compliance with the ESA satisfies CESA if the CDFW determines that the federal incidental take authorization is consistent with CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of a species that is only State listed, the project proponent must apply for a take permit under Fish and Game Code Section 2081(b).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan and the former Soviet Union. It prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase, or barter any migratory birds or their eggs, parts, or nests except as authorized under a valid permit. Executive Order 13186 directs each federal agency taking actions that have or may have a negative effect on migratory bird populations to work with USFWS to develop a memorandum of understanding that will promote the conservation of migratory bird populations.

Clean Water Act

The federal Clean Water Act is the primary federal law regulating water quality. The objective of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Waters of the U.S., including wetlands, are broadly defined in 33 Code of Federal Regulations Part 328.3(a) to include navigable waterways, their tributaries, and adjacent wetlands, as well as other waters described in the Environmental Setting portion of this chapter. Implementing the Clean Water Act is the responsibility of the EPA, but the EPA depends on other agencies, such as individual state governments and the Corps, to assist in implementation.

Sections 401 and 404 of the Clean Water Act apply to activities that would impact waters in the United States, such as creeks, ponds, and wetlands. For waters subject to federal jurisdiction, a permit under Section 404 of the Clean Water Act, issued by the Corps, must be secured prior to the discharge of dredged or fill materials into these waters. Projects requiring a Section 404 permit also must obtain a Water Quality Certification in accordance with Section 401 of the Clean Water Act. For this project, the Central Valley Regional Water Quality Control Board (RWQCB) would issue the Section 401 certification.

On February 14, 2019, the EPA and the Corps proposed a new definition of "Waters of the United States" that is intended to clarify the limits of jurisdiction under the Clean Water Act. The Proposed Rule clarifies that Waters of the U.S. encompass traditional navigable waters, including the territorial seas; tributaries that contribute perennial or intermittent flow to such waters; certain ditches; certain lakes and ponds; impoundments of otherwise jurisdictional waters; and wetlands adjacent to other jurisdictional waters. Some waters that may currently be defined as Waters of the U.S. would not be so under the Proposed Rule, such as many ditches, constructed features (excavated basins), isolated waters and wetlands, and ephemeral tributaries. The Final Rule has been issued.

Section 404

The Corps is responsible under Section 404 of the Clean Water Act for regulating the discharge of fill material into Waters of the U.S. and their lateral limits. The lateral limits of jurisdiction for a non-tidal stream are measured at the line of the ordinary high water mark or the limit of adjacent wetlands. Any permanent extension of the limits of an existing water of the United States, whether natural or human-made, results in a similar extension of Corps jurisdiction.

In general, a Section 404 permit must be obtained before an individual project can place fill or grade in wetlands or other Waters of the U.S. Along with general permits, the Corps has Nationwide Permits that apply to specific actions. Mitigation for such actions will be required based on the conditions of the Corps permit. The Corps is required to consult with the USFWS and/or the National Marine Fisheries Service under Section 7 of the ESA if the action being permitted could affect federally listed species.

Section 401

Pursuant to Section 401 of the Clean Water Act, projects that require a Corps permit for discharge of dredge or fill material must also obtain a Water Quality Certification or waiver that confirms the project complies with State water quality standards, or a no-action determination, before the Corps permit is valid. State water quality is regulated and administered by the State Water Resources Control Board (SWRCB) through the RWQCB with jurisdiction over the project. As noted, the project site is within the jurisdiction of the Central Valley RWQCB. For the RWQCB to issue a Section 401 certification, a project must demonstrate compliance with CEQA.

Waters of the State

Under the Porter-Cologne Water Quality Control Act, "Waters of the State" fall under the jurisdiction of the SWRCB and the RWQCB with jurisdiction over the affected water. The RWQCBs are required to prepare and periodically update water quality control basin plans, which set forth water quality standards for surface water and groundwater, as well as actions to control non-point and point sources of pollution to achieve and maintain these standards.

Projects that affect Waters of the State may also be required to meet Waste Discharge Requirements (WDRs) set by the RWQCB. SWRCB's Resolution 2008-0026 identified a need to protect Waters of the State that are not subject to Section 404 permitting and associated Section 401 Water Quality Certification. In April 2019, the SWRCB adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State.* When the program is implemented, the Central Valley RWQCB is expected to require issuance of WDRs that authorize the impacts of filling isolated wetlands that are not subject to Section 404 permitting, or in some cases granting a WDR waiver.

CDFW Streambed Alteration Agreement

Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider.

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) is a comprehensive program for assessing and mitigating the biological impacts of converting open space or biologically sensitive lands to urban development (SJCOG 2000). It has been adopted locally by San Joaquin County, the City of Stockton,

and the other incorporated cities in San Joaquin County. The SJMSCP protects 97 wildlife species and 52 vegetative communities, many of which are listed or proposed for listing under ESA and CESA. The SJMSCP also protects many birds covered by the Migratory Bird Treaty Act and other sensitive species that may be of concern pursuant to CEQA, or species that are included on one of the California Native Plant Society lists. The San Joaquin Council of Governments (SJCOG) implements the SJMSCP on a project-by-project basis.

For the conversion of open space to non-open space uses that affect covered plant, fish, and wildlife species, the SJMSCP provides three compensation methods: preservation of existing sensitive lands, creation of new comparable habitat on the project site, or payment of fees that would be used to secure preserve lands outside the project site. SJMSCP fees, and preservation and re-creation ratios that are required, are established based upon the type and value of the land to be converted and are revised annually to correspond with current market values. Conversion of lands of higher biological values, such as wetlands, requires higher SJMSCP fees or higher preservation and creation ratios. The SJMSCP fees are updated annually by SJCOG. The project site is designated Category C, Agricultural Habitat Open Spaces, Pay Zone B.

In addition to fee payments, the SJMSCP identifies and requires the applicants to abide by Incidental Take Minimization Measures (ITMMs), which are protection measures that avoid direct impacts of development on special-status species. Examples of ITMMs include prescriptions for protection of Swainson's hawk nest trees or timely tree removal, prevention of burrowing owl nesting in unoccupied burrows discovered outside the nesting season or pre-construction surveys of nesting activity if construction will occur during the nesting season.

The participating local agencies consider a project that complies with the SJMSCP to result in biological resource impacts that are less than significant. However, a project may choose to not participate in the SJMSCP and instead may comply independently with the various statutes and regulations that apply to biological resources. Whether or not a project participates in the SJMSCP, it still would be required to mitigate biological resource impacts to levels that are less than significant if feasible.

City of Stockton Heritage Tree Ordinance

Stockton Municipal Code Chapter 16.130 addresses Heritage Trees, which are any valley oak, coast live oak, and interior live oak tree which has a trunk diameter of 16 inches or more, measured at 24 inches above actual grade. For trees with multiple trunks, the combined total trunk diameter shall be used for all trunks measuring 6 inches or greater measured at 24 inches above actual grade. Except for an emergency, removal of any Heritage Tree requires a City permit, regardless of location on a property or condition of the tree(s). Heritage Trees that are removed or effectively removed must be replaced on a three-for-one basis at the discretion of the City's Community Development Director. The size of the replacement trees shall be determined by the Director based on the size of the tree that was removed, but replacements are required to be at least 15-gallon container stock and planted on the same parcel as the tree that was removed, if possible.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

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

Impact BIO-1: Special-Status Species and Habitats

Table 7-3, which lists the special-status species documented or potentially occurring in the project vicinity, indicates that most of these species have a likelihood of occurrence on the project site ranging from low to none. There were two special-status species, both bird species, that were determined to have more than a low probability of occurrence: Swainson's hawk and white-tailed kite. In addition, while no sign of burrowing owl was observed on the project site, the biological resource report indicated that this species has the potential to occur on the project site on more than a transitory or very occasional basis. Finally, although not expected to occur in the site, giant garter snake and western pond turtle were addressed in the biological resource report for completeness. Descriptions of these species are provided below.

Swainson's Hawk. Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The Migratory Bird Treaty Act and the California Fish and Game Code protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through September 15). Swainson's hawk are found in the

Central Valley primarily during their breeding season, a population is known to winter in the San Joaquin Valley. The site is within the nesting range of Swainson's hawks and the CNDDB contains several records of nesting Swainson's hawks in the greater project vicinity. Large trees in and near the site could be used by nesting Swainson's hawks and the grasslands and croplands in the site provide suitable foraging habitat for this species.

Burrowing Owl. The Migratory Bird Treaty Act and California Fish and Game Code protect burrowing owls year-round, as well as their nests during the nesting season (February 1 through August 31). Burrowing owls are a year-long resident in a variety of grasslands as well as scrub lands that have a low density of trees and shrubs with low growing vegetation; burrowing owls that nest in the Central Valley may winter elsewhere. The primary habitat requirement of the burrowing owl is small mammal burrows for nesting. The owl usually nests in abandoned ground squirrel burrows, although they have been known to dig their own burrows in softer soils. While no burrows were observed on the project site, burrowing owls are widespread in this part of Stockton and may nest on the project site if burrow habitat becomes available in the future.

White-Tailed Kite. White-tailed kite is a State of California Species of Concern but not a listed species under ESA or CESA. The Migratory Bird Treaty Act and California Fish and Game Code protect white-tailed kite year-round, as well as their nests during nesting season; nesting for this species peaks from May to August. White-tailed kites can be found in a variety of habitats across California including grasslands, open woodlands, riparian areas, marshes and cultivated fields. Populations of white-tailed kites are concentrated in the Central Valley, but their range spans west of the Sierra Nevada's to the California coastline. White-tailed kite may nest in large trees along North Littlejohns Creek or other large trees near the project site and may forage in grasslands or croplands on the site.

Giant Garter Snake. The giant garter snake is listed as threatened under both ESA and CESA. Historically, this species was found throughout the Central Valley, but currently giant garter snake is only known to occur in nine discrete populations in the Sacramento and San Joaquin Valleys. The giant garter snake is one of the most aquatic of garter snakes and is usually found in streams, marshes, and sloughs with mud bottoms. This species prefers slow-moving waters with emergent herbaceous wetland vegetation for cover and foraging, and grassy banks and openings for basking. The project site does not provide the aquatic habitat required by giant garter snake due to its intermittent nature. Additionally, the grasslands and croplands in the site are highly disturbed. Neither of these upland habitat types provide high-quality aestivation habitat for giant garter snake.

In the past, the USFWS had expressed concern about development near North Littlejohns Creek and Weber Slough, with its potential impact on giant garter snake habitat. However, as a result of the agreement described in the Regulatory Framework, the project would maintain a buffer between the development area and North Littlejohns Creek. While the agreement does not require a buffer along Weber Slough, the project would leave undeveloped a 100-foot-wide corridor that includes the slough and its banks, primarily for access for channel maintenance. With these non-development areas, the project would have even less of a potential impact on giant garter snake.

Pursuant to the SJMSCP, North Littlejohns Creek is considered "potential habitat" for giant garter snake, triggering an automatic "no construction" buffer extending 200 feet from the centerline of the creek, unless a buffer reduction is granted by SJCOG. In October 2018, the Norcal Logistics Center project requested a buffer reduction along North Littlejohns Creek from 200 feet to 50 feet, which is consistent with the USFWS agreement. The reduced buffer was granted by SJCOG at its December 2018 meeting. Standard ITMMs related to preconstruction surveys for giant garter snake will still be required.

Western Pond Turtle. The western pond turtle is a State Species of Concern, but it is not a listed species under ESA or CESA. Western pond turtles are associated with permanent or nearly permanent bodies of water with adequate basking sites such as logs, rocks, or open mud banks. Pond turtles construct nests in sandy banks along slow-moving streams and ponds in the spring and the young usually hatch in two to three months. Neither Weber Slough nor North Littlejohns Creek have suitable aquatic features that western pond turtle requires. Weber Slough is ephemeral, and North Littlejohns Creek is intermittent. Weber Slough and North Littlejohns Creek are surrounded by cultivated cropland and highly disturbed grasslands, respectively, that do not provide suitable nesting habitat for this species.

Pursuant to the SJMSCP, North Littlejohns Creek is considered "potential habitat" for western pond turtle, triggering an automatic "no construction" buffer extending 300 feet from the centerline of the creek, unless a buffer reduction is granted by SJCOG. In October 2018, the Norcal Logistics Center project requested a buffer reduction along North Littlejohns Creek from 300 feet to 50 feet, concurrent with the giant garter snake buffer reduction request. The reduced buffer was also granted by SJCOG. Standard ITMMs related to preconstruction surveys for western pond turtle will still be required, and temporary construction setbacks from nests will be implemented in the event active nests are located.

The biological resource report concluded that the project is expected to have little to no significant impact on most special-status species known to occur in and around the project site. However, Swainson's hawk and white-tailed kite could potentially nest in trees on or near the project site and may use the grasslands on the site for foraging. Burrowing owls could nest on the site if burrow habitat is available.

The project intends to participate in the SJMSCP. As part of its participation, the project would implement ITMMs required by the SJCOG. ITMMs would include pre-construction surveys for nesting Swainson's hawks within 0.5 miles of the project site for construction activities between March 1 and September 15, and pre-construction surveys for nesting burrowing owls within 250 feet of the project site for construction activities between February 1 through August 31. While giant garter snake and western pond turtle are not expected to occur on the site, standard measures for these species outlined in the SJMSCP, primarily consisting of pre-construction surveys, are expected to be included in the ITMMs.

A project that complies with the SJMSCP can be deemed to result in biological resource impacts that are less than significant for CEQA purposes. Mitigation presented below would ensure project participation in the SJMSCP, which would reduce potential impacts on special-status species to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

BIO-1: The developer shall apply to the San Joaquin Council of Governments (SJCOG) for coverage under the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan (SJMSCP). The project site shall be inspected by the SJMSCP biologist, who will recommend which Incidental Take Minimization Measures (ITMMs) set forth in the SJMSCP should be implemented. The project applicant shall pay the required SJMSCP fee, if any, and be responsible for the implementation of the specified ITMMs.

Significance After Mitigation: Less than significant

Impact BIO-2: Riparian and Other Sensitive Habitats

As noted, a riparian vegetation corridor exists along North Littlejohns Creek, which borders the Hoggan property to the north. The corridor would be protected by the agreement with the USFWS, which places a 50-foot buffer between the creek and potential development. Weber Slough does not have a substantial riparian area through the Sanchez property, and the project proposes a 100-foot-wide corridor centering on the slough within which no building development would occur. The biological resource study did not identify any sensitive natural communities on the project site. The project would have no impact on riparian or other sensitive habitats.

Level of Significance: No impact

Mitigation Measures: None required

Impact BIO-3: Waters of the U.S. and Wetlands

As noted above, North Littlejohns Creek and Weber Slough have been identified as potential Waters of the U.S. The biological resource report stated that no other potential jurisdictional Waters of the U.S. or wetlands of any type were observed on the project site. As noted, a 50-foot buffer will be maintained between North Littlejohns Creek and development on the Hoggan property, so the project would have no direct impact on the creek.

In general, the project would leave a 100-foot-wide corridor along Weber Slough within which no development would occur. However, the project proposes the installation of a pump station and outfall along Weber Slough to discharge collected storm water drainage. A portion of Weber Slough adjacent to Austin Road may need to be modified in

conjunction with road improvements. These actions would require work within Weber Slough, which includes potential wetlands and Waters of the U.S., which would be subject to potential impacts as a result of the project.

As a potential Water of the U.S., Weber Slough is under Section 404 jurisdiction, and development of the proposed storm drainage pump station and outfall would require a Corps permit. In addition, the pump station and outfall will likely require a Streambed Alteration Agreement pursuant to Sections 1600-1607 of the California Fish and Game Code. Impacts to wetlands or Waters that are less than 0.10 acres are considered *de minimis* by the Corps of Engineers and do not require mitigation. If impacts exceed 0.10 acres, the Corps will require mitigation that will at minimum produce "no net loss" of wetlands. To ensure that adequate mitigation for potential wetlands and Waters impacts are addressed, the following mitigation measure requires a wetland delineation and, if potential impacts exceed 0.10 acres, demonstration of mitigation sufficient to result in "no net loss" of wetlands before City or other permits are issued for the proposed pump station and outfall. Compliance with these requirements would reduce project impacts on wetlands or Waters of the United States to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

BIO-2 Prior to issuance of City permits for the proposed pump station and outfall, the project applicant shall delineate wetland areas, obtain required federal and state permits and demonstrate that the project would result in "no net loss" of wetlands and/or Waters of the U.S. Wetland mitigation necessary to make this demonstration shall be included in the project or project conditions of approval.

Significance After Mitigation: Less than significant

Impact BIO-4: Fish and Wildlife Migration

The biological resource report noted that North Littlejohns Creek is an intermittent stream, while Weber Slough is an ephemeral stream. Because of this, neither stream provides suitable aquatic habitat for fish. Neither stream would be considered a fish migratory corridor.

The biological resource report noted that there are several potential nest trees on the Hoggan property that are suitable for nesting raptors and other protected migratory birds, as well as grassland. Also, there are some large trees close to the Sanchez property that may be used for nesting by migratory birds. The presence of large trees and suitable raptor foraging habitat (i.e., open fields) in and near the project site may attract migratory birds that may nest on the project site. Disruption of active nests or nesting behaviors by project construction would be a potentially significant impact. Implementation of mitigation described below would reduce impacts on migratory birds and their nests, if any are found, to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

BIO-3: If vegetation removal or construction commences during the general avian nesting season (February 1 through September 15), a pre-construction survey for all species of nesting birds is recommended. If active nests are found, work in the vicinity of the nests shall be delayed until the young have fledged.

Significance After Mitigation: Less than significant

Impact BIO-5: Local Biological Requirements

As noted, valley oak was identified in several places on the Hoggan property. The biological resources report did not identify which of these oak trees were Heritage Trees, which are protected by the Stockton Municipal Code.

The oaks within the riparian corridor would not be affected by the project, as they are within the established buffer area. However, it is possible that the other oak trees on the Hoggan property could be removed as a result of the project, and some of these trees could be Heritage Trees. Mitigation described below would recommend avoidance of oak tree removal if possible, but it also would require a survey of any oak trees proposed for removal to determine if the tree would be subject to the Heritage Tree provisions of the Municipal Code. Implementation of the mitigation measure would reduce potential impacts on Heritage Trees to a level that is less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

BIO-4: Project development on the Hoggan property (APN 179-200-27) shall avoid removal of existing oak trees to the extent feasible. If removal of oak trees is required, a certified arborist shall survey the oak trees proposed for removal to determine if they are Heritage Trees as defined in Stockton Municipal Code Chapter 16.130. The arborist report with its findings shall be submitted to the City's Community Development Department. If Heritage Trees are determined to exist on the property, removal of any such tree shall require a permit to be issued by the City in accordance with Stockton Municipal Code Chapter 16.130. The permittee shall comply with all permit conditions, including tree replacement.

Significance After Mitigation: Less than significant

Impact BIO-6: Habitat Conservation Plans

The project site is in the coverage area of the SJMSCP and is classified as Category B – Multi-Purpose Open Space. Mitigation Measure BIO-1 would require the project to participate in the SJMSCP, including payment of required SJMSCP fees and implementation of applicable ITMMs. The project would involve no conflict with the SJMSCP with implementation of the mitigation measure. No other habitat conservation plans apply to the project site. Impacts would be less than significant with implementation of Mitigation Measure BIO-1.

Level of Significance: Potentially significant

Mitigation Measures: Implement Mitigation Measure BIO-1.

Significance After Mitigation: Less than significant

8.0 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL SETTING

Background information for this section comes primarily from two cultural resources technical memoranda prepared by Solano Archaeological Services, one for each of the properties that constitute the project site. Research for the memoranda included record searches of the California Historical Resources Information System conducted by the Central California Information Center at California State University Stanislaus, contact with the Native American Heritage Commission (NAHC), and field surveys conducted on October 4, 2018 (Hoggan property) and February 19, 2019 (Sanchez property).

The memoranda are cited in Chapter 21.0, Sources, and are available to qualified reviewers at the offices of the Stockton Community Development Department, as indicated on the Appendix D cover. The California Office of Historic Preservation, in its guidelines for archaeological reports, indicates that confidential information on sites may need to be provided to review and regulatory agencies for management purposes (California Office of Historic Preservation 1990). Based on this guidance, the City defines "qualified reviewer" as a member of a review or regulatory agency with a "need to know" related to its responsibilities pertinent to a project. The City shall determine who would be a qualified reviewer on a case-by-case basis.

Prehistoric Setting

The earliest well-documented entry and spread of humans into California occurred at the beginning of the Paleo-Indian Period (10,000–6000 B.C.). Few archaeological sites have been found in the Valley that date to the Paleo-Indian or the Lower Archaic (6000–3000 B.C.) time periods, however archaeologists have recovered a great deal of data from sites occupied by the Middle Archaic period (3000–500 B.C.) when the broad regional patterns of foraging subsistence strategies gave way to more intensive procurement practices. Permanent villages that were occupied throughout the year were established, primarily along major waterways. The onset of status distinctions and other indicators of growing sociopolitical complexity mark the Upper Archaic Period (500 B.C.–A.D. 700). Several technological and social changes characterized the Emergent Period (A.D. 700–1800), such as the bow and arrow and distinctions in social status linked to acquired wealth.

The project site is generally considered to be in Northern Valley Yokuts territory. The Northern Valley Yokuts occupied the land on either side of the San Joaquin River from the delta to south of Mendota. The Diablo range probably marked the western boundary of Yokuts territory; the eastern boundary would have lain along the Sierra Nevada

foothills. The late prehistoric Yokuts may have been the largest ethnic group in pre-contact California. However, because of their rapid decimation as a result of disease, missionization, and Euro-American settlement, the Northern Valley Yokuts are generally not well documented in the ethnographic record.

The Northern Valley Yokuts were organized into at least 11 small political units or tribes. Each tribe had a population of approximately 300 people, most of who lived within one principal settlement that usually had the same name as the political unit. Within the villages, structures included sweathouses, ceremonial chambers, and oval single-family dwellings made of tule. Northern Valley Yokuts material culture included a wide range of implements, including acorn mortars and pestles; snares, bows and spears used in hunting; tule boats; and a wide variety of basketry.

Solano Archaeological Services requested two records searches of the Sacred Lands file maintained by the NAHC, one for each property that comprises the project site. The results of both searches indicated the presence of a nearby Sacred Land. It is not clear if there is more than one Sacred Land near the properties or if the same Sacred Land was found in both searches.

The NAHC provided lists totaling seven Native American individuals or organizations that may have knowledge of cultural resources in or near the project site, with a particular note that the Northern Valley Yokuts tribe should be contacted. The representative for the Northern Valley Yokuts, Katherine Erolinda Perez, responded by stating the Hoggan property is sensitive for inadvertent discovery and recommends that all future ground disturbing activities be monitored. She also noted that an unrecorded prehistoric habitation site existed within a half-mile radius of the Hoggan property. In a follow-up telephone call to Solano Archaeological Services, Ms. Perez stated that an unmapped and unrecorded prehistoric habitation site lies in the vicinity of the Sanchez property; as such, the property is also sensitive for inadvertent discovery of prehistoric resources (Coleman, pers. comm.). In addition to the above contact, the City of Stockton conducted formal AB 52 notification to Native American tribes. The results of that notification are discussed below.

Historic Setting

Euro-American contact with the Northern Valley Yokuts began with infrequent excursions by Spanish explorers traveling through the Sacramento-San Joaquin Valleys in the late 1700s to early 1800s. The Spanish, and later Mexican, governments of California tried to encourage settlement by awarding large plots of land, called ranchos, to prominent men. The project site was part of one such grant, Charles M. Weber's *El Campo De Los Franceses*. Weber moved from San Jose after being given a half-interest in the rancho, and he purchased the other half-interest after the end of the Mexican Period. Weber founded the City of Stockton in 1850, and the City incorporated that same year.

One of the key components to the settlement of the San Joaquin Valley was the availability of transportation, which was addressed in the 1870s when the Central Pacific Railroad constructed its line through the San Joaquin Valley to reach southern California. This affected the valley transportation network, which in turn affected passenger travel and the ability of farmers and ranchers to sell their goods to distant markets. During the late 1800s, the San Joaquin Valley became the center of California's wheat belt. While ranching remained an important industry, the expansion of large-scale irrigation in the early 1900s made possible the production of a variety of fruits and vegetables, vineyards, alfalfa, and cotton, among other crops. During the latter part of the 19th century, the manufacture of agricultural tools and equipment became a major industry in Stockton. By the conclusion of the 19th century, Stockton witnessed increased commercial activity as a hub of transportation and agriculture on the Sacramento/San Joaquin Delta.

The establishment of a State highway system in the early- to mid-20th century was the next major transportation development. This included two north-south highways through the Central Valley. One corresponded to today's SR 99 in the interior; the second was constructed along the slope of the Coast Range. The routes that passed through population centers, particularly during the latter half of the 20th century, witnessed the growth of residential, commercial, and industrial complexes along these corridors and development of the modern freeway system.

A records search for the Hoggan property indicated that three cultural resources studies had been conducted in or adjacent to the property prior to the Solano Archaeological Services investigation. Only one cultural resource site has been recorded – the Bergs Canal built within North Littlejohns Creek. Three other historic resources have been recorded within a one-half-mile radius of the Hoggan property; all three are located along SR 99.

A records search for the Sanchez property indicated that 22 cultural resources studies had been conducted in or near the property prior to the Solano Archaeological Services investigation. Historical topographic maps and a 1967 historic aerial photograph indicated the presence of a potential historical resource – an unrecorded ditch and road segment at least 50 years old. This segment was verified and recorded during the field survey of the Sanchez property.

REGULATORY FRAMEWORK

CEQA Guidelines Section 15064.5

Criteria specified in CEQA Guidelines Section 15064.5 suggest that an "important historical or archaeological resource" is one which generally meets the criteria for listing in the California Register of Historical Resources, including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

- Is associated with the lives of persons important in California's past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

If a resource does not meet any of the above criteria, it does not preclude a lead agency from determining that a resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

AB 52

In 2014, the California Legislature enacted AB 52, which requires CEQA consultation with Native American tribes on projects that could potentially affect resources of value to the tribes. The intent of this consultation is to avoid or mitigate potential impacts on "tribal cultural resources," which are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources, or
- Included in a local register of historical resources as defined in subdivision (k) of Public Resources Code Section 5020.1.

The tribal cultural resource must be a tangible resource for CEQA purposes, but the meaning or value attributed to that resource may be intangible. Only tribes that request to be on a CEQA lead agency's notice list shall be consulted on a project. The project must be within the geographic area that is traditionally and culturally affiliated with the tribes.

Under AB 52, consultation with tribes on a notice list shall be initiated prior to the release of the CEQA document for public review. When a tribe requests consultation, the lead agency must provide the tribe with notice of a proposed project within 14 days either of a project application being deemed complete or when the lead agency decides to undertake the project if it is the agency's own project. The tribe has 30 days from receipt of the notification letter to respond in writing. In the response, if consultation is requested, the tribe must designate a lead contact person. If the tribe requests consultation, then the lead agency has up to 30 days after receiving the tribe's request to initiate formal consultation.

Matters which may be subjects of AB 52 consultation include the type of CEQA environmental review necessary, the significance of tribal cultural resources, and project alternatives or appropriate measures for preservation or mitigation of the tribal cultural resource that the tribe may recommend to the lead agency. The consultation process ends when either (1) the resource in question is not considered significant, (2) the parties agree to mitigate or avoid a significant effect on a tribal cultural resource, or (3) a party, acting

in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. Regardless of the outcome, a lead agency is still obligated under CEQA to mitigate for any significant environmental effects, as explicitly noted in AB 52.

Under California Government Code Sections 6254(r) and 6254.10 and 14 California Code of Regulations 15120(d), any information on tribal cultural resources that is submitted by the tribe during the environmental review process shall not be included in the CEQA environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe. A confidential appendix to the CEQA document containing such information may be prepared by the lead agency, which can be made available to qualified reviewers.

The City of Stockton provided formal AB 52 notification to the following tribes. Notification was provided to two representatives of both the Ione Band of Miwok Indians and the Wilton Rancheria. AB 52 notification materials are shown in Appendix D.

American Indian Council of Mariposa County
Buena Vista Rancheria of Me-Wuk Indians
California Valley Miwok Tribe
Ione Band of Miwok Indians
Northern Valley Yokuts
Torres Martinez Desert Cahuilla Indians
United Auburn Indian Community of the Auburn Ranch
Wilton Rancheria
Native American Heritage Commission

As of March 4, 2020, the City has received no consultation requests from any of the above tribes.

In addition to the AB 52 notification, during cultural resources studies on the Hoggan property, Solano Archaeological Services sent project notifications to the following tribes, based on recommendations of the NAHC:

- United Auburn Indian Community of the Auburn Rancheria
- Wilton Rancheria
- Northern Valley Yokuts
- Ione Band of Miwok Indians
- California Valley Miwok Tribe
- Buena Vista Rancheria of Me-Wuk Indians

Notifications on the Sanchez property were sent to the tribes listed above, along with the Sheep Rancheria of Me-Wuk Indians of California, again based on recommendations of the NAHC. One tribe contacted Solano regarding the Hoggan property, the United Auburn Indian Community, responded by e-mail stating that the tribe defers to the

Northern Valley Yokuts for project-specific recommendations. As noted above, the Northern Valley Yokuts responded with their concerns about potential project impacts on tribal cultural resources.

City of Stockton Municipal Code

The City of Stockton has established provisions in its Municipal Code to protect cultural resources. The section of the Municipal Code most relevant to the proposed project is Section 16.36.050, described below.

Section 16.36.050 - Cultural Resources

If a historical or archaeological resource or human remains may be impacted by a development project requiring a discretionary land use permit, the Secretary of the Cultural Heritage Board shall be notified, any survey needed to determine the significance of the resource shall be conducted, and the proper environmental documents shall be prepared. In addition:

A. Historical Resources. Resources that have been identified as a landmark or part of a historic district in compliance with Chapter 16.220 (Cultural Resources) shall require a certificate of appropriateness (Section 16.220.060) if any exterior changes to the resource are proposed.

B. Archaeological Resources. In the event that archaeological resources are discovered during any construction, construction activities shall cease, and the Community Development Department (Department) shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may occur in compliance with State and federal law.

C. Human Remains. In the event human remains are discovered during any construction, construction activities shall cease, and the County Coroner and Director shall be notified immediately in compliance with CEQA Guidelines 15064.5 (d). A qualified archaeologist shall be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner shall notify the NAHC within 24 hours of this identification. The NAHC will identify the most likely descendent of the Native American to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5,
- Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5,
- Disturb any human remains, including those interred outside of formal cemeteries.

Also, a project may have a significant impact on the environment if it would cause a substantial adverse change in the significance of a tribal cultural resource, defined in California Public Resources Code Section 21074 as a site, feature, place, sacred place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, or object with cultural value to a California Native American tribe, and that is:

- 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
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c). In applying the Section 5024.1(c) criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact CULT-1: Historical Resources

As noted, the Solano Archaeological Services memoranda revealed two historical resources – the Bergs Canal built within North Littlejohns Creek, and an unrecorded ditch and road segment on the Sanchez property. Both these resources are considered segments of larger canal systems. Although large irrigation systems played a large role in California's early development of agriculture, individual segments lack historic integrity and remain a localized solution for irrigation south of Stockton. Also, preliminary research has not yielded a connection of significant people with the creation and construction of these resources, and the design of these resources is typical of larger irrigation ditches and does not exhibit any unique elements of construction. Although both resources are an example of older irrigation ditches created during California's early agricultural boom, neither provides channels of research interest and are not the oldest, largest, or last example of such types of ditches.

Based on this, neither historical resource was determined to be eligible for listing in the California Register of Historical Resources. Since these resources are not considered to have significant historical value, any project impacts on these resources would be less than significant. It should be noted that the Bergs Canal resource is in North Littlejohns Creek, where no development would occur as a result of the setback agreement (see Chapter 7.0, Biological Resources).

Level of Significance: Less than significant

Mitigation Measures: None required

Impact CULT-2: Archaeological and Tribal Cultural Resources

The Solano Archaeological Services memoranda did not identify any prehistoric resources on the project site in the records search nor encountered any in the field survey. However, they noted that the project site is considered sensitive for cultural resources; in particular, a high potential for buried prehistoric resources exists. Should these resources be disturbed by project construction activities, this would be a potentially significant impact. Both studies recommended actions to take should presently undocumented buried archaeological deposits be encountered during project construction.

As noted, contact with the NAHC indicated the presence of a Sacred Land near both properties, and the Northern Valley Yokuts stated a prehistoric habitation site lies in the vicinity of the project site. The Yokuts also indicated that both the Hoggan and Sanchez properties are sensitive for inadvertent discovery of tribal resources and recommended that all future ground disturbing activities be monitored by a qualified archaeologist and a Native American monitor.

Requirements related to cultural resource protection during construction have been addressed by the Stockton Municipal Code, which requires construction activity to be halted at an uncovered archaeological site until it is evaluated. Mitigation measures described below provide more direction in complying with these requirements of the Stockton Municipal Code. These measures also would address the concerns of the Northern Valley Yokuts, as they are based upon measures that have been approved by the tribal representative for other projects. Implementation of these mitigation measures would reduce potential impacts on archaeological resources and tribal cultural resources to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

CULT-1: Prior to construction, construction personnel shall receive brief "tailgate" training by a qualified archaeologist in the identification of buried cultural resources, including human remains, and protocol for notification should such resources be discovered during construction work. A Yokuts tribal representative shall be invited to this training to provide information on potential tribal cultural resources.

CULT-2: If any subsurface historical or archaeological resources, including human burials and associated funerary objects, are encountered during construction, all construction activities within a 50-foot radius of the encounter shall be immediately halted until a qualified archaeologist can examine these materials, initially evaluate their significance and, if potentially significant, recommend measures on the disposition of the resource. The City shall be immediately notified in the event of a discovery, and if burial resources or tribal cultural resources are discovered, the City shall notify the appropriate Native American representatives. The contractor shall be responsible for retaining qualified professionals, implementing recommended mitigation measures and documenting mitigation efforts in written reports to the City.

CULT-3: If tribal cultural resources other than human remains and associated funerary objects are encountered, the City shall be immediately notified of the find, and the City shall notify the Yokuts tribal representative. The qualified archaeologist and tribal representative shall examine the materials and determine their "uniqueness" or significance as tribal cultural resources and shall recommend mitigation measures needed to reduce potential cultural resource effects to a level that is less than significant in a written report to the City, with a copy to the Yokuts tribal representative. The City will be responsible for implementing the report recommendations. Avoidance is the preferred means of disposition of tribal cultural resources.

Significance After Mitigation: Less than significant

Impact CULT-3: Human Burials

Cultural resource investigations to date have not revealed the presence of human burials on the project site. However, human remains potentially could be encountered during construction or other ground disturbing activities. As a result, the project has the potential to result in a significant cultural resources effect. Native American human remains encountered during project construction also would involve the potential for significant impacts. As noted, the Yokuts tribal representative has indicated concern about potential impacts on tribal cultural resources.

CEQA Guidelines Section 15064.5(e) describes the procedure to be followed when human remains are uncovered in a location outside a dedicated cemetery. All work in the vicinity of the find shall be halted and the County Coroner shall be notified to determine if an investigation of the death is required. If the County Coroner determines that the remains are Native American in origin, then the County Coroner must contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the Most Likely Descendants of the deceased Native American, and the Most Likely Descendants may make recommendations on the disposition of the remains and any associated grave goods with appropriate dignity. If a

Most Likely Descendant cannot be identified or fails to make a recommendation, or the landowner rejects the recommendations of the Most Likely Descendant, then the landowner shall rebury the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance.

Compliance with CEQA Guidelines Section 15064.5(e) typically would ensure that impacts on any human remains encountered during project construction associated with the project would be less than significant. In addition, the Stockton Municipal Code has provisions generally similar to CEQA Guidelines Section 15064.5(e) regarding the discovery and disposition of human remains, with the additional requirement that the Community Development Director also be notified of a find. However, there is additional concern about Native American burials, particularly if grave goods are associated with a burial. Mitigation described below provides further instruction on the treatment of remains determined to be Native American. Implementation of this mitigation measure, along with compliance with CEQA Guidelines Section 15064.5(e) and the applicable provisions of the Stockton Municipal Code, would reduce project impacts on human burials to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

CULT-4: If project construction encounters evidence of human burial or scattered human remains, the contractor shall immediately notify the County Coroner and the City, which shall in turn notify the Yokuts tribal representative. The City shall notify other federal and State agencies as required. The City will be responsible for compliance with the requirements of California Health and Safety Code Section 7050.5 and with any direction provided by the County Coroner. If the human remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission, which will notify and appoint a Most Likely Descendant. The Most Likely Descendant will work with the archaeologist to decide the proper treatment of the human remains and any associated funerary objects in accordance with California Public Resources Code Sections 5097.98 and 5097.991. Avoidance is the preferred means of disposition of the burial resources.

Significance After Mitigation: Less than significant

9.0 GEOLOGY, SOILS, AND MINERAL RESOURCES

ENVIRONMENTAL SETTING

Geomorphology and General Geology

The project site in the San Joaquin Valley in central California near the Sacramento-San Joaquin River Delta. The San Joaquin Valley is in the southern portion of the Great Valley Geomorphic Province. The Great Valley, also known as the Central Valley, is a topographically flat, northwest-trending, structural trough about 50 miles wide and 450 miles long. It is bordered by the Tehachapi Mountains on the south, the Klamath Mountains on the north, the Sierra Nevada on the east, and the Coast Ranges on the west. The elevation is approximately 32 feet above mean sea level at the Hoggan property and approximately 42 feet above mean sea level at the Sanchez property.

The San Joaquin Valley is filled with thick sedimentary rock sequences that were deposited as much as 130 million years ago. The sediments that form the Valley floor were derived largely from erosion of the Sierra Nevada. The smaller and steeper slopes on the west side of the Valley overlie sedimentary rocks more closely related to the Coast Ranges. Large alluvial fans have developed on each side of the Valley. The larger and more gently sloping fans are on the east side of the Valley, and they overlie metamorphic and igneous basement rocks. These basement rocks are exposed in the Sierra Nevada foothills and consist of metasedimentary, volcanic, and granitic rocks. The Geologic Map of the San Francisco-San Jose Quadrangle designates the underlying geology of the project site as the Modesto Formation, consisting of Quaternary sediments (Wagner et al. 1991).

Geological Conditions

Seismicity

There are several faults and potential fault traces located within the County, concentrated along its eastern and western margins. Faults are classified as to their potential for seismic activity based on evidence of past activity. An “active” fault is defined as one along which displacement has been demonstrated to occur within the past 11,700 years. A fault is considered “potentially active” if there is evidence of movement within the past 700,000 years and further movement is considered likely. An “inactive fault” shows no evidence of movement within the last 1.6 million years, and renewal activity is not considered likely. Fault rupture is a potential hazard that occurs within active earthquake fault zones. A fault zone has significant width, ranging from a few feet to several miles (Bryant and Hart 2007).

According to the Stockton General Plan 2040 EIR, there are no active or potentially active faults in the Stockton vicinity. The Stockton Fault is a south-dipping reverse fault that trends east-west across the Stockton area. The fault is not exposed at the surface. It is not a recently active fault in geological terms, and it has not been classified as an "active" fault by the California Geological Survey. The nearest active fault is the Greenville Fault, approximately 22 miles west-southwest of Stockton. The Greenville Fault is considered capable of a maximum moment earthquake magnitude of 6.0, with a low probability of an earthquake of greater magnitude (City of Stockton 2018b). Portions of the Concord-Green Valley and Hayward fault zones, 35 and 50 miles west of Stockton, and the Calaveras fault zone, approximately 40 miles southwest of Stockton, have also been rated as active within the last 200 years. The project site, along with the rest of San Joaquin County, is subject to seismic shaking from these fault zones, as well as the San Andreas Fault farther to the west (San Joaquin County 2016b).

Ground Shaking

The severity of seismic ground shaking depends on many variables, such as earthquake magnitude, proximity, local geology (including the properties of unconsolidated sediments), groundwater conditions, and topographic setting. In general, ground-shaking hazards are most pronounced in areas that are underlain by loosely consolidated soil/sediment. Earthquakes of magnitude 6.7 or greater can create ground accelerations severe enough to cause major damage to structures and foundations not designed to resist the forces generated by earthquakes. Underground utility lines are also susceptible where they lack adequate flexibility to accommodate the seismic ground motion.

The nearest active earthquake fault, the Greenville Fault, has an estimated likelihood of a magnitude 6.7 or greater earthquake of 3 percent. Stockton's significant distance from active earthquake faults would help mitigate impacts related to ground shaking (City of Stockton 2018b).

Liquefaction

Liquefaction generally occurs in areas where moist, fine-grained, cohesionless sediment or fill materials are subjected to strong seismic ground shaking. Under certain circumstances, seismic ground shaking can temporarily transform an otherwise solid, granular material to a fluid state. Liquefaction is a serious hazard because buildings in areas that experience liquefaction may suddenly subside and suffer major structural damage. Liquefaction is most often triggered by seismic shaking, but it can also be caused by improper grading, landslides, or other factors. In dry soils, seismic shaking may cause soil to consolidate rather than flow, a process known as densification. Neither the California Geological Survey nor the U.S. Geological Survey has mapped any seismically-induced liquefaction hazard zones in the Stockton area (City of Stockton 2018b).

Other Geological Hazards

Subsidence is the sinking of a large area of ground surface in which the material is displaced vertically downward, with little or no horizontal movement. The San Joaquin Valley and the Sacramento-San Joaquin Delta are areas that have experienced subsidence. The main cause of subsidence in valley areas is the withdrawal of groundwater from aquifers. If the amount of groundwater withdrawn exceeds the amount by which the groundwater is replaced, then clay beds in the aquifer may be compressed to the point that they no longer expand to their original thickness after groundwater recharge. When the clay particles in the beds settle, the beds become effectively thinned, resulting in permanent land subsidence at the ground surface. Subsidence is not anticipated outside of the Delta area. The project site is not within the legally defined Delta area.

Soils and Soil Conditions

According to the Soil Survey of San Joaquin County, there are two predominant soil types underlying the project site (SCS 1992, NRCS 2018):

- Jacktone clay, 0 to 2 percent slopes (designated as 180 on Figures 9-1 and 9-2). This is a somewhat poorly drained soil also formed in alluvium from mixed rock sources, and it is moderately deep to a hardpan. Permeability and runoff of Jacktone clay are slow, and the water erosion hazard is slight

- Stockton clay, 0 to 2 percent slopes (designated as 250 on Figures 9-1 and 9-2). This is a deep-to-hardpan, somewhat poorly drained soil formed in alluvium from mixed rock sources. Permeability and runoff of Stockton clay are slow, and the water erosion hazard is slight.

The predominant soil underlying the Hoggan property is Stockton clay (Figure 9-1). A small area along the southern boundary of the Hoggan property contains Jacktone clay. The predominant soil on the Sanchez property is Jacktone clay (Figure 9-2). The west-central and southern portions of the property contain Stockton clay.

Expansive soils can change dramatically in volume depending on moisture content. When wet, these soils can expand; conversely, when dry, they can contract or shrink. Sources of moisture that can trigger this shrink-swell phenomenon include seasonal rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soil can develop wide cracks in the dry season, and changes in soil volume have the potential to damage concrete slabs, foundations, and pavement. Special building/structure design or soil treatment are often needed in areas with expansive soils. Both Jacktone clay and Stockton clay soils have a high shrink-swell potential.

Potential soil erosion associated with construction and development and resulting impacts on water quality are addressed by State of California stormwater permit requirements and corresponding local implementation plans, ordinances and standards, including those adopted by the City of Stockton. Storm water pollution prevention controls are addressed

in detail in Chapter 12.0, Hydrology; however, soil erosion controls specific to construction work are described in the Regulatory Framework section below.

Paleontological Resources

Paleontological resources are fossils or groups of fossils that are unique, unusual, rare, uncommon or important, and those that add to an existing body of knowledge in specific areas. Surface examination of a study or project area often does not reveal whether paleontological resources are present. A search of the database of the Museum of Paleontology at UC Berkeley includes numerous records of vertebrate fossil localities related to the Modesto or the Riverbank Formations in the greater Central Valley. The project site is underlain by the Modesto Formation.

The Museum of Paleontology database showed that San Joaquin County has more than 800 documented fossil localities. Most paleontological specimens have been found in rock formations in the foothills of the Diablo Mountain Range, but remains of extinct animals could be found virtually anywhere in the county, especially along watercourses such as the San Joaquin River and its tributaries (San Joaquin County 2016b). However, only a handful of specimens are within the Stockton General Plan Planning Area, and those are identified as relatively recent. Due to the alluvial nature of the area, this should not be taken to suggest that additional localities are not present (City of Stockton 2016). There are no known paleontological resources on the project site.

Mineral Resources

Mineral resources within San Joaquin County are primarily sand, gravel, and other construction material deposits in the alluvial portion of the valley floor. Sand and gravel deposits have been identified along the Stanislaus River in San Joaquin County (DMG 1977). Portland cement concrete aggregate deposits also have been identified within San Joaquin County, but none are located on the project site (DMG 1988).

Oil and natural gas deposits have been identified throughout the Central Valley, with extensive natural gas deposits in the Delta area west of Stockton. The project site does not contain oil or natural gas fields. The nearest active field is the French Camp natural gas field south of Stockton and west of the project site (DOGGR 2001).

REGULATORY FRAMEWORK

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act, enacted in 1972 and subsequently amended, prohibits the location of most structures for human occupancy across the traces of active faults and to thereby mitigate the hazard of fault rupture. Under the Act, the State Geologist is required to delineate Earthquake Fault Zones along known active faults in California. Cities and counties affected by the zones must regulate certain development

projects within the zones, withholding development permits for sites within the zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting (Bryant and Hart 2007).

The project site is not within an area mapped by the State Geologist as a "Zone of Required Investigation," which includes Alquist-Priolo Earthquake Fault Zones. A Zone of Required Investigation is established where required to reduce the threat to public health and safety and to minimize the loss of life and property posed by earthquake-triggered ground failures (California Geological Survey 2017).

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was passed in 1990 to address earthquake hazards such as seismically-induced liquefaction and landslides. Under the Act, seismic hazard zones are mapped through the Seismic Hazards Zonation Program of the California Geological Survey to identify areas prone to earthquake-induced liquefaction, landslides, and amplified ground shaking. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property that may result from earthquake-triggered ground failure. Section 2697(a) of the Act states that cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. As noted, the project site is not within an area mapped by the State Geologist as a Zone of Required Investigation, which includes Seismic Hazards Mapping Act zones.

California Building Code

The California Building Code is included in Title 24 of the California Code of Regulations and incorporates the International Building Code, a model building code adopted across the United States. The California Building Code is updated every three years, and the current 2016 version took effect January 1, 2017. The City of Stockton adopted the California Building Code by reference pursuant to Title 15, Chapter 15.40, Section 15.40.010 of the City's Municipal Code.

The California Building Code contains building requirements that address likely ground shaking hazards that may occur in Stockton. It can require detailed soils and/or geotechnical studies in areas of suspected geological hazards, such as unstable geologic units that may be subject to collapse, subsidence, landslides, liquefaction, or lateral spreading.

Construction General Permit

Construction projects that involve one acre or more of ground disturbance are required to obtain a Construction General Permit, issued by the SWRCB. Discharges subject to the Construction General Permit must develop and implement a Storm Water Pollution Prevention Plan (SWPPP), which includes a site map and description of construction activities and identifies the Best Management Practices (BMPs) that will be employed to

prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. A monitoring program is generally required to ensure that BMPs are implemented according to the SWPPP and are effective at controlling discharges of stormwater-related pollutants. The City of Stockton has incorporated the Construction General Permit as part of its water quality control program, which is described in Chapter 12.0, Hydrology.

Modifications to the Construction General Permit in 2010 established BMP and monitoring requirements through a "risk-based" approach. Construction activities would be assessed for the risk that erosion and sedimentation generated by the activity would pose to water quality in the area, based on potential rainfall likelihood and intensity and on the sensitivity of waters receiving runoff from the construction site.

Surface Mining and Reclamation Act

As mandated by the Surface Mining and Reclamation Act, the California Geological Survey has classified mineral resource development potential of lands in counties into an appropriate Mineral Resource Zone (MRZ), in accordance with the California Mineral Land Classification System. Local agencies are required to use this information when developing land use plans and when making land use decisions. The MRZ classifications include:

MRZ-1 - Areas of No Mineral Resource Significance

MRZ-2 - Areas of Identified Mineral Resource Significance

MRZ-3 - Areas of Undetermined Mineral Resource Significance

MRZ-4 - Areas of Unknown Mineral Resource Significance

The Mineral Land Classification Map, prepared by the California Division of Mines and Geology, designates the project site and surrounding lands as MRZ-1. An MRZ-1 designation in the Stockton-Lodi region indicates that the soils contain excessive amounts of clay, silt or other deleterious material for use as Portland cement concrete-grade aggregate (DMG 1988). Neither the City of Stockton nor San Joaquin County General Plans has identified any mineral resources on or near the project site.

Stockton Municipal Code

Section 15.48.050 of the Stockton Municipal Code, entitled Construction and Application, includes a requirement that seeks to mitigate hazards associated with erosion, stating that "During construction, construction activities shall be designed and conducted to minimize runoff of sediment and all other pollutants onto public properties, other private properties and into the waters of the United States." Section 15.48.110, entitled Erosion Control Requirements, contains specific provisions for erosion control for those construction projects where a grading permit is not required. Section 15.48.070

includes requirements for a grading permit that apply to most construction projects. Such permits require implementation of erosion control measures, often referred to as BMPs.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

- Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (including liquefaction), or landslides.
- Result in substantial soil erosion or the loss of topsoil,
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse,
- Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property,
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater,
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature,
- Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state, or
- 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.

Regarding the fifth bullet point, since future development would connect to the City of Stockton's wastewater system, it would not use septic systems. Therefore, this issue is not analyzed in this EIR.

Impact GEO-1: Faulting and Seismicity

As previously noted, there are no active or potentially active faults within or near the project site. The project site is not within an Alquist-Priolo Earthquake Fault Zone. The project would have no impact related to fault rupture.

The project site, along with the rest of the City, is subject to seismic shaking from active faults outside San Joaquin County. Proposed building construction would be required to incorporate engineering design features that would be in accordance with the adopted California Building Code. Compliance with the California Building Code and the seismic design criteria therein would enable structures to withstand projected seismic shaking. Impacts related to seismicity would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact GEO-2: Other Geologic Hazards

The project site and its surroundings are flat and therefore not prone to landslide hazards. As noted, subsidence is not considered a potential hazard outside the Delta region, nor are there identified areas where liquefaction could occur. The Norcal Logistics Center EIR notes that the types of soils and the depth to groundwater in the area provide little potential for ground failures (ESA 2014). The City typically requires a geotechnical study to be provided in conjunction with new development, especially when large structures are proposed. The geotechnical study would identify any geological or soil issues that structural engineering and design would address to avoid potential adverse effects. The project would have no impact related to other geologic hazards.

Level of Significance: No impact

Mitigation Measures: None required

Impact GEO-3: Soil Erosion

Both Jacktone clay and Stockton clay soils have a low potential for soil erosion. Project construction activities would loosen the soil, leaving it exposed to potential water and wind erosion. The eroded soils, in turn, could be transported off the project site by runoff or wind.

As noted, the City of Stockton has a water quality program that is applicable to potential erosion from construction activities, including a requirement for projects disturbing one acre or more of soil to obtain a Construction General Permit. Proposed development on the project site would need to obtain a Construction General Permit and comply with its provisions, including the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that would control soil erosion and sedimentation. As part of the SWPPP, the developer shall incorporate an Erosion Control Plan consistent with all applicable provisions of the SWPPP within the site development plans.

Additionally, the project would comply with SJVAPCD Regulation VIII, which is discussed in Chapter 6.0, Air Quality. The measures specified in Regulation VIII would control dust emissions, thereby reducing potential wind erosion impacts. Compliance with the requirements of the Construction General Permit and SJVAPCD Regulation

VIII, as well as with applicable provisions of the Stockton Municipal Code, would make potential construction erosion impacts less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact GEO-4: Expansive Soils

As noted, both soils on the project site have a high shrink-swell potential. Expansive soils can lead to damage of buildings and supporting infrastructure if not addressed. As such, the existence of expansive soils is a potentially significant impact.

The City often requires submittal of geotechnical information and incorporation of geotechnical recommendations into development plans prior to approval of future development, particularly large developments. Mitigation Measure GEO-1 would require preparation of a geotechnical study with recommendations to minimize or eliminate potential geotechnical issues, including expansive soils. With implementation of this mitigation measure, expansive soil impacts would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

GEO-1: Prior to site development plan approval, a site-specific, design-level geotechnical study shall be completed for the proposed construction areas. The study shall include an evaluation of potential geologic and soil hazards, including the presence of expansive soils. The study shall recommend design and construction features to reduce the potential impact of identified hazards on the proposed development if the hazard is considered significant. The recommendations included in the study shall be incorporated in design and construction documents and implemented during development.

Significance After Mitigation: Less than significant

Impact GEO-5: Paleontological Resources and Unique Geological Features

Geological materials underlying the site consist of mixed alluvial deposits. There are no unique geological features located on the project site that would be indicative of any special resources.

As noted above, no evidence of paleontological resources on the project site was found. Nevertheless, it is conceivable that excavation associated with project development could unearth paleontological materials. The Modesto Formation, which underlies the project site, has been identified as a potential location for paleontological resources. Mitigation Measure GEO-2 provides for interruption of construction activities in such an event, inspection of resources encountered by a qualified paleontologist, and mitigation of

potential effects as specified by the paleontologist. Implementation of Mitigation Measure GEO-2 would reduce potential paleontological effects to a level that is less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

GEO-2: If any subsurface paleontological resources are encountered during construction, all construction activities within a 50-foot radius of the encounter shall be immediately halted until a qualified paleontologist can examine these materials, initially evaluate their significance and, if potentially significant, recommend measures on the disposition of the resource. The City shall be immediately notified in the event of a discovery. The contractor shall be responsible for retaining qualified professionals, implementing recommended mitigation measures and documenting mitigation efforts in written reports to the City.

Significance After Mitigation: Less than significant

Impact GEO-6: Access to Mineral Resources

There are no identified mineral, petroleum, or natural gas resource areas on the project site, nor are there any active mining operations or petroleum/natural gas extraction on or near the project site. The project would have no effect on the availability of or access to locally designated or known mineral resources. The project would have no impact on mineral resources.

Level of Significance: No impact

Mitigation Measures: None required

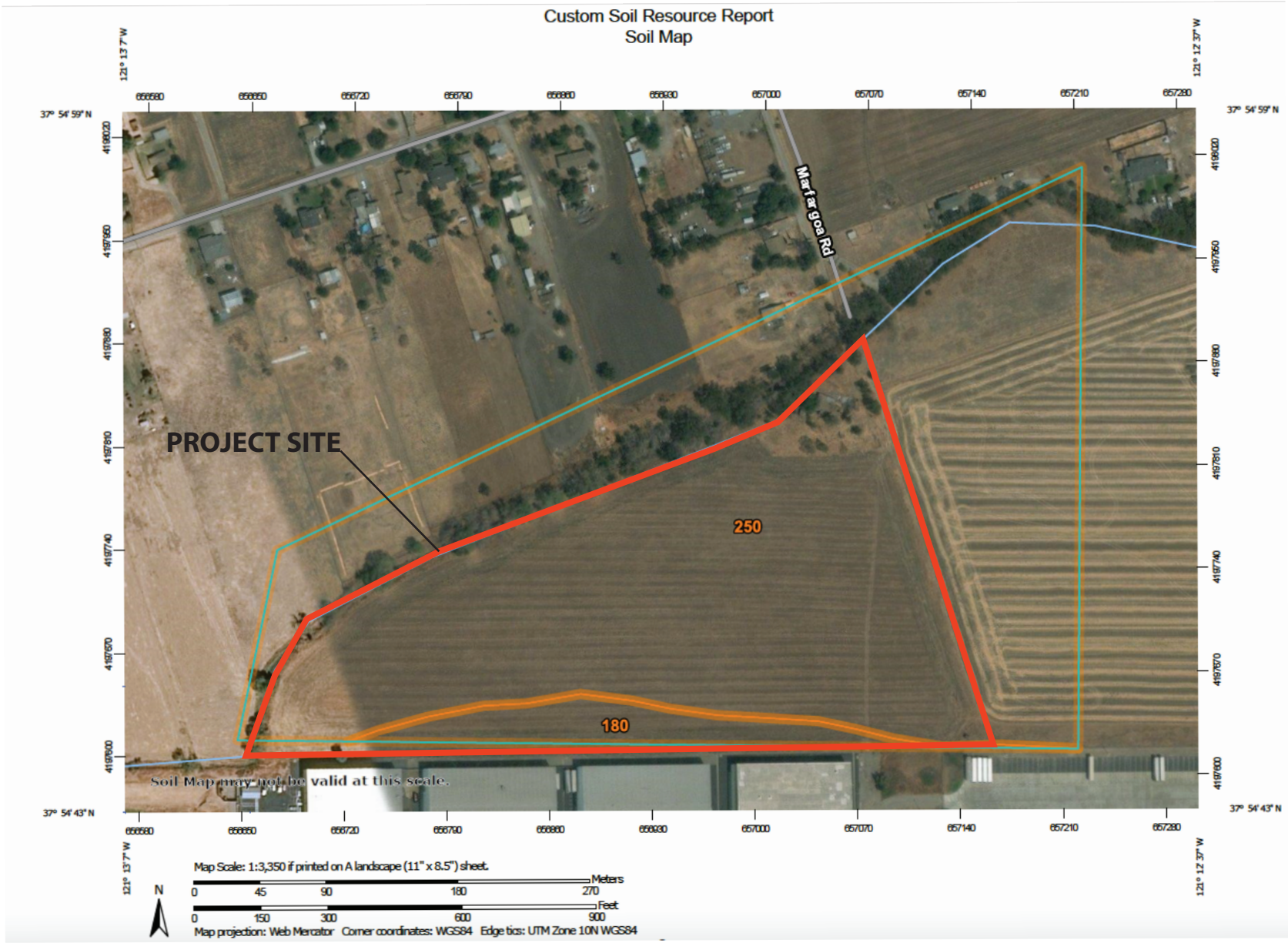


Figure 9-1
SOIL MAP HOGGAN PROPERTY

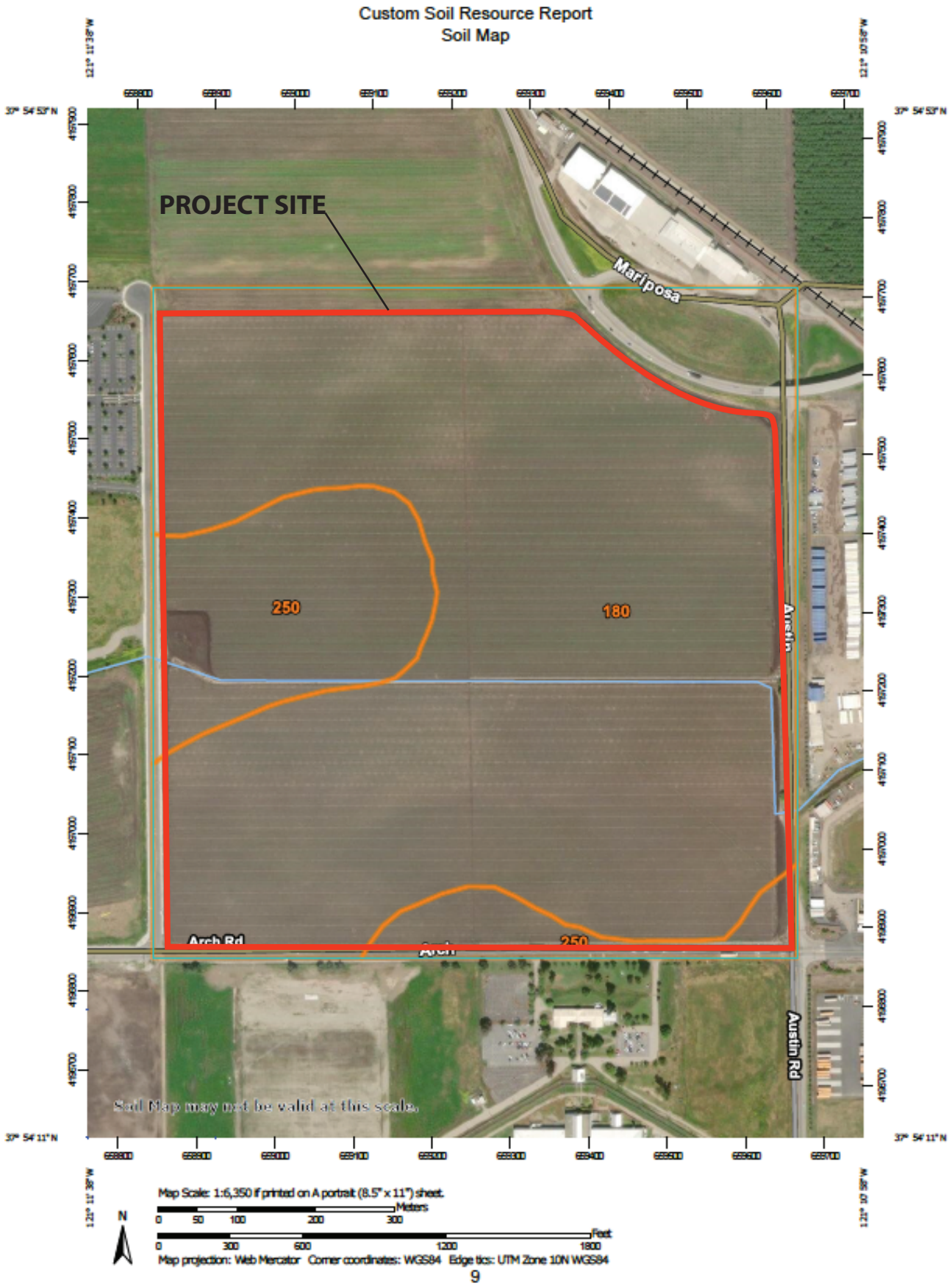


Figure 9-2
SOIL MAP SANCHEZ PROPERTY

10.0 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL SETTING

Global Climate Change and Greenhouse Gases

Global climate change is a shift in the "average weather," or climate, of the Earth as a whole. Recent scientific observations and studies indicate that global climate change, linked to an increase in the average global temperature that has been observed, is now occurring. There is a consensus among climate scientists that the primary cause of this change is human activities that generate emissions of greenhouse gases (GHGs) (CAPCOA 2009). GHGs are gases that trap heat in the earth's atmosphere. They include carbon dioxide, the most abundant GHG, as well as methane, nitrous oxide, and other, less abundant gases.

GHGs vary in their heat-trapping properties. Because of this, measurements of GHG emissions are commonly expressed in carbon dioxide equivalent (CO_2e), in which emissions of all other GHGs are converted to equivalent carbon dioxide emissions. GHG emissions in California in 2016 were estimated at 429.33 million metric tons CO_2e – a decrease of approximately 13.0% from the peak level in 2004. Transportation was the largest contributor to GHG emissions in California, with approximately 41% of total emissions. Other significant sources included industrial activities, with 21% of total emissions, and electric power generation, both in-state and imported, with 16.0% of total emissions (ARB 2018). Total GHG emissions from Stockton in 2005 were an estimated 2,360,932 metric tons CO_2e. Of the total emissions, approximately 48% percent came from on-road transportation and 33% came from building energy use (City of Stockton 2014).

Concerns related to global climate change include the direct consequences of a warmer climate, but also include indirect effects such as reduced air quality, reduced snowpack, higher-intensity storms, and rising sea levels. All these changes have implications for the human environment, as well as existing ecosystems and the species that depend on them. The United Nations Intergovernmental Panel on Climate Change has concluded that stabilization of greenhouse gases at a concentration of 400-450 parts per million (ppm) CO_2e is required to keep mean global warming below 2° Celsius, which is considered necessary to avoid dangerous impacts of climate change (IPCC 2001). According to data collected by the National Oceanic and Atmospheric Administration, the carbon dioxide concentration in the atmosphere was 413.92 ppm in June 2019 (NOAA 2019).

The State of California, through a collaboration of three agencies, has prepared Climate Change Assessments that provide scientific assessments on the potential impacts of climate change in California and reports potential adaptation responses. The most recent report, issued in 2019, includes assessments of climate change impacts by region,

including the San Joaquin Valley. Potential climate change impacts occurring in the San Joaquin Valley include the following (Westerling et al. 2018):

- Acceleration of warming across the region and state.
- More intense and frequent heat waves.
- Higher frequency of catastrophic floods.
- More intense and frequent drought.
- More severe and frequent wildfires.
- Accelerating sea level rise.

The consequences of these impacts would fall on the following sectors in the San Joaquin Valley:

- Agriculture is one of the most vulnerable sectors due in part to more frequent and severe drought, as well as tighter water supply. Regulatory and physical constraints on water supply for agriculture, and environmental factors such as warmer temperatures and more variable precipitation, new pests, and reduced chill hours will affect agricultural decision-making and implementation.
- Ecosystems are highly vulnerable to climate change given existing anthropogenic stressors and the lack of organization of landscape-scale science, funding, and mitigation of adverse impacts within the region. This is particularly the case during prolonged droughts, when scarce water supply disproportionately impacts ecosystems.
- Water resources will be severely impacted by climate change. Regional climate trends are likely to reinforce naturally highly variable precipitation regimes, but with prolonged periods of drought and pronounced precipitation events. At higher elevations, more precipitation as rain and less as snow will result in a fundamental shift in the hydrologic regime, with greater surface water flows over shorter periods of time. In all, the increased variability in timing and magnitude of surface water will result in a cascade of downstream effects, including changes in reservoir operations for flood protection, less available surface water during summer when irrigation requirements are highest, and decreased water quality. Water quality will be degraded directly, from increased stream temperatures reducing cold water management options for fisheries or from the increase in concentration of contaminants given diminished flows.
- Infrastructure, including urban, water, and transportation systems, may face increased stress from higher temperatures and extreme precipitation events, including droughts and floods. Increasing urbanization in the San Joaquin Valley – and uneven land use planning throughout the region – is likely to hinder efficient and cost-effective investments in regional infrastructure.

- Public health will be exacerbated by many negative impacts from climate change. Warmer temperatures will facilitate the spread of disease, worsen air quality from extended agricultural fallowing, and challenge food security in disadvantaged communities. At the same time, concentration of pollutants in drinking water, particularly in small community water systems and rural household drinking wells, may increase the incidence of waterborne diseases. Disadvantaged rural communities are likely to experience more intense impacts from extreme events compared to urbanized areas.

REGULATORY FRAMEWORK

International

Global climate change is a subject of longstanding international dialogue and action, dating from the 1988 establishment of the Intergovernmental Panel on Climate Change to further the understanding of human-induced climate change, its potential impacts, and options for adaptation and mitigation (IPCC 2004). Action on the international level has been limited, as not all countries have been able to agree on a global strategy. In 2015, the Paris Agreement was reached among 196 countries, with each country pledging to take actions to decrease GHG emissions to reach the overall goal of limiting the increase in global temperature to no more than 2° Celsius. Although the United States was a signatory to the Paris Agreement, the current presidential administration recently announced its intention to withdraw from it. Formal withdrawal from the agreement would not occur until November 2020 at the earliest.

Federal

Unlike the criteria air pollutants described in Chapter 6.0, Air Quality, GHGs have no "attainment" standards established by either the federal or state governments. Nevertheless, the EPA has found that GHG emissions endanger both the public health and public welfare under Section 202(a) of the Clean Air Act, due to their impacts associated with climate change (EPA 2009).

Although the federal government does not have a comprehensive GHG strategy, it has adopted some GHG emission reduction actions. In coordination with the U.S. Department of Transportation, EPA issued GHG emission and fuel economy standards for passenger vehicles and trucks that are intended to cut 6 billion metric tons of GHG emissions over the lifetimes of vehicles sold in model years 2012-2025. In 2010, the EPA set GHG emissions thresholds to define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. However, a U.S. Supreme Court decision in 2014, along with a decision by a lower court, led to a hold on these regulations while the EPA considers revisions.

In 2013, the EPA proposed standards to cut carbon emissions from new power plants, which were adopted in 2015. In 2015, the EPA adopted the Clean Power Plan, which established guidelines for states in limiting carbon dioxide emissions from existing power plants. However, the current administration is not implementing either of these actions.

State

California has addressed climate change on its own initiative as early as 1988, when the California Energy Commission was designated as the lead agency for climate change issues. However, the most significant state activities have occurred since 2005, when executive orders and State legislation established the current framework for dealing with climate change. Several of these actions are described below.

Executive Orders S-3-05 and B-30-15

Executive Order S-3-05, signed by Governor Schwarzenegger in 2005, established GHG emission reduction targets for California. Specifically, GHG emissions would be reduced to the level of emissions in the year 2000 by 2010, to the level of emissions in the year 1990 by 2020, and to 80% below the 1990 emissions level by 2050. The desired 2050 GHG emission reduction is consistent with the Intergovernmental Panel on Climate Change objectives for stabilizing global climate change. The 2020 reduction goal set forth by S-3-05 was codified by AB 32, which is described below.

On April 29, 2015, Governor Brown signed Executive Order B-30-15, which advances the goals of Executive Order S-3-05 by establishing a GHG reduction target of 40% below 1990 emission levels by 2030. The 2030 reduction goal set forth by B-30-15 was codified by Senate Bill (SB) 32, which also is described below.

To date, the 2050 reduction goal has not been made State law, and the State has not prepared any plans to achieve the 2050 goal. In its ruling on *Cleveland National Forest Foundation v. SANDAG* (2017), the California Supreme Court stated that the CEQA lead agency did not abuse its discretion by declining to explicitly engage in an analysis of the consistency of projected 2050 GHG emissions with the goals in the executive order, given the lack of reliable means to forecast how future technology and State legislative action will affect future emissions. The same condition applies to this project; therefore, an analysis of project consistency with the 2050 reduction goal in Executive Order S-3-05 will not be conducted in this EIR.

AB 32

AB 32, the Global Warming Solutions Act of 2006, is State legislation that sets goals of reducing GHG emissions to year 2000 levels by 2010 and to year 1990 levels by 2020. These specific goals are directly related to the Governor's overall objectives established in Executive Order S-3-05. The State's initial planning efforts were oriented toward meeting the legislated 2010 and 2020 goals, while placing the State on a trajectory that will facilitate eventual achievement of the 2050 goal set forth in Executive Order S-3-05.

The ARB has primary responsibility for AB 32 implementation. ARB adopted a Climate Change Scoping Plan in 2008 with the purpose of meeting the AB 32 targets. The Scoping Plan details the various GHG reduction initiatives that will be undertaken by the State or passed down to local governments, and it quantifies the GHG emission reductions associated with each of the initiatives. The 2008 Scoping Plan proposed to reduce GHG emissions from the State's projected 2020 "business-as-usual" emissions by approximately 29%. Under the Scoping Plan, nearly 85% of the GHG reductions would be achieved under a "cap-and-trade" program and "complementary measures," including expansion of energy efficiency programs, increase in the use of renewable energy sources, and low-carbon fuel standards, among others. The remaining 15% would include measures applicable to GHG sources not covered by the cap-and-trade program (ARB 2008b).

The cap-and-trade program is the centerpiece of the GHG reduction program set forth in the Scoping Plan. In general, the program sets a "cap" on the total GHG emissions that would be allowed in California, which gradually decreases over time. Allowances for GHG emissions are sold at auction to industrial activities and utilities that emit large quantities of GHGs, which in turn can sell allowances that are unused to other activities that need more allowances (the "trade" component). The State Legislature recently extended the cap-and-trade program from its original expiration in 2020 to 2030, as part of a strategy to meet GHG reduction targets set by SB 32 (see below).

In May 2014, the ARB approved the First Update to the Scoping Plan. The 2014 Update lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to the 2050 target set forth in Executive Order S-3-05. It recommends actions in nine sectors: energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green buildings, and the cap-and-trade program (ARB 2014).

Recently, the ARB released the California Greenhouse Gas Emission Inventory, with data from 2016. As noted above, total state GHG emissions were 429.33 million metric tons CO2e. This total was approximately two million metric tons CO_2e below the 2020 target established by AB 32 (ARB 2018).

SB 32

In 2016, the State Legislature passed, and Governor Brown signed, SB 32. SB 32 extends the GHG reduction goals of AB 32 by requiring statewide GHG emission levels to be 40% below 1990 levels by 2030, in accordance with the target originally established by Executive Order B-30-15. The State has adopted an updated Scoping Plan that sets forth strategies for achieving the SB 32 target. The updated Scoping Plan continues many of the programs that were part of the previous Scoping Plans, including the cap-and-trade program, low-carbon fuel standards, renewable energy, and methane reduction strategies. It also addresses for the first time GHG emissions from the natural and working lands of California, including the agriculture and forestry sectors (ARB 2017). As noted, the cap-and-trade program has been extended from its original expiration in 2020 to 2030.

Executive Order B-55-18

On September 10, 2018, Governor Brown signed Executive Order B-55-18. This executive order set a statewide goal of achieving carbon neutrality no later than 2045. "Carbon neutrality" refers to achieving net zero carbon emissions (i.e., GHGs) by balancing a measured amount of carbon released with an equivalent amount sequestered or offset. After 2045, California shall achieve and maintain net negative GHG emissions. The goals set by Executive Order B-55-18 have not been codified, and the State has not yet prepared any plans to achieve these goals.

SB 375/Sustainable Communities Strategy

In 2008, the State enacted SB 375, which requires a metropolitan planning organization to include a Sustainable Communities Strategy in its Regional Transportation Plan (see Chapter 16.0, Transportation). The Sustainable Communities Strategy demonstrate an approach to how land use development and transportation can work together to meet GHG emission reduction targets for cars and light trucks. These targets, set by ARB, call for the region to reduce per capita GHG emissions. If a metropolitan planning organization is unable to meet the targets through the Sustainable Communities Strategy, then an alternative planning strategy must be developed which demonstrates how targets could be achieved.

SJCOG is the metropolitan planning organization for San Joaquin County and its incorporated cities. The ARB provided GHG reduction targets for the preparation of SJCOG's 2014 Regional Transportation Plan, setting the targets at a 5% per capita reduction relative to 2005 levels by 2020, and a 10% per capita reduction relative to 2005 levels by 2035. These remain the targets in the recently adopted 2018 Regional Transportation Plan (SJCOG 2018a).

The adopted Sustainable Communities Strategy includes policies and supporting strategies designed to attain the GHG per capita reduction targets. Among the strategies that may be relevant to the project are improving transportation options linking residents to employment centers within and out of San Joaquin County, promoting safe and efficient strategies that improve the movement of goods by truck, and improving regional transportation system efficiency (SJCOG 2018a). It should be noted that SJCOG has no authority to enforce the policies and strategies in the Sustainable Communities Strategy; the ultimate decisions regarding land use remain with the local governments.

Local

City of Stockton Climate Action Plan

The City of Stockton adopted a Climate Action Plan (CAP) in 2014, in compliance with a Settlement Agreement with the California Attorney General and the Sierra Club related to the City's adopted General Plan 2035 and associated EIR. The CAP "outlines a framework to feasibly reduce community GHG emissions in a manner that is supportive

of AB 32 and is consistent with the Settlement Agreement and 2035 General Plan policy" (City of Stockton 2014).

The CAP sets a GHG emission reduction target of 10% below 2005 GHG emission levels by 2020, or approximately 20.6% below 2020 "business as usual" GHG emissions (i.e., 2020 GHG emissions that are unmitigated), which is the level by which the State has set its emission reduction goal. Approximately 83% of the reductions needed to achieve the City's GHG reduction goal are achieved through state-level programs, and 17% are achieved through City-level programs. The largest GHG reductions are identified in the areas of building energy (both energy efficiency and renewable energy), transportation, and waste. It should be noted that the GHG emission inventory on which CAP targets and policies are based did not include heavy industrial sources.

Approximately 1% of the total reduction would be achieved through a Development Review Process through which development projects requiring discretionary approval from the City must demonstrate a 29% reduction from 2020 business-as-usual GHG emissions, consistent with the SJVAPCD target. Appendix F of the CAP has a Climate Impact Study Process, which is part of the Development Review Process, that describes BMPs to reduce GHG emissions from construction and operational activities. Development must identify the BMPs or other mitigation that would provide the reduction in GHG emissions (City of Stockton 2014).

Stockton General Plan 2040

The following Stockton General Plan 2040 policies and implementing actions are relevant to this project (City of Stockton 2018a):

- Action CH-5.1B: Maintain and implement the City of Stockton Climate Action Plan (CAP) and update the CAP to include the following:
    - Updated communitywide GHG emissions inventory;
    - 2030 GHG emissions reduction target, consistent with SB 32;
    - Estimated 2030 GHG emissions reduction benefits of State programs;
    - Summary of the City's progress toward the 2020 local GHG emissions reduction target;
    - New and/or revised GHG reduction strategies that, when quantified, achieve the 2030 reduction target and continue emission reductions beyond 2030; and
    - New or updated implementation plan for the CAP.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

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

This EIR conducts its GHG analysis in accordance with CEQA Guidelines Section 15064.4, which states that a lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. CEQA Guidelines Section 15064.4(b) states that a Lead Agency should consider the following factors, among others, when assessing the significance of impacts from GHG emissions on the environment:

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Some jurisdictions have established quantitative thresholds for determining the significance of project GHG emissions from construction activities and project operations. Neither the City, San Joaquin County, nor SJVAPCD has established such quantitative significance thresholds, although the SJVAPCD recommends a 29% reduction from business-as-usual GHG levels for project operational emissions. As noted above, the CAP determined that approximately 83% of the GHG reductions targeted by the City would be accomplished by statewide measures, while 17% would be accomplished by local measures. Local measures include the Development Review Process, building energy use measures, land use and transportation measures, and waste generation and water conservation measures, among others. Based on these percentages, approximately 5% of GHG reductions would be required by local measures. For the purposes of this analysis, a project that can attain at least a 5% reduction in GHG emissions from business-as-usual levels would have impacts on GHG reduction plans that would be less than significant.

Impact GHG-1: Project GHG Construction Emissions and Consistency with Applicable Plans and Policies

The CalEEMod model estimated the total GHG construction and operational emissions associated with the proposed project site development (see Appendix C of this EIR). As noted in Chapter 6.0, Air Quality, CalEEMod used the optional Sanchez property development figures that were used in the traffic analysis (see Table 16-1 in Chapter 16.0, Transportation). Table 10-1 presents the results of the CalEEMod run.

TABLE 10-1
PROJECT GHG EMISSIONS

GHG Emission Type	Unmitigated Emissions (metric tons CO_2e)	Mitigated Emissions (metric tons CO_2e)
Construction – Proposed Project[1]	3,071	3,071
Construction – Market Driven Project[1]	2,166	2,166
Operational – Proposed Project[2]	13,764	11,217
Operational – Market Driven Project[2]	15,568	12,595

[1] Maximum GHG emissions for calendar year.
[2] Annual emissions.
Source: California Emissions Estimator Model v. 2016.3.1.

Based on results from the CalEEMod run, maximum project construction GHG emissions for a calendar year for the proposed project would be approximately 3,071 metric tons CO_2e for an assumed construction period of approximately five years. For the Market Driven Project described in Chapter 16.0 Transportation, maximum project construction emissions would be approximately 2,166 metric tons. Construction emissions would occur only during construction work and would cease once work is completed. In addition, implementation of rules described in Chapter 6.0, Air Quality, that are designed to reduce air pollutant emission is also expected to reduce incrementally the amount of GHGs generated by project construction. Nevertheless, project GHG construction emissions are considered potentially significant.

As discussed in Chapter 6.0, the project would be required to observe SJVAPCD Rule 9510, the Indirect Source Rule. Rule 9510 focuses on reductions in NO_x and particulate matter emissions. However, it is expected that actions taken to comply with Rule 9510 would also lead to an incidental reduction in GHG emissions, though the amount of this reduction cannot be determined.

The ARB has implemented the Regulation for In-Use Off-Road Diesel Fueled Fleets, which applies to all self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles (except on-road two-engine sweepers). The overall purpose of the Off-Road Regulation is to reduce emissions of NO_x and particulate matter from off-road diesel vehicles operating within California. The Off-Road Regulation imposes limits on idling and requires a written idling policy. It also requires

fleets to reduce their emissions by retiring, replacing, or repowering older engines, or by installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The requirements and compliance dates of the Off-Road Regulation vary by fleet size. As with SJVAPCD Rule 9510, compliance with the Off-Road Regulation would lead to an incidental reduction in GHG emissions, though the amount of this reduction cannot be determined.

The Climate Impact Study Process in the Stockton CAP describes construction BMPs to reduce GHG emissions from construction activities. These include having at least 3% of the construction fleet electric-powered and reducing idling time of construction equipment to three minutes. These measures have been incorporated as mitigation below. However, the reduction impact of these measures cannot be quantified to a project level, so it cannot be determined if implementation of these measures would reduce project impacts to a level that would be less than significant. Therefore, project impacts related to construction GHG emissions are considered significant and unavoidable.

Level of Significance: Potentially significant

Mitigation Measures:

GHG-1: The project shall implement the Off-Road Vehicles Best Management Practices specified in the Stockton Climate Action Plan. At least three (3) percent of the construction vehicle and equipment fleet shall be powered by electricity. Construction equipment and vehicles shall not idle their engines for longer than three (3) minutes.

Significance After Mitigation: Significant and unavoidable

Impact GHG-2: Project GHG Operational Emissions and Consistency with Applicable Plans and Policies

The CalEEMod run estimated that operational GHG emissions resulting from development under the proposed project would be approximately 13,764 metric tons CO_2e annually under "unmitigated" conditions (i.e., without implementation of any reduction measures). To estimate "mitigated" with project conditions, the CalEEMod run also incorporated the following project features and regulations that would reduce GHG emissions.

- Installation of sidewalk along currently unimproved frontage per City standards.
- Implementation of Employee Trip Reduction Plan (per SJVAPCD Rule 9410; see Chapter 6.0, Air Quality).
- Install high-efficiency lighting (55% lighting energy reduction).
- Implement required water conservation reduction (20% reduction in water use).
- Institute recycling and composting services (75% reduction in waste disposed).

With incorporation of these measures, estimated operational GHG emissions would be reduced to approximately 11,217 metric tons CO_2e annually, an approximately 18.5% reduction in GHG emissions from unmitigated levels.

The CalEEMod run estimated that operational GHG emissions resulting from development under the Market Driven Project scenario would be approximately 15,568 metric tons CO_2e annually under "unmitigated" conditions (i.e., without implementation of any reduction measures). Under "mitigated" conditions, estimated operational GHG emissions would be reduced to approximately 12,595 metric tons CO_2e annually, an approximately 19.1% reduction in GHG emissions from unmitigated levels.

As noted, a project that can show GHG reductions greater than 5% from the business-as-usual (unmitigated) level can be said to be consistent with the reduction goals of the Stockton CAP. As indicated in Table 10-1, project GHG operational emissions reduction under both development scenarios would be reduced by more than 5%. Since the Stockton CAP goals are intended to be consistent with both the State's and SJVAPCD's plans, this reduction would be consistent with the goals of these plans.

Per SB 32, the State has set a 2030 reduction target of 40% below 1990 GHG emission levels. The Stockton CAP does not have 2030 reduction targets. However, assuming the same growth in business-as-usual GHG emissions that was projected to occur between 2005 and 2020 by the CAP, the total 2030 business-as-usual GHG emissions in Stockton would be 3,025,292 metric tons CO_2e. Based on information in the CAP, the 2030 reduction target (40% below 1990 emissions) would be 1,074,672 metric tons CO_2e. Therefore, the percentage reduction from business-as-usual levels that would be required in 2030 would be approximately 64.5%.

The 2017 Scoping Plan proposes various measures to achieve the 2030 target. Most of these are State measures, such as use of the cap-and-trade program, the Short-Lived Climate Pollutant Plan, and achievement of the 50% renewable sources of electricity in the Renewables Portfolio Standard.[1] Based on estimates in the 2017 Scoping Plan, State actions would account for 89.8% of GHG reductions needed by 2030, with local actions accounting for approximately 9.3% of reductions. Applying this ratio to the percentage reduction for 2030, then approximately 6.0% of the reduction from 2030 business-as-usual levels would be achieved by local measures, including the Development Review Process. A project that can shows GHG reductions greater than 6.0% can be said to be consistent with the reduction goals of SB 32. Project GHG operational emissions under both development scenarios would exceed this percentage. Therefore, the project would be consistent with the reduction goals of SB 32.

In summary, project GHG operational emissions would be consistent with both the GHG reduction goals of the Stockton CAP to 2020 and the GHG reduction goals of SB 32 for 2030. Project operational impacts on GHG emissions would be less than significant.

[1] Please refer to Chapter 17.0, Utilities and Energy, for a description of the Renewables Portfolio Standard.

Level of Significance: Less than significant

Mitigation Measures: None required

11.0 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL SETTING

This chapter focuses on health and safety issues associated with hazardous materials, proximity to airports, and wildfires. Chapter 6.0, Air Quality, addresses hazards from TAC emissions; Chapter 9.0, Geology, addresses geologic and soil hazards; and Chapter 12.0, Hydrology, addresses potential flooding hazards.

Hazardous Materials

The Norcal Logistics Center EIR described existing conditions related to hazardous materials on and near the center site. It noted that former agricultural uses, like those on the proposed project site, involved agricultural pesticide and chemical use. Motor oil contamination was identified on two parcels, APNs 181-10-02 and 181-10-05 (ESA 2014). There was no record of any hazardous material sites on either of the properties that comprise the proposed project site.

A report on hazardous materials sites that encompassed the Sanchez and Hoggan properties was prepared by EDR. The EDR report, available in Appendix E of this EIR, reviewed various hazardous material site databases to identify recorded sites within several distances up to a two-mile radius from a point approximately halfway between the two properties. This provides a characterization of hazardous material site conditions not only of the project site, but of the industrial area in southeast Stockton.

The EDR report noted that the CERS HAZ WASTE database of the California Environmental Protection Agency, which records sites that fall under hazardous chemical management, hazardous waste onsite treatment, and other programs, lists 16 sites within a mile of the project site. There are two sites within 1-2 miles of the project site where hazardous material cleanup is occurring or is being evaluated: the Youth Correctional Facility and Ripon Pacific, Inc. Also, there were eight Leaking Underground Storage Tank sites listed within 1.25 miles of the project site. All the cases for these sites are closed. The EDR report did not find recorded sites of any status on the Sanchez or Hoggan properties.

Data on hazardous waste and hazardous material use and transportation sites are kept in the GeoTracker database, maintained by the SWRCB, and in the EnviroStor database, maintained by the California Department of Toxic Substances Control (DTSC). GeoTracker and EnviroStor map the locations and provide the names and addresses of hazardous material sites, along with their contamination history and cleanup status. A search of both databases indicated no record of active hazardous material sites on or in the immediate vicinity of the Sanchez and Hoggan properties (SWRCB 2019, DTSC 2019).

A list of solid waste disposal sites identified by SWRCB that exhibit waste constituent levels outside the waste management unit as being above hazardous waste screening criteria did not contain any locations within the project vicinity (CalEPA 2016a). Likewise, a list by SWRCB containing sites under Cease and Desist Orders and Cleanup and Abatement Orders showed no locations near the project site (CalEPA 2016b).

Airport Hazards

Development near airports is potentially subject to hazards arising from airport operations. In general, development that concentrates residents and employees near airports is discouraged, both to avoid potential hazards associated with aircraft takeoffs and landings and to reduce exposure to noise associated with aircraft. Chapter 14.0, Noise, discusses potential noise impacts related to airport operations.

The closest public airport to the project site is Stockton Metropolitan Airport. Stockton Airport offers scheduled passenger air service, along with general aviation and air cargo services. The airport is approximately two miles southwest of the Hoggan property and three miles southwest of the Sanchez property. However, both properties are within the land use compatibility planning area for Stockton Metropolitan Airport.

Wildfire Hazards

Wildland fires are an annual hazard in San Joaquin County. Wildland fires burn natural vegetation on undeveloped lands and include rangeland, brush, and grass fires. Long, hot, and dry summers with temperatures often exceeding 100°F add to the county's fire hazard. Human activities are the major causes of wildland fires, while lightning causes the remaining wildland fires. High hazard areas for wildland fires are the grass-covered areas in the east and the southwest foothills of the county (San Joaquin County 2016b). The project site is not within these areas.

The Fire and Resource Assessment Program, managed by the California Department of Forestry and Fire Protection (Cal Fire), identifies fire threat based on a combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). These two factors are combined in determining the following Fire Hazard Severity Zones: Moderate, High, Very High, Extreme. These zones are mapped for two separate areas: State Responsibility Areas are where the State of California is financially responsible for the prevention and suppression of wildfires, while Local Responsibility Areas are where fire protection is typically provided by city fire departments, fire protection districts, counties, or by Cal Fire under contract to local government. The project site and surrounding lands are within a Local Responsibility Area and have not been placed in a Fire Hazard Severity Zone (Cal Fire 2007a, 2007b).

REGULATORY FRAMEWORK

Federal Hazardous Material Regulations

At the federal level, the principal agency regulating the generation, transport and disposal of hazardous substances is the EPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The RCRA established a federal hazardous substance "cradle-to-grave" regulatory program that regulates the generation, transportation, treatment, storage and disposal of hazardous substances. Under RCRA, individual states may implement their own hazardous substance management programs if they are consistent with, and at least as strict as, the RCRA and if they receive EPA approval.

The EPA regulates hazardous substance sites under the Comprehensive Environmental Response Compensation and Liability Act, commonly referred to as Superfund. The purpose of Superfund is to provide authorities with the ability to respond to uncontrolled releases of hazardous substances from inactive hazardous waste sites that endanger public health and the environment. The subsequent Superfund Amendments and Reauthorization Act amended Superfund to, among other things, expand EPA's response authority, strengthen enforcement activities at Superfund sites, and broaden the application of the law to include federal facilities. In addition, new provisions were added dealing with emergency planning and community right-to-know.

The U.S. Department of Transportation regulates the interstate transport of hazardous materials and wastes through implementation of the Hazardous Materials Transportation Act. This act specifies driver-training requirements, load labeling procedures, and container design and safety specifications. Transporters of hazardous wastes must also meet the requirements of additional statutes such as RCRA.

State Hazardous Material Regulations

Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including the California Environmental Protection Agency and the Office of Emergency Services. The California Highway Patrol and Caltrans enforce regulations related to hazardous materials transport.

The DTSC is part of the California Environmental Protection Agency. It has the primary authority to enforce hazardous materials regulations for the generation, transport and disposal of hazardous wastes under the authority of the Hazardous Waste Control Law, with delegation of enforcement to local jurisdictions that enter into agreements with the agency (ESA 2014). DTSC is also responsible for overseeing the evaluation and cleanup of contaminated properties throughout California, including military facilities, school construction and expansion projects, permitted facilities, brownfields and voluntary agreements.

Under both RCRA and the Hazardous Waste Control Law, the generator of a hazardous substance must complete a manifest that accompanies the waste from the point of generation to the ultimate treatment, storage or disposal location. The manifest describes

the waste, its intended destination, and other regulatory information about the waste. Copies must be filed with the DTSC. Generators must also match copies of waste manifests with receipts from the treatment, storage or disposal facility to which it sends waste.

Local Hazardous Material Regulations

The Unified Hazardous Waste and Hazardous Management Regulatory Program, enacted in 1993, is a state and local effort to consolidate, coordinate, and make consistent existing programs regulating hazardous waste and hazardous materials management. The California Environmental Protection Agency adopted implementing regulations for the Unified Program in 1996.

The Unified Program is implemented at the local level by a Certified Unified Program Agency. The San Joaquin County Environmental Health Department was approved by the State as the Certified Unified Program Agency for the County and its incorporated cities. In that role, the County Environmental Health Department administers the California Accidental Release Prevention, Aboveground Petroleum Storage Act, Hazardous Waste Generator, Hazardous Waste Onsite Treatment, and Underground Storage Tank programs. It also provides the management and record keeping of hazardous materials through the Hazardous Materials Program. This program inspects businesses for compliance with the Hazardous Waste Control Law and issues hazardous materials/waste permits to businesses that handle quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at any given time. Businesses issued these permits are required to submit a Hazardous Materials Business Plan, which includes an inventory of hazardous materials and hazardous wastes, and an emergency response plan for incidents involving hazardous materials and wastes.

Stockton Metropolitan Airport Land Use Compatibility Plan

The Airport Land Use Compatibility Plan (ALUCP) for Stockton Metropolitan Airport was adopted by SJCOG in 2016. The purposes of the ALUCP are to protect the public from the adverse effects of airport noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace. The ALUCP establishes land use compatibility zones within the Airport Influence Area (AIA) of Stockton Airport, which is the area covered by the ALUCP (Figure 11-1). Allowable development densities and intensities are specified within each zone, along with prohibited land uses and other development conditions, all of which are based on safety criteria in the ALUCP (Coffman Associates 2016).

Eight safety and compatibility zones have been established around Stockton Metropolitan Airport. The Hoggan property is mostly within Zone 7a, which allows a maximum non-residential development intensity of 450 persons per acre, requires airspace review of objects more than 100 feet tall, and prohibits the following land uses (Coffman Associates 2016):

- New or expansion of existing dumps or landfills, other than those consisting entirely of earth and rock.
- New dumps and landfills subject to applicable law and implementing advisories.
- Outdoor stadiums.
- Waterways that attract birds that may be a hazard to aircraft.
- Other hazards to flight.

The Sanchez property is mostly within Zone 7b, which has the same development conditions and prohibitions as Zone 7a, including the airspace review, except that waterways and expansion of existing dumps are not prohibited. A small portion of the northeastern portion of the Sanchez property is in Zone 8, which has no limit on development intensity and prohibits only flight hazards and new dumps and landfills, although airspace review is still required (Coffman Associates 2016).

Projects that could potentially affect airport operations are subject to review by the Airport Land Use Commission, members of which are the SJCOG Board of Directors. The Airport Land Use Commission reviews projects for consistency with the ALUCP prepared for the airport and to ensure that the project does not interfere with airport operations. Projects within the AIA of an airport are subject to Commission review. The project site is within the AIA of Stockton Metropolitan Airport.

San Joaquin County Emergency Operations Plan

An update to the San Joaquin County Emergency Operations Plan was adopted in April 2019. The primary purpose of the plan, prepared by the County Office of Emergency Services, is to outline the County's all-hazard approach to emergency operations to protect the safety, health, and welfare of its citizens throughout all emergency management mission areas The plan is an all-hazards document describing the County's incident management structure, compliance with relevant legal statutes, other relevant guidelines, whole community engagement, continuity of government focus, and critical components of the incident management structure. Hazards include natural hazards such as floods, earthquakes, and extreme heat, along with technological hazards such as dam and levee failure and hazardous material releases and human-caused hazards such as civil disturbances and terrorism. (San Joaquin County OES 2019a).

As part of the preparation of the Emergency Operations Plan, evacuation routes have been designated in various parts of the County, including southeast Stockton. Within an area designated as the Stockton South East Evacuation Zone, Arch Road, Austin Road, and Mariposa Road have been designated as evacuation routes (San Joaquin County OES undated).

California Fire Code

The California Fire Code is found in California Code of Regulations Title 24, Part 9 and is revised and published approximately every three years by the California Building Standards Commission. It incorporates, by adoption, the International Fire Code of the International Code Council, with California amendments. This is the official Fire Code for the State and all political subdivisions. The City of Stockton has adopted all the sections of the California Fire Code, as published by the International Fire Code, as stated in Chapter 15.12 of the Stockton Municipal Code.

Stockton Municipal Code

The City of Stockton has established provisions in its Municipal Code related to hazards and hazardous materials. The sections of the Municipal Code most relevant to the proposed project are described below.

Section 16.28.030 – Aircraft Operations Overlay District

Chapter 16.28 regulates development and new land uses in overlay districts established by Section 16.16.020. Section 16.28.030 establishes the Airport Operations overlay district and provides height limits for structures in the vicinity of the Stockton Metropolitan Airport, based on zones or surfaces defined in the air space above the airport and its surroundings. It also requires that all proposed uses in the overlay district be consistent with the ALUCP.

Section 16.36.080 - Hazardous Materials

This section sets forth the standards for regulating the use, handling, storage, and transportation of hazardous materials. Per Section 16.36.080(A), a use permit is required for any new commercial, industrial, institutional, or accessory use, or major addition (over 10 percent) to an existing use within 1,000 feet of a residential zoning district that involves the manufacture, storage, handling, or processing of hazardous materials in sufficient quantities that would require permits as hazardous materials. In addition, this section provides standards for reporting, notification, new development, and both underground and above-ground storage of hazardous materials.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials,

- 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,
- Emit hazardous emissions or handle hazardous or acutely hazardous materials within one-quarter mile of an existing or proposed school,
- Be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5, and as a result create a significant hazard to the public or the environment,
- For a project located within an airport land use plan or within two miles of a public or public-use airport if no plan has been adopted, result in a safety hazard or excessive noise for people residing or working in the project area,
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan, or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Impact HAZ-1: Hazardous Material Transportation and Storage

Future development proposed by the project may require the storage, transport, use, and disposal of hazardous materials. Proposed warehouses may store finished goods or raw materials that may be considered hazardous to human health.

Project site activities that would transport or store hazardous materials would be required to do so in compliance with applicable local, state, and federal regulations. These requirements would include preparation and implementation of a Hazardous Materials Business Plan for activities that would transport or store certain quantities of hazardous materials. Compliance with existing hazardous material regulations and business plan provisions would reduce impacts related to routine transport, use, and storage of hazardous materials to a level that would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HAZ-2: Hazardous Material Releases

Construction activities on the project site may involve the use of hazardous materials such as fuels and solvents, and thus create a potential for hazardous material spills. Construction and maintenance vehicles would transport and use fuels in ordinary quantities. Fuel spills, if any occur, would be minimal and would not typically have significant adverse effects. Potential hazardous materials spills during construction are addressed in the required SWPPP, described in Chapter 9.0, Geology. In accordance with SWPPP requirements, contractors have absorbent materials at construction sites to clean

up minor spills. Other substances used in the construction process would be stored in approved containers and used in relatively small quantities, in accordance with the manufacturers' recommendations and/or applicable regulations.

An issue of concern is the proximity of a "disadvantaged community" to the proposed development (see Chapter 13.0, Land Use, for a description of a disadvantaged community). As previously noted, the Hoggan property is across North Littlejohns Creek from residences along Marfargoa Road. Factors in determining the existence of a disadvantaged community include the presence of diesel PM and hazardous waste generators and facilities. Chapter 6.0, Air Quality, analyzes potential diesel PM impacts on sensitive receptors near the Hoggan property. Although proposed development on the Hoggan property would be a warehouse, which uses a limited amount of hazardous materials, other development allowed by the IL zone may use hazardous materials in larger amounts.

However, as noted in HAZ-1 above, hazardous materials transportation and storage on the project site would be subject to federal, state and local regulations that would prevent release of hazardous materials to the soil and/or groundwater and the creation of new hazardous material or waste sites. These requirements would include preparation and implementation of a Hazardous Materials Business Plan. In case of release, the City and County have emergency response teams that would handle any incident involving hazardous materials.

As previously noted, a project may have significant impacts if it would emit hazardous emissions or handle hazardous or acutely hazardous materials within one-quarter mile of an existing or proposed school. There are no schools within one-quarter mile of the project site; the nearest school is Nightingale Charter School on 1721 Carpenter Road, approximately 2.25 miles west of the Hoggan property. Overall, project impacts related to hazardous material releases would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HAZ-3: Hazardous Material Sites

As previously noted, a search of hazardous material databases did not find records of hazardous material sites on or near the project site. The site has been used mainly for agriculture, so no hazardous materials associated with industrial activities are expected. However, past agricultural activities may have left residues of agricultural chemicals in the soils.

Past and present use of chemicals in agricultural operations are a potential hazard if concentrations left in the soil are at a level that can affect human health. Agricultural chemicals are typically applied in dilute concentrations and degrade relatively quickly when used properly. According to the DTSC, based on data from former agricultural properties, the only pesticide class of concern are organochlorine pesticides, such as DDT, dieldrin, and toxaphene, among others. Such pesticides are persistent and

accumulate in the environment. Most other classes of pesticides have relatively short half-lives and have not been found in agricultural fields (DTSC 2008). It should be noted that usage of most organochlorine pesticides has been banned in the United States.

The proposed land use on the project site is warehouse uses. Such uses are unlikely to lead to exposure of warehouse workers to any agricultural chemical contamination that exists in the soil. Construction workers may be exposed to potential soil contamination on the Sanchez property. However, this would be a short-term exposure that is unlikely to lead to health impacts, and most pesticides that may exist in the soil are anticipated to degrade quickly. Given the lack of agricultural activity on the Hoggan property in recent years, it is unlikely that there is any soil contamination on the property at concentrations that would adversely affect health.

The Norcal Logistics Center EIR indicated that any previously identified contamination on the Norcal site has either been removed or is only present in benign levels that do not require any action and would not result in a significant adverse human health or environmental impact (ESA 2014). It is likely that the same condition applies to the Hoggan property, since it appears to have not been used for agricultural activities since at least 1993, based upon Google Earth historical photos.

The Sanchez property has remained in agricultural use and therefore the potential exists for residual agricultural chemicals. A Phase I Environmental Site Assessment and subsequent Phase II Environmental Site Assessment were conducted to determine whether agricultural contamination exists at a level that may pose a risk to human health. The Phase II ESA found that agricultural chemical contamination was below established levels of health concern. As a result, project impacts related to hazardous material sites would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HAZ-4: Airport Hazards

As noted, the project site is within the AIA for the Stockton Metropolitan Airport, and it is safety zones established by the Stockton Metropolitan Airport ALUCP. The Airport Land Use Commission would review the proposed project for consistency. Proposed development on the Hoggan property appears to be consistent with the allowed land uses in Zone 7a of the ALUCP. Likewise, proposed development on the Sanchez property appears to be consistent with the allowed land uses in Zones 7b and 8. No land uses prohibited by the ALUCP are proposed on either property. Project impacts related to airport hazards would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HAZ-5: Interference with Emergency Vehicle Access and Evacuations

Project construction work that may occur on adjacent roads could potentially interfere with emergency vehicle access and evacuations. This situation would occur with development on the Sanchez property, as there are no public roads on or adjacent to the Hoggan property. While project construction work would mostly occur on the Sanchez property, roadway frontage improvements and connection to utility lines may occur on adjacent roads. Of particular concern is work along Arch Road and Austin Road, segments of which front the Sanchez property. Both roads have been designated as evacuation routes for southeast Stockton.

Construction work on Arch Road and Austin Road would mainly occur on the edge of the roadways, which is not expected to require closure of the roads or any major restriction on travel lanes. Should trenching or other excavation occur, the excavated area can be covered or backfilled such that emergency vehicles and evacuee vehicles can travel on these roads unobstructed. Once construction work is completed, project development would not obstruct any roadways. Project impacts on emergency vehicle access or emergency evacuation plans would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

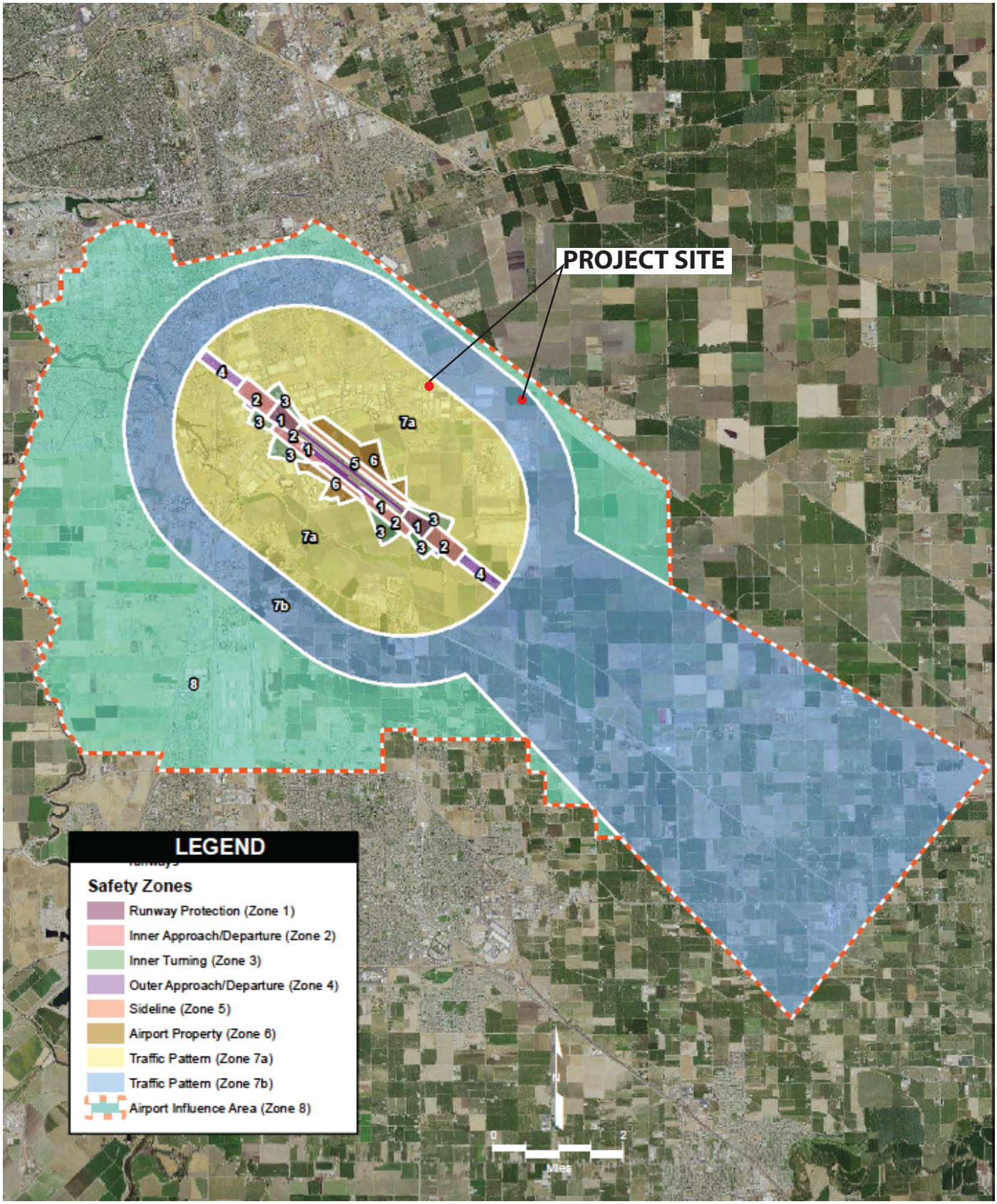
Impact HAZ-6: Wildfire Hazards

The project site currently is vacant land that had been previously farmed intensively. However, it is within an urbanizing area and is partially surrounded by existing urban development, which has a low wildfire hazard. As noted, the project site is not within a State Responsibility Area nor is it within a designated Fire Safety Hazard Zone, which are the primary concerns of the recently updated CEQA Guidelines Appendix G.

The project would reduce the existing wildland fire hazard by replacing the existing grasses and weeds with buildings and pavement. Once annexation is approved, fire protection services for the project site would become the responsibility of the Stockton Fire Department, which can provide service as well as receive assistance from other fire districts if necessary (see Chapter 15.0, Public Services and Recreation). Additionally, the project would be required to comply with the adopted California Fire Code, which would reduce potential fire risks. Project impacts related to wildfires would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required



SOURCE: Stockton Metropolitan Airport Land Use Compatibility Plan Update

Figure 11-1
STOCKTON METROPOLITAN
AIRPORT SAFETY ZONES

12.0 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL SETTING

Surface Waters and Surface Water Quality

The project site is approximately 6.5 miles east of the San Joaquin River, the main river in the Stockton area. The project site is located approximately five miles east of the boundary of the Sacramento-San Joaquin Delta as defined by statute. The Sacramento-San Joaquin Delta is a 600-square-mile area of waterways and islands of reclaimed land at the confluence of the Sacramento and San Joaquin Rivers. The Delta receives runoff from a watershed that covers approximately 45 percent of the State's land area, including flows from the Sacramento, San Joaquin, Mokelumne, and Cosumnes Rivers (Lund et al. 2007). Portions of the Stockton area are within the legally defined boundaries of the Delta, but the project site is not.

The project site is within the Duck-Littlejohns Hydrologic Area of the North Valley Floor Hydrologic Unit in the San Joaquin Hydrologic Basin (RWQCB 1986). Two surface water channels are on or adjacent to the project site. North Littlejohns Creek flows west along the northern boundary of the Hoggan property. North Littlejohns Creek is a stream that originates as Littlejohns Creek in the foothills. The North Littlejohns Creek watershed drains 5,414 acres, starting where North Littlejohns Creek diverges from the mainstem of Littlejohns Creek approximately eight miles east of the project site. The outlet of the watershed flows into French Camp Slough. North Littlejohns Creek is intermittent and mostly conveys flood flows during and after winter storms. In summer months, the creek receives irrigation runoff on an occasional basis (ESA 2014).

Weber Slough is located south of North Littlejohns Creek. It is an unlined agricultural ditch within the project site, paralleling a portion of the eastern boundary of the Sanchez property, then traversing the center of the property as it flows west. Weber Slough only receives ephemeral flows, associated mainly with excess agriculture irrigation water. Both North Littlejohns Creek and Weber Slough also receive urban stormwater drainage from outfalls to these streams (ESA 2014).

North Littlejohns Creek and Weber Slough discharge into French Camp Slough west of the Stockton Metropolitan Airport. French Camp Slough flows west until it discharges into the San Joaquin River, upstream from the Stockton Deepwater Shipping Channel. The San Joaquin River, in turn, flows past Stockton and through the Delta region to its confluence with the Sacramento River east of Suisun Bay.

Surface water quality in these streams has been greatly influenced by local land uses, which have historically included agricultural uses. Pollutant sources in the vicinity include past waste disposal practices, urban stormwater runoff, agricultural chemicals and

fertilizers, and agricultural equipment deposits. Typical contaminants include sediment, hydrocarbons and metals, pesticides, nutrients, and litter. Irrigation of the project site, in addition to storm events, likely transport these pollutants into North Littlejohns Creek and Weber Slough (ESA 2014).

The RWQCB has prepared a list under Clean Water Act Section 303(d) that identifies surface waters in the Stockton area considered impaired in water quality, along with the pollutants responsible for the impairment. Littlejohns Creek, consisting of North and South Littlejohns Creek, is listed as having impaired water quality from *E. coli* bacteria and from unknown toxicity. Likewise, Weber Slough is not explicitly listed, but several Delta waterways and sloughs have been listed for various types of impairments, primarily from agricultural chemicals (RWQCB 2014).

Groundwater and Groundwater Quality

The project site is within the Eastern San Joaquin County Groundwater Subbasin of the San Joaquin Valley Groundwater Basin. The Eastern San Joaquin Subbasin is bounded by the Mokelumne River on the north and northwest, the San Joaquin River on the west, the Stanislaus River on the south, and the Sierra Nevada to the east. The subbasin is recharged by water from streams, percolation of rainfall and irrigation water, inflow from other groundwater basins, and intentional recharge in ponds and on some farm fields with compensation to landowners.

Average groundwater use in the Eastern San Joaquin Subbasin is about 809,321 acre-feet per year, of which approximately 95 percent is for agricultural uses and 5 percent for municipal and industrial uses (City of Stockton 2018b). According to the most recent groundwater report, groundwater levels in the vicinity of the project site range from 70 to 80 feet below ground surface (San Joaquin County Flood Control District 2016).

Groundwater has historically been an important source of domestic water in the Stockton area, but currently supplies less than one-quarter of the City's water (see Chapter 17.0, Utilities). Since the late 1940s and early 1950s, groundwater extraction to meet agricultural and urban demands has created a pronounced pumping depression between the Mokelumne and Stanislaus Rivers, with the center of the depression east of Stockton. In this depression area, groundwater levels can be more than 70 feet below ground surface following the irrigation season (ESA 2014). The demand for groundwater in San Joaquin County appears to have peaked in the 1990s and is projected to continue to decline as the City of Stockton uses more surface water, more efficient urban and irrigation practices are adopted, and sustainable groundwater management plans are implemented.

Groundwater in the subbasin is typically characterized by calcium-magnesium bicarbonate or calcium-sodium bicarbonate types. The pumping depression east of Stockton has caused poorer water quality from the Delta to migrate toward the City of Stockton (ESA 2014). Groundwater flow in the subbasin converges on the depression with relatively steep groundwater gradients eastward from the Delta toward the depression east of Stockton. The eastward flow from the Delta area is significant because

of the typically poorer quality water moving eastward in the Stockton area. During periods of substantial over pumping, degradation of water quality due to saline migration has threatened the long-term sustainability of the underlying groundwater basin. However, the groundwater supply of the City is generally of good quality, and once-rapid saline water migration appears to have slowed significantly (City of Stockton 2018b).

Flooding

According to the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (FEMA), the Hoggan and Sanchez properties are mostly within an area designated Zone AO (Figure 12-1). Zone AO denotes areas inside the 100-year floodplain, which is an area of concern for flood hazards, with determined average flood depths of 1-3 feet. The portion of the Sanchez property within the Weber Slough channel lies within an area designated Zone A, which is like Zone AO but without the determined flood depth. The area along North Littlejohns Creek is also designated Zone A (FEMA 2009). Both the A and AO zones designate areas that are subject to inundation by a flood with a chance of occurring on average once every 100 years, or the "100-year flood." The 100-year flood is the standard flood hazard that is of concern to FEMA.

As described later in this chapter, legislation enacted in 2007 requires urban and urbanizing areas in the Central Valley to have protection from a flood with a chance of occurring on average once every 200 years (the "200-year flood") no later than 2025. A particular focus is protection of areas subject to a 200-year flood of three feet or more in depth. Based on information in the Stockton General Plan, the project site would not be subject to a 200-year flood at a depth of 3 feet or greater (Figure 12-2).

Dam and levee failures are incidents that can cause flooding. According to an annex to the Emergency Operations Plan prepared by the County Office of Emergency Services, the project site is not subject to inundation from failure of major dams or dikes in the area. The project site is outside the boundaries of levee districts established in San Joaquin County (San Joaquin County OES 2019b). No levees have been built along the segments of North Littlejohns Creek or Weber Slough on or near the project site.

REGULATORY FRAMEWORK

Federal

Clean Water Act

The Clean Water Act, as administered by the EPA, seeks to restore and maintain the chemical, physical, and biological integrity of the nation's waters. It employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.

Section 303(d) requires that each state identify water bodies or segments of water bodies that are "impaired" (i.e., not meeting one or more of the water quality standards established by the State). These waters are identified in the Section 303(d) list as waters that are polluted and need further attention to support their beneficial uses. Once the water body or segment is listed, the State is required to establish a Total Maximum Daily Load for the pollutant causing the conditions of impairment. The Total Maximum Daily Load is the maximum amount of a pollutant that a water body can receive and still meet water quality standards. Typically, it is the sum of the allowable loads of a single pollutant from all contributing point and non-point sources. The intent of the 303(d) list is to identify water bodies that require future development of a Total Maximum Daily Load to maintain water quality.

National Pollutant Discharge Elimination System

The Clean Water Act authorizes the EPA to implement water quality regulations. The National Pollutant Discharge Elimination System (NPDES) permit program, under Section 402(p), controls water pollution by regulating storm water discharges into the waters of the United States. California has an approved State NPDES program. The EPA has delegated authority for regulating storm water discharges to the SWRCB, which in turn delegates this authority to the RWQCBs. In accordance with the NPDES program, the Central Valley RWQCB has issued a general permit for municipal separate storm sewer systems (MS4) within its jurisdiction (RWQCB Order R5-2016-0040). The City of Stockton implements its storm water quality programs in accordance with this MS4 permit. A description of the City's MS4 permit program is provided later in this section.

National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate FEMA to evaluate flood hazards. FEMA provides Flood Insurance Rate Maps for local and regional planners to promote sound land use and floodplain development by identifying potential flood areas based on the current conditions. To delineate these maps, FEMA conducts engineering studies referred to as Flood Insurance Studies. The most recent maps for the City of Stockton were completed and published in 2009. Using information gathered in these studies, FEMA engineers and cartographers delineate Special Flood Hazard Areas (SFHA) on Flood Insurance Rate Maps. The SFHA is the area where the floodplain management regulations of the National Flood Insurance Program must be enforced and the area where the mandatory purchase of flood insurance applies. These include areas with Zone A and Zone AO designations.

The City of Stockton, under the National Flood Insurance Program, has created standards and policies to ensure flood protection. These policies address development and redevelopment, compatibility of uses, required predevelopment drainage studies, compliance with discharge permits, enhancement of existing waterways, and cooperation with the Corps and the San Joaquin Area Flood Control Agency for updating, among other matters. The San Joaquin Area Flood Control Agency is a joint powers agency whose members are San Joaquin County, the City of Stockton, and the San Joaquin Flood

Control and Water Conservation District. The agency's mission is to study, plan, and implement flood protection projects in order to reduce the risk to people, structures, and the economy.

State

Water Quality Control Plan (Basin Plan)

The Central Valley RWQCB has prepared a Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan). The Basin Plan identifies water quality standards that are based on identified beneficial uses and water quality objectives based on those uses. Beneficial uses listed for surface water bodies in the vicinity of the project site include municipal and domestic supply, agriculture supply, wildlife habitat, warm and cold freshwater habitat, contact and non-contact recreation, warm and cold water migration of aquatic organisms, warm and cold water spawning, industrial process and service supply, and groundwater recharge (RWQCB 2015). The City achieves consistency with the standards of the Basin Plan through implementation of the City's MS4 permit program, which is described below, as well as compliance with Waste Discharge Requirements applied to its wastewater treatment system, which is described in Chapter 17.0, Utilities.

SWRCB General Permits

SWRCB has adopted general permits for construction activity and industrial and commercial use to maintain surface water quality. As described in Chapter 9.0, Geology and Soils, project construction that causes one acre of ground disturbance or more is required to obtain a Construction General Permit, conditions for which include preparation of a SWPPP.

Sustainable Groundwater Management Act

In 2014, the California Legislature passed the Sustainable Groundwater Management Act, the purpose of which is to give local agencies greater authority to manage groundwater supplies. The legislation requires the formation by June 30, 2017 of local Groundwater Sustainability Agencies that must assess conditions in their local water basins and adopt locally-based management plans. Several agencies in the Eastern San Joaquin Subbasin have become Groundwater Sustainability Agencies, including the City of Stockton, San Joaquin County, the Stockton East Water District, Central San Joaquin Water Conservation District, and the South San Joaquin Groundwater Sustainability Agency.

Under the Sustainable Groundwater Management Act, groundwater sustainability plans for critically overdrafted basins are to be adopted by January 31, 2020, while other groundwater basins are required to adopt plans by January 31, 2022. The Eastern San Joaquin Subbasin has been designated a critically overdrafted basin and therefore is subject to the January 31, 2020 adoption requirement. A plan was adopted in by the

member agencies and submitted to the California Department of Water Resources for review.

SB 5 Bills

In 2007, the State of California approved SB 5 and a series of related Senate and Assembly bills intended to set new flood protection standards for urban areas. This group of bills, referred to collectively in this document as "the SB 5 Bills," establish the State standard for flood protection in urban areas in the Central Valley as protection from the 200-year flood. Under the SB 5 Bills, urban and urbanizing areas must be provided with 200-year flood protection no later than 2025. After July 2, 2016, new development in areas potentially exposed to 200-year flooding more than three feet deep is prohibited, unless the local land use agency certifies that 200-year flood protection has been provided or that "adequate progress" has been made toward provision of 200-year flood protection by 2025.

Under Stockton Municipal Code Section 16.90.020A(5), a parcel map or a discretionary permit shall not be approved unless the review authority finds, based on substantial evidence in the record, that the property is located in an urban or urbanizing area of a potential 200-year flood of three feet or less. The Stockton General Plan 2040, in its Figure 5-7, identified 200-year flood areas of three feet or greater in depth, in accordance with the SB 5 Bills. Neither the Sanchez nor Hoggan properties are within such flood areas.

Regional and Local

City of Stockton Storm Water Management Program

As noted above, quality storm water regulation is established in the MS4 general permit issued by the SWRCB. The MS4 permit requires affected MS4 systems, including the City's, to adopt and implement a Storm Water Management Program, which is intended to minimize the potential storm water quality impacts of development, including both construction and post-construction activity. The City of Stockton has adopted a Storm Water Management Program, which consists of a variety of programs, including controls on illicit discharges, public education, controls on City operations, and water quality monitoring. Program elements most applicable to land development include construction storm water discharge requirements and the incorporation of post-construction BMPs in new development. The Storm Water Management Program includes additional controls on the operation of industrial and commercial businesses.

Storm Water Quality Control Criteria Plan

The Storm Water Quality Control Criteria Plan applies to the City of Stockton and to adjacent County lands. The Storm Water Quality Control Criteria Plan identifies a range of post-construction BMPs that must be incorporated into development plans. BMPs include provisions for control of storm water volumes such that peak existing discharges

are not exceeded. Volume control can be achieved through a combination of low-impact development and specific volume control measures. Post-construction BMP requirements are contained in City ordinances that require compliance with the plan.

Eastern San Joaquin Groundwater Authority

The Eastern San Joaquin Groundwater Authority, a joint powers agency that includes the City of Stockton, was originally established in 2001 as the Northeastern San Joaquin County Groundwater Banking Authority. Its purpose was to collectively develop locally-supported projects to strengthen water supply reliability in eastern San Joaquin County. An Eastern San Joaquin Groundwater Basin Groundwater Management Plan was issued by the San Joaquin County Public Works Department in 2004. This plan set forth groundwater management options to elevate groundwater levels and to maintain or enhance both groundwater and surface water quality (NSJGBA 2004).

In 2017, an adopted joint powers agreement between the Northeastern San Joaquin County Groundwater Banking Authority members and other local agencies created the Eastern San Joaquin Groundwater Authority. The purpose of this agency is to create and adopt a groundwater sustainability plan for the Eastern San Joaquin Subbasin, in accordance with the Sustainable Groundwater Management Act. As noted, the Eastern San Joaquin Subbasin has been designated a critically overdrafted basin; as required, a groundwater sustainability plan was adopted and posted to the Sustainable Groundwater Management Act portal before January 31, 2020 (Nakagawa pers. comm.).

Stockton Municipal Code

The City of Stockton sets forth stormwater quality requirements in Municipal Code Chapters 13.16, Stormwater Management and Discharge Control, and 13.20*, Stormwater Quality Control Criteria Plan.* In addition, Chapter 15.48 of the Stockton Municipal Code regulates grading and erosion control in the city.

Chapter 15.44, Flood Damage Prevention, includes provisions that serve to minimize public and private losses due to flood conditions. The chapter applies to "special flood hazard areas," defined in the chapter as areas that are within the 100-year floodplain, designated on FEMA maps as Zones A, AO, or AE, among others. Projects cannot be constructed within these special flood hazard areas without complying with the provisions of this chapter. Such provisions include anchoring of structures and elevation of structures at least two feet above the base flood elevation. Nonresidential structures shall either be elevated or shall be floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water and that its components are capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

- Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality,
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin,
- Substantially alter the existing drainage pattern of the 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 result in substantial erosion or siltation on- or off-site, impede or redirect flood flows, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff,
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation, or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Impact HYDRO-1: Surface Water Resources and Quality

Both properties within the project site have surface waters on or adjacent to them. However, as discussed in Chapter 7.0, Biological Resources, a required "no-development" buffer has been established for North Littlejohns Creek, which would prevent encroachment of development within 50 feet of the creek. Proposed Sanchez property development includes a 100-foot-wide corridor along Weber Slough, which likewise would prevent encroachment onto this surface water.

The project proposes future development of five light industrial buildings. As noted in Chapter 9.0, Geology and Soils, construction activities associated with this development could disturb soils, which could be transported off-site by runoff and could eventually enter surface waters. In addition, construction-related debris, fuels, oils, and other pollutants could be transported. This could have a potentially significant impact on water quality in North Littlejohns Creek and Weber Slough, which in turn drain into French Camp Slough and eventually the San Joaquin River.

As previously described, the City of Stockton operates under a NPDES MS4 permit. To comply with the conditions of the permit, it has adopted a Storm Water Management Program that is intended to minimize the potential storm water quality impacts of development. Program elements most applicable to land development include construction storm water discharge requirements which are met by the development and implementation of an SWPPP, as discussed above, including risk-based monitoring requirements, and the incorporation of post-construction BMPs in new development per the Storm Water Quality Control Criteria Plan. Vegetated buffer strips and swales, detention basins, vaults and wetlands, and various filtration and infiltration structures and devices are among the BMPs that may be implemented to provide water quality treatment and volume control for runoff from building, paving, and other development.

Project development will be required to submit storm water management plans for the project that shall include construction erosion and sedimentation controls as well as post-construction BMPs. The plans also shall include calculations of potential storm drainage generated by development and the facilities and the practices to be implemented that would ensure this drainage is not discharged to Weber Slough or North Littlejohns Creek in a manner that exceeds their capacities. Developers are required to enter into an agreement for maintenance of the post-construction BMPs prior to receiving a Certificate of Occupancy. In addition, project development shall comply with all requirements of, and pay all associated fees as required by, the City's Storm Water Management Program as set forth in its NPDES Storm Water Permit.

Construction associated with proposed project development would have a potentially significant impact on surface water quality. However, compliance with the applicable permits, programs and regulations would reduce impacts to a level that would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HYDRO-2: Groundwater Resources and Quality

The project would not draw directly from groundwater but would be connected to the City's water system. The City's water supply relies in part on groundwater, though that reliance has been reduced with increased surface water supplies (see Chapter 17.0, Utilities). Development on the project site would generate additional water demands, but as discussed in Chapter 17.0, the City's water system can accommodate this development from its existing supplies. The project would not require additional groundwater resources.

Development of the project would replace existing vacant land with buildings and pavement. This would reduce the potential groundwater recharge area, thereby reducing the amount of percolation. A groundwater sustainability plan has been prepared for the Eastern San Joaquin Subbasin in accordance with the Sustainable Groundwater Management Act.

The Stockton General Plan 2040 EIR analyzed the issue of groundwater recharge. It noted that, while future development would increase the total amount of impervious areas, priority projects would be required to implement multiple BMPs that minimize impervious areas and retain, reuse, and/or infiltrate stormwater. In addition, proposed General Plan Action SAF-3.2.B requires new development to employ Low Impact Development approaches that conserve natural areas and reduce impervious areas. The EIR concluded that groundwater recharge impacts would be less than significant. Also, as noted above, and as set forth in the Eastern San Joaquin Groundwater Basin Groundwater Management Plan, recharge ponds and farm fields are being used as recharge areas (NSJGBA 2004). Given this and the acreage of the project site compared to the subbasin, the project is not expected to interfere substantially with groundwater recharge in the subbasin such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

As noted, groundwater depths at the project site range from 70 to 80 feet. Because of this, project construction is unlikely to intercept any groundwater, thereby potentially contaminating it. The project does not require drilling of new wells on the project site; water to project development would be provided by the City of Stockton's water system. Project activities would not directly affect groundwater. Overall, project impacts on groundwater are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HYDRO-3: Drainage Patterns and Runoff

Proposed development of the project site would alter existing storm drainage patterns, due to grading and the installation of buildings and pavement. In addition, proposed development would result in additional generation of runoff due to the introduction of impervious surfaces on currently undeveloped properties.

The project proposes a detention basin on the Sanchez property and two detention basins on the Hoggan property that would collect storm drainage from onsite development. The collected storm drainage from the Hoggan site would be discharged to existing elements of the City storm drainage system on the adjacent Norcal Logistics Center site. Storm drainage from the Sanchez site would be collected and subsequently be pumped into Weber Slough when capacity is available. Pumping equipment would be controlled by flow monitoring devices in the Slough. These existing controls would ensure that the capacity of these streams would not be exceeded by the project and thereby cause flooding.

The Norcal Logistics Center project has a Storm Drain Master Plan that describes the facilities that would be installed to accommodate storm drainage collected on the site. The Storm Drain Master Plan places the northern portion of the Norcal Logistics Center, along with the Hoggan property, within an area designated Watershed N3. Drainage collected in Watershed N3 would be sent to a detention basin adjacent to North Littlejohns Creek, into which the collected drainage would eventually be discharged (see

Chapter 17.0, Utilities). It is expected that runoff from the Hoggan property would be collected and conveyed to the existing basin on the Norcal Logistics Center site, especially since the Storm Drain Master Plan shows a future main extending from the Hoggan property. According to the Norcal Logistics Center EIR, the detention basin has been sized to collect drainage from all of Watershed N3, including the Hoggan property (ESA 2014).

The Sanchez property was not included in the Storm Drain Master Plan for the Norcal Logistics Center. However, the project proposes a detention basin for the property that would discharge collected runoff to Weber Slough. The proposed drainage facilities serving the Sanchez property would be required to comply with the City's NPDES MS4 permit and its implementation plans such as the Storm Water Management Program and the Storm Water Quality Control Criteria Plan.

Runoff from future development on the project site would likely contain pollutants such as motor vehicle fluid and metal deposits, among others. As discussed under Impact HYDRO-1, project development would be required to comply with water quality plans, permits, and regulations that would minimize water quality impacts. Project impacts on drainage and runoff would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HYDRO-4: Release of Pollutants in Flood, Tsunami, and Seiche Zones

The project site is within the 100-year floodplain designated by FEMA. Future development on the project site could introduce substances that could pollute flood waters that may flow through the site. As described in Chapter 11.0, Hazards, prior to operation of the proposed project, the project applicant will be required to file a Hazardous Materials Business Plan with the County Environmental Health Department to describe the types and amounts of hazardous materials stored on the project site, along with procedures to be implemented in the event of release or threatened release. Significant risks to the public or workers are not expected, should identified hazardous materials be used, transported, and disposed of properly in accordance with the handling instructions on their labels and with state and federal regulations.

As noted, the City's 200-year floodplain mapping indicates that the project site would not be subject to 200-year flooding greater than 3 feet in depth, which means the project would not be subject to SB 5-related requirements. The project site would not be subject to potential inundation from failure of dams and dikes associated with foothill water storage reservoirs, as well as from levees confining the flows of project area streams. The project site is in a topographically flat area distant from large bodies of water. Because of this, the project would not be subject to tsunami or seiche hazards. Overall, project impacts related to flood, seiche, and tsunami hazards are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

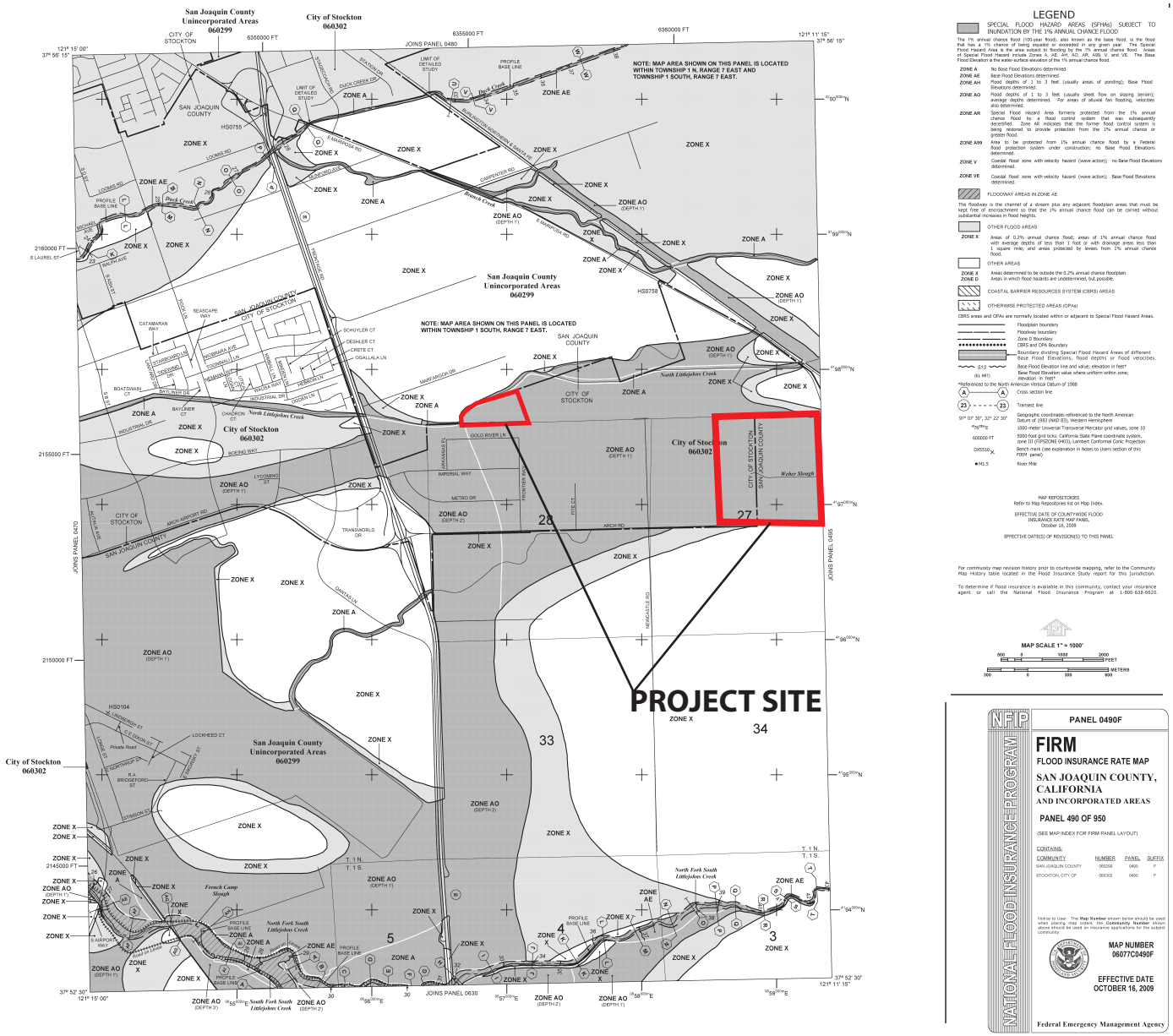
Impact HYDRO-5: Consistency with Water Quality and Groundwater Management Plans

The project would be required to comply with water quality provisions in the City's Storm Water Management Program and Storm Water Quality Control Criteria Plan, including post-construction BMPs. These provisions are designed to ensure the City complies with the conditions of its NPDES MS4 permit. In turn, compliance with the permit conditions would ensure consistency with the water quality objectives and standards of the Basin Plan.

The groundwater sustainability plan for the Eastern San Joaquin Subbasin was adopted and posted to the Sustainable Groundwater Management Act portal during January of this year. The project, as described above, is not expected to place significant demands on groundwater supplies, and a previous plan related to groundwater management is already being implemented. It is expected that future development would be required to comply with any provisions in an adopted groundwater sustainability plan related to development impacts on sustainable groundwater management. Project impacts related to water quality and groundwater management plans would be less than significant.

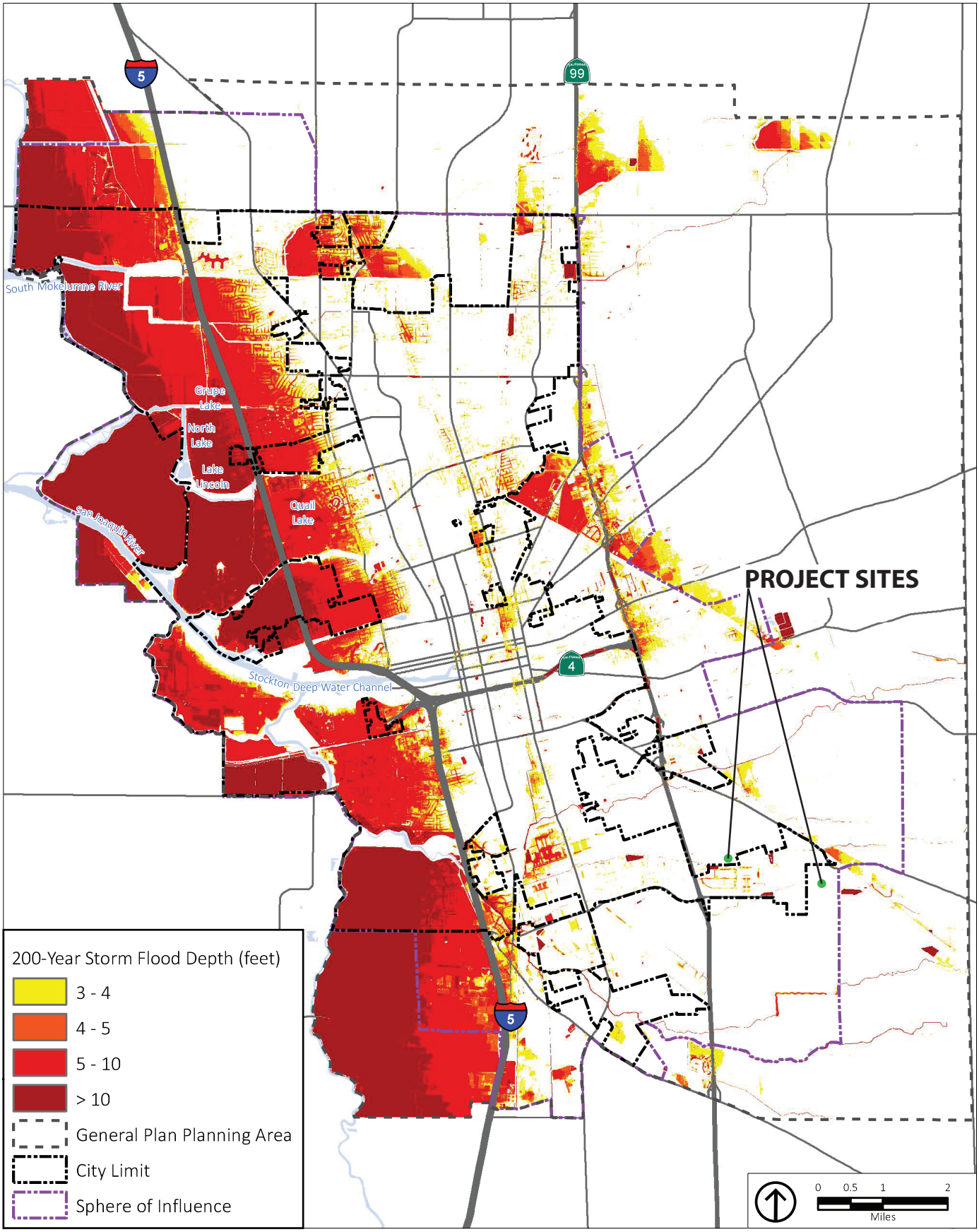
Level of Significance: Less than significant

Mitigation Measures: None required



BaseCamp Environmental

Figure 12-1
100 YEAR FLOOD PLAIN



Source: PlaceWorks; California Department of Water Resources, 2016.

Figure 12-2
200 YEAR FLOOD PLAIN MAP

13.0 LAND USE, POPULATION, AND HOUSING

ENVIRONMENTAL SETTING

Existing Land Uses

The project site is in unincorporated San Joaquin County, adjacent to the Norcal Logistics Center, which is within the Stockton City limits. Both the project site and the Norcal Logistics Center are in an area of southeastern Stockton and adjacent County lands approximately bounded by SR 99 to the west, Mariposa Road to the north, Jack Tone Road to the east, and the North Fork of South Littlejohns Creek to the south. Land uses in this area are a mix of light industrial, logistical, and institutional development interspersed with land in agricultural and rural residential use. Most land in this area is under the jurisdiction of the City or the County, but the O.H. Close Youth Correctional Facility and the California Health Care Facility are under the jurisdiction of the CDCR, a State agency. Across SR 99, approximately two miles southwest of the Hoggan property, is the Stockton Metropolitan Airport, which is owned and operated by San Joaquin County.

The Sanchez property is currently in use for agricultural production. Land uses surrounding the Sanchez property consist of the CDCR facilities to the south and the BNSF Intermodal Facility to the east. North and west of the property is land that is part of the Norcal Logistics Center, which is designated for light industrial uses by the Stockton General Plan and by City zoning. Development has occurred on the Norcal Logistics Center site west of the Sanchez property.

The Hoggan property is undeveloped and not presently in use. It is adjacent to and north of light industrial development located along Frontier Way and Gold River Lane. North and west of the property, across North Littlejohns Creek, is land occupied by rural residences along Marfargoa Road, along with vacant land. Land east of the Hoggan property is undeveloped land that is part of the Norcal Logistics Center site.

Population

As of January 1, 2019, the population of Stockton was estimated at 316,410, an increase of 8.5% from its 2010 population as recorded by the U.S. Census Bureau (California Department of Finance 2019). Table 13-1 below shows population and growth trends in Stockton, San Joaquin County, and the State of California from 2010 to 2019.

TABLE 13-1
POPULATION OF STOCKTON, SAN JOAQUIN COUNTY, AND CALIFORNIA

Jurisdiction	Population April 1, 2010	Population January 1, 2019	Population Growth 2010-2019
Stockton	291,707	316,410	8.5%
San Joaquin County	685,306	770,385	12.4%
State of California	37,253,956	39,927,315	7.2%

Source: California Department of Finance 2019.

Both Stockton and San Joaquin County experienced robust population growth between 2000 and 2010, with a countywide growth rate of 2.0% per year and a citywide growth rate of 1.8% per year. This was substantially higher than the statewide average of 1.0% during the same period. This population growth was primarily due to significant in-migration during the early part of the decade. Population growth slowed later in the decade due to economic conditions, leading to a net outflow of population. While in-migration occurred again, the average annual growth rate growth post-2010 was notably lower than in the prior decade: 1.1% per year in San Joaquin County and 0.9% per year in the City of Stockton. Both percentages were slightly higher than the statewide per-year average of 0.7% (City of Stockton 2019).

SJCOG forecasts that the population of Stockton will grow to 463,450 by 2040 (City of Stockton 2018b). San Joaquin County is also projected to see substantial growth and urbanization. The recently adopted San Joaquin County General Plan update forecasts that total population in the County, both incorporated and unincorporated areas, would be about 945,300 by 2035. This equates to an average annual population growth rate of 1.5%, which is approximately 25% more than the State's projected annual average growth rate of 1.2% between 2012 and 2035 (San Joaquin County 2016a).

Housing and Employment

As of January 1, 2019, Stockton had an estimated 100,877 housing units. Single-family detached units (typical houses) accounted for approximately 64.4% of total housing units in Stockton, with multifamily units of two or more per building accounting for approximately 26.9%. The remaining units were single-family attached units and mobile homes (California Department of Finance 2019).

Employment data from the California Employment Development Department indicate that in the Stockton-Lodi Metropolitan Statistical Area, which covers San Joaquin County, the average annual unemployment rate was 7.0% in 2017, the most recent year such data were available. This marked a decrease from 8.1% in 2016 and from a peak of 16.5% in 2010 (EDD 2018a). By comparison, the unemployment rate in California in 2017 was 4.8% (EDD 2018b).

Environmental Justice

State law defines "environmental justice" as "the fair treatment of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." Low-income residents, communities of color, tribal nations, and immigrant communities have historically experienced disproportionate environmental burdens and related health problems. This inequity has resulted from many factors, including inappropriate zoning and incomplete land use planning, which has led to development patterns that concentrate pollution emissions and environmental hazards that have not had the political power to protect themselves.

The California Office of Environmental Health Hazard Assessment has developed the California Communities Environmental Health Screening Tool (CalEnviroScreen) to identify "environmental justice" or "disadvantaged" communities. CalEnviroScreen measures pollution and population characteristics using 20 indicators such as air and drinking water quality, waste sites, toxic emissions, asthma rates, and poverty. It applies a formula to each U.S. Census tract in California to generate a score that rates the level of cumulative impacts on each area. A census tract with a higher score is one that experiences higher pollution burdens and vulnerability than one with a lower score. One such area is located north of the Hoggan Annexation and is shown on Figure 13-1 of this EIR.

REGULATORY FRAMEWORK

Stockton General Plan 2040

The City of Stockton General Plan 2040, formally named the Envision Stockton 2040 General Plan, was adopted in 2018. It provides a guide to development within the City limits and on lands within its Planning Area to the year 2040, including goals, policies, and implementation programs designed to guide future development and provide for orderly expansion of the City. The Stockton General Plan 2040 represents a substantial change in the policy framework for future development in Stockton compared to the prior General Plan. The fundamental shift is from emphasizing growth in "outfill" areas at the periphery of Stockton to focusing new construction and redevelopment in existing "infill" neighborhoods – neighborhoods with vacant land. This change is reflected in the General Plan land use map, the map depicting planned land uses, the transportation network required to serve future development, and the goals, policies, and actions described in the Stockton General Plan 2040 (City of Stockton 2018a).

Both the Sanchez and Hoggan properties are outside the City limits but are within the Planning Area and Sphere of Influence (SOI) of the Stockton General Plan 2040. The Stockton General Plan 2040 designates the properties as Industrial (Figure 13-2). Adjoining incorporated lands that are part of the Norcal Logistics Center site are also designated Industrial. The Industrial designation applies to a wide variety of industrial uses, including uses with nuisance or hazardous characteristics, warehousing, construction contractors, light manufacturing, offices, retail sales, service businesses,

public and quasi-public uses, and other similar and compatible uses. The maximum floor-area ratio – the ratio between building floor space and land within the building site – allowed under the Industrial designation is 0.6.

The following Stockton General Plan 2040 policies and implementing actions are relevant to this project (City of Stockton 2018a):

- Action LU-6.2.B: Do not approve future annexations or City utility connections unless they are consistent with the overall goals and policies of the General Plan and do not adversely impact the City's fiscal viability, environmental resources, infrastructure and services, and quality of life. [See also Chapter 5.0, Agricultural Resources.]

- Action LU-6.5-A: Require preparation of a fiscal impact analysis for large development projects and proposed annexations to ensure a full accounting of infrastructure and public service costs and to confirm whether revenue enhancement mechanisms are necessary to ensure net fiscal balance or better, and require appropriate fiscal mitigations, when necessary, to ensure the City's ongoing fiscal health and continued viability of the City's General Fund.

- Action TR-1.3.A: Protect the Airport and related aviation facilities from encroachment by ensuring that all future development within the Airport Influence Area (AIA) is consistent with the policies adopted by the San Joaquin County Airport Land Use Commission, except in cases where the City Council concludes that project approval would provide for the orderly development of the Airport and the areas surrounding it while protecting the public health, safety, and welfare by minimizing the public's exposure to excessive noise and safety hazards. [See also Chapter 11.0, Hazards.]

- Action TR-1.3.C: Within the AIA, require that new development or an expansion of an existing use that requires a building permit file an avigation easement with the City.

San Joaquin County General Plan

San Joaquin County adopted an update to its General Plan in 2016. Like the Stockton General Plan 2040, the County General Plan provides a guide to development, in this case for the unincorporated lands of the County. The County General Plan designates the project site as Agricultural-Urban Reserve. As described in Chapter 5.0, Agricultural Resources, the Agricultural-Urban Reserve designation typically applies to lands within a city's Sphere of Influence; the cities have more site-specific plans for planned urbanization in these areas, such as the City's Industrial designation applied to the project site. The Agricultural-Urban Reserve designation also applies to County lands north of the Norcal Logistics Center site and south of Arch Road. County lands east of Austin Road and south of Mariposa Road are generally designated General Agriculture. County lands north of the Hoggan property are designated Low Density Residential. The CDCR lands are designated Public Facility.

The County General Plan supports focused growth within incorporated cities and calls for annexation to the City prior to development of lands outside city limits. County General Plan Policy LU-1.10 states: "The County shall coordinate with San Joaquin LAFCo and cities within the County to ensure future annexation proposals and requests to expand Spheres of Influence reflect the growth and development patterns envisioned in this General Plan. The County shall provide input on annexation proposals and requests to expand Spheres of Influence in an effort to play a more active role in future expansion of cities into the unincorporated County."

City of Stockton Development Code

The City of Stockton Development Code (Stockton Municipal Code Title 16) is designed to implement the Stockton General Plan 2040. It establishes zoning districts that specify allowable land uses, either by right or with a discretionary permit. It also sets forth development regulations in each district, including height of structures, yards, and infrastructure standards, among others. The Development Code applies to land within the Stockton city limits, so the City does not presently zone the project site. As part of the project, in anticipation of annexation to the City, the entire project site is proposed to be pre-zoned IL – Industrial, Limited. As described in Chapter 3.0, Project Description, the IL zone generally allows for indoor light manufacturing uses.

San Joaquin County Development Code

The San Joaquin County Development Code (San Joaquin County Code Title 9) serves the same function as the City's Development Code but is applicable to lands in unincorporated San Joaquin County, such as the project site currently. It establishes zoning districts with allowable land uses and development regulations for each district. The project site is zoned by the County AG-40 (Agriculture-General, 40-acre minimum parcel size) (Figure 13-3). The General Agriculture designation generally applies to areas outside those planned for urban development, where soils can produce a wide variety of crops and/or support grazing. Typical building types include low-intensity structures associated with farming and agricultural processing and sales.

San Joaquin Local Agency Formation Commission (LAFCo)

The San Joaquin LAFCo is responsible for and approval reviews annexations and other boundary changes for cities and special districts within San Joaquin County; as such, it would review the proposed annexation of the project site. As an agency with approval authority over the proposed annexation, LAFCo is a responsible agency under CEQA and would use this EIR in its decision-making process.

LAFCo's review encompasses the consistency of the project with State statutes and policies, particularly the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, as well as its own adopted policies. In determining the appropriateness of a proposed annexation, key considerations of LAFCo include if the project would constitute a logical expansion of a city boundary and if a proposed annexation area would

be provided with public utilities and services in an efficient manner. LAFCo's policies with respect to proposed annexations are specified in its Change of Organization Policies and Procedures, adopted in 2007 and subsequently amended (San Joaquin LAFCo 2012).

Stockton Sphere of Influence Plan/Municipal Service Review

One of the primary responsibilities of a LAFCo is to determine the Sphere of Influence of local governmental agencies. A Sphere of Influence designates the probable physical boundary and service area of a local agency. The Cortese-Knox-Hertzberg Act requires a Municipal Service Review to be prepared prior to or concurrent with an update of a Sphere of Influence. The Municipal Service Review evaluates existing and future service conditions and reviews the advantages and disadvantages of various government service structure options. A Municipal Service Review provides information upon which the LAFCo can base its action on a Sphere of Influence determination, as well as future actions on annexation requests (San Joaquin LAFCo 2012).

San Joaquin LAFCo policy states that an annexation shall be approved only if the Municipal Service Review and the Sphere of Influence Plan demonstrates that adequate services can be provided with the timeframe needed by the inhabitants of the annexed area (San Joaquin LAFCo 2012). The project site is within the City of Stockton's existing Sphere of Influence. The City submitted an Interim Sphere of Influence Plan/Municipal Service Review to LAFCo in February 2019; a Final Municipal Service Review has not yet been adopted. In accordance with the Cortese-Knox-Hertzberg Act, written determinations were provided for the following issue areas (City of Stockton 2019):

- Growth and population projections for the affected area;
- Disadvantaged Unincorporated Communities;
- Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies;
- Financial ability of agencies to provide services;
- Status of, and opportunities for, shared facilities; and
- Accountability for community service needs, including governmental structure and operational efficiencies.

LAFCo's Policies and Procedures call for Municipal Service Reviews and Sphere of Influence plans to present information on future projections and plans tied to 5- to 10-year and 30-year horizons (San Joaquin LAFCo 2012). The City has divided the buildout period into two timeframes: 0 to 10 years (2016 to 2025), referred to as the 10-year horizon, and 11 to 25 years (2026 to 2040), referred to as the 25-year horizon. The Sanchez property has been placed within the 10-year horizon for future development, but the Hoggan property is presently not within the horizon. The City's proposed Final Municipal Service Review, however, proposes to include the Hoggan property within the 10-year planning horizon (City of Stockton 2019).

Adjacent Unincorporated Communities

As a part of annexation proceedings, SB 244 (2011) requires that LAFCo to make certain determinations when the annexation is adjacent to unincorporated communities that include 12 or more registered voters and have an annual median income that is less than 80% of the statewide annual median household income. SB 244 prohibits LAFCo from approving such an annexation unless 1) an application to annex the adjacent community has been filed in the past five years, or 2) the LAFCo finds, based upon written evidence, that a majority of the residents within the adjacent community are opposed to annexation.

One such area (Figure 13-1) is the unincorporated Mariposa Road Community, which is bounded more or less by Mariposa Road, SR 99, and North Littlejohns Creek (City of Stockton 2019). The proposed Hoggan annexation is adjacent to and south of this Community, and therefore annexation of the Hoggan property is subject to the requirements of SB 244. No known application has been submitted for annexation of the Mariposa Road Community within the past five years, but it is suspected that area residents may oppose annexation. The applicant for the Hoggan annexation has retained Gravis Marketing, a national professional polling company, to conduct a survey of registered voters in the community to determine their support or opposition to annexation. This survey will be completed during the public review period for this EIR, and a written report on the survey will be submitted to the City of Stockton. If the Mariposa Community voters oppose annexation, no action will be required under SB 244. If the voters do not oppose the Hoggan annexation, an application for annexation of the community may be required to satisfy SB 244, and the proposed annexation of the Hoggan parcel may be delayed. Action on the annexation application is a discretionary action that is not addressed in this EIR and may therefore require CEQA review.

Stockton Metropolitan Airport Land Use Compatibility Plan (ALUCP)

The ALUCP for Stockton Metropolitan Airport establishes compatibility of land uses within safety zones of the airport. Chapter 11.0, Hazards, discusses the ALUCP regarding land uses, including compatible development in designated safety zones, which are shown on Figure 11-1. Both the project sites are within the Airport Influence Area (AIA) and Traffic Pattern zones7a and 7b. New development under the Stockton General Plan 2040 would require notification of the Airport Land Use Commission and be subject to Stockton Municipal Code Chapter 16.28, which requires that uses be consistent with the ALUCP.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

- Physically divide an established community,

- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect,

- 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), or

- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Impact LUP-1: Division of Communities

The area surrounding the project site is predominantly a combination of vacant parcels, agricultural uses, and light industrial development. The pattern of development, or lack thereof, in the area does not constitute a "community," as it is commonly understood, that could be divided by the project. Rather, the proposed project would add to the buildout of a planned industrial district. The only significant residential development that could be considered a community is a low-density rural residential development north of the Hoggan property. This development would not be physically affected by the project. The project would not divide any established community and therefore would have no impact on this issue.

Level of Significance: No impact

Mitigation Measures: None required

Impact LUP-2: Conflict with Applicable Plans, Policies, and Regulations

Stockton General Plan

The project site abuts the City of Stockton and is proposed to be annexed to the City. Once the site is annexed, it would be subject to the City's land use plans and ordinances. County land use designations and zoning would become inapplicable upon annexation of the project site to the City.

The project site would be pre-zoned by the City, and the pre-zoning would take effect upon project site annexation. The proposed pre-zoning is consistent with the existing Stockton General Plan designation of Industrial for the project site.

It is not expected that the proposed annexation and pre-zoning would significantly conflict with Stockton General Plan 2040 policies and ordinances designed to protect the environment. This EIR analyzes the potential environmental effects of the project, including potential conflicts with General Plan policies and City ordinances, within each technical chapter. For issues where there could be potential conflict with policies or ordinances, the EIR identifies mitigation measures to avoid or minimize any potentially significant environmental effects that are identified with the proposed development.

Other than conversion of agricultural lands, an impact already identified in the Stockton General Plan 2040 EIR, no significant and unavoidable environmental effects are associated with the project.

General Plan Action LU-6.5-A requires large development projects to prepare a fiscal impact analysis to ensure a full accounting of infrastructure and public service costs and to assess adequacy of City resources to serve the project. As part of the annexation application, a City Service Plan shall be prepared and submitted to LAFCo in compliance with LAFCo procedures and the General Plan action. The City Service Plan shall describe existing conditions related to City public services and shall determine revenues and costs associated with serving proposed development on the project site. A preliminary draft of this plan indicates that the City would have adequate resources to provide services to the project site should annexation be approved.

San Joaquin LAFCo

The Legislature and locally the San Joaquin LAFCo adopted policies with which proposed annexations must be consistent. One of these policies states that development of existing vacant or non-prime agricultural lands within a city or its Sphere of Influence should be encouraged before annexation of existing open space lands outside of a city's jurisdiction or its Sphere of Influence. However, there are relatively few areas currently within the Stockton city limits that could accommodate the proposed land uses for the project site. Also, the proposed development on the project site would be consistent with other land uses in the surrounding area, and the County General Plan indicates that future development is anticipated on the property.

As noted in Chapter 5.0, Agricultural Resources, the Sanchez property is classified as Prime Farmland and Farmland of Statewide Importance. The project would need to be in compliance with LAFCo policies that discourage premature agricultural land conversions. This property would be subject to the City's Agricultural Lands Mitigation Program and the SCMSCP, which would reduce the impacts of converting the land to urban uses. In addition, as noted, the project site is within the City's Sphere of Influence, and the Sanchez property is within the 10-year planning horizon for the City of Stockton. The Hoggan property does not have agricultural land considered Farmland by CEQA; as such, conversion would not have a significant impact. The Hoggan property annexation would be a logical extension of the light industrial development of the area, as there is existing development to the south, industrial development is proposed to the east, and the property is separated from lands to the north and west by North Littlejohns Creek.

The project would be consistent with the LAFCo policy requiring a Municipal Service Review and Sphere of Influence Plan to demonstrate that adequate services can be provided with the timeframe needed by the inhabitants of the annexed area. The Interim Municipal Service Review prepared by the City indicates that adequate public services can be provided to both properties within the timeframes required. As discussed in Chapter 17.0, Utilities, the City can accommodate wastewater, water, and storm drainage demands of the project, and the project would be required to design infrastructure to be consistent with City plans and specifications.

As noted, the Hoggan property is adjacent to the Mariposa Road DUC, and thus is subject to the provisions of SB 244. However, a survey of registered voters indicated a majority of the registered voters within the DUC are opposed to being annexed to the City. Therefore, assuming LAFCo approval of the survey, annexation of the Mariposa Road DUC into the City would not be required.

Other Plans, Policies and Regulations

As described in Chapter 11.0, Hazards, the Hoggan property is within Compatibility Zone 7a of the ALUCP for the Stockton Metropolitan Airport, and the Sanchez property is with Compatibility Zone 7b (Coffman Associates 2016). The Airport Land Use Commission would review the project; however, development proposed on both properties does not appear to conflict with the land uses development standards for these zones. It is expected that the project would comply with General Plan Action TR-1.3.C, which requires new development within the AIA that requires a building permit to file an avigation easement with the City. Overall, project impacts in this area of concern would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact LUP-3: Inducement of Population Growth

The project would involve new warehouse and related industrial development. This development would provide employment opportunities, which may influence people currently residing outside Stockton to relocate closer to or within the city and surrounding area to take advantage of these opportunities, potential indirect influence or the local population and placing demands on housing in the area.

An Initial Study, prepared in October 2012 and attached to the NOP for the Norcal Logistics Center EIR, stated that most jobs generated by development of the Norcal Logistics Center are expected to be filled mainly by existing residents in the Stockton area; therefore, impacts on population would be less than significant (ESA 2014). The proposed project can be expected to have similar impacts. As noted above, while the unemployment rate in Stockton-Lodi MSA has decreased substantially in recent times, as of December 2019 it is still 5.7%, well above the statewide percentage of 3.7%. The unemployed labor force in the MSA was estimated at 18,500 at the same time (CA EDD 2020), indicating that substantial local labor would be available for jobs generated by the project. Both unemployment and job availability associated with the project would fluctuate over time, making any clear determination of the significance of growth speculative.

As noted, the proposed project would be consistent with the Stockton General Plan, which provides guidance for development based on predicted growth including anticipated growth in both jobs and the resident population. The project would be responsible for a portion of industrial development and job growth resulting from General

Plan implementation. Project impacts on population growth, therefore, are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact LUP-4: Displacement of Housing and People

Neither the Sanchez nor Hoggan sites have any housing units or people residing therein. No displacement of housing or people would occur as a result of development of the project site. The project would have no impact on displacement of housing or people.

Level of Significance: No impact

Mitigation Measures: None required

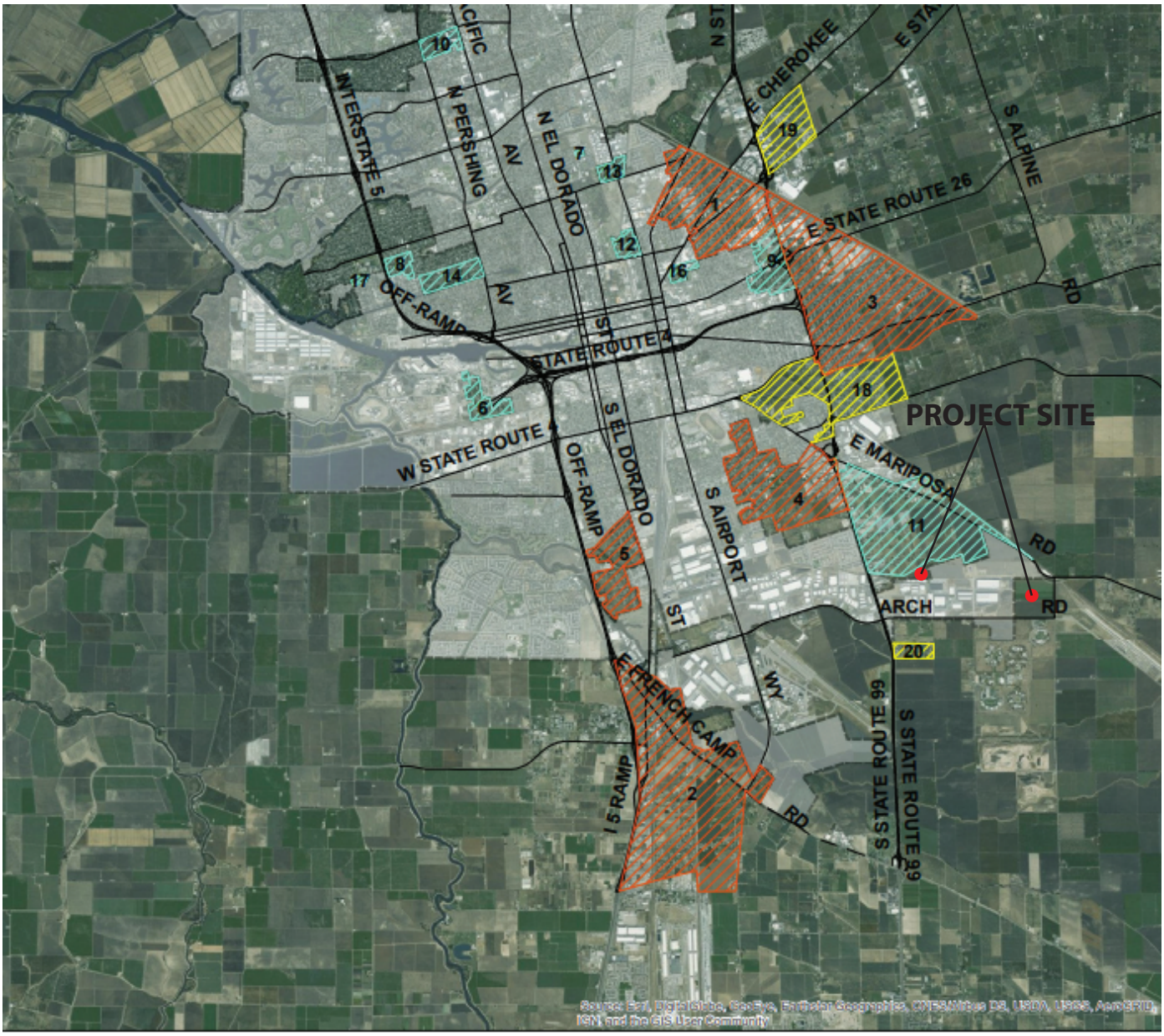


Figure B-1:
Disadvantaged Unincorporated Communities

Map date: October 21, 2016
Source: City of Stockton; San Joaquin County; United States Census, 2000.

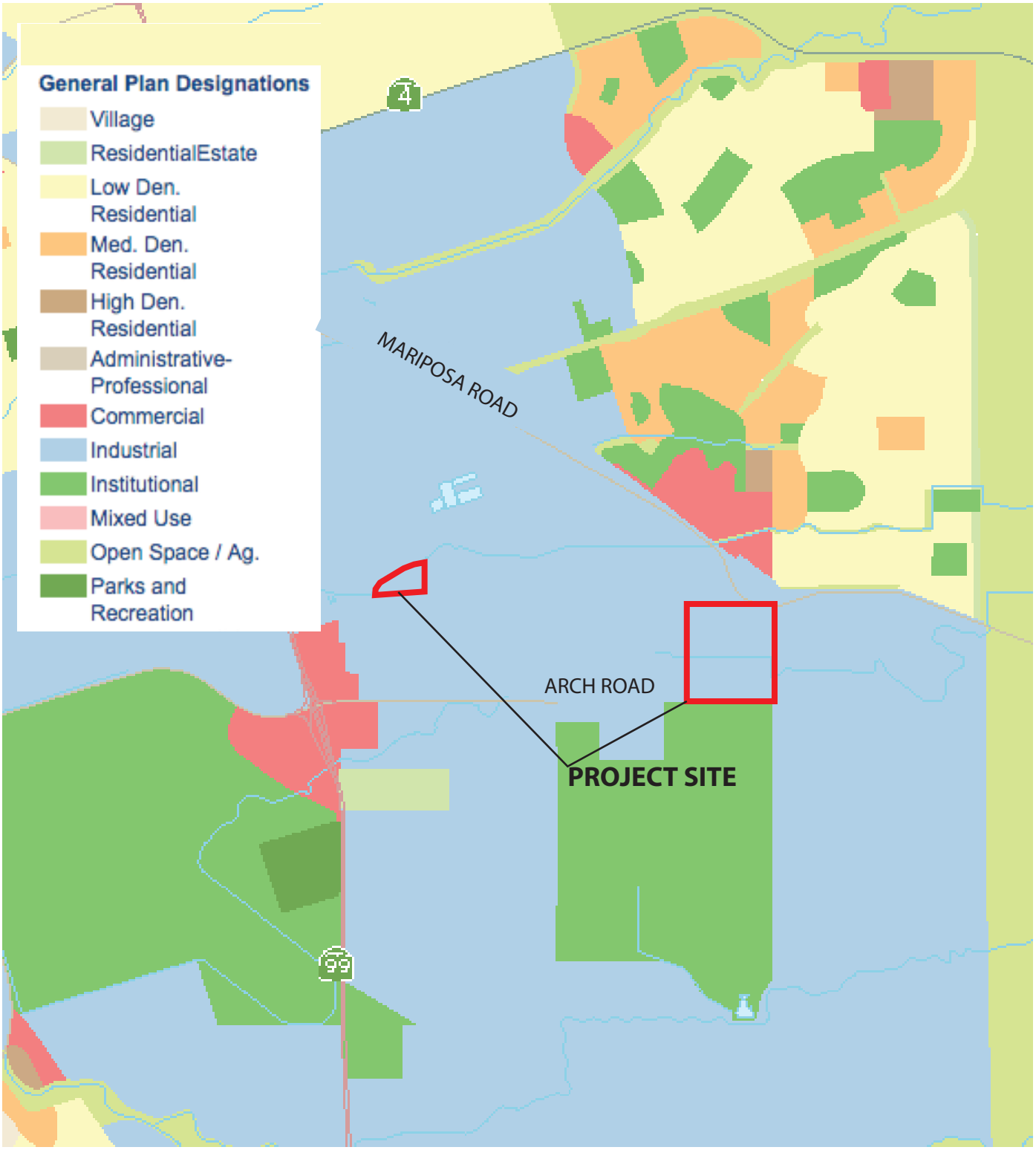
DUCs (CDP)
1. August
2. French Camp
3. Garden Acres
4. Kennedy
5. Taft Mosswood

DUCs (Island)
6. Boggs Tract
7. Sperry Tract
8. East Interstate 5 Community
9. Fremont St. Community
10. Holt Ave/Pershing Ave Community
11. Mariposa Road Community
12. North Oaks Community
13. West Lane Community
14. Pershing Ave Community
15. Waller-Childress Community
16. Rose Terrace
17. West Interstate 5 Community

DUCs (Fringe)
18. Charter Way Community
19. State Route 88 Community
20. Sunny Road Community
City Limits

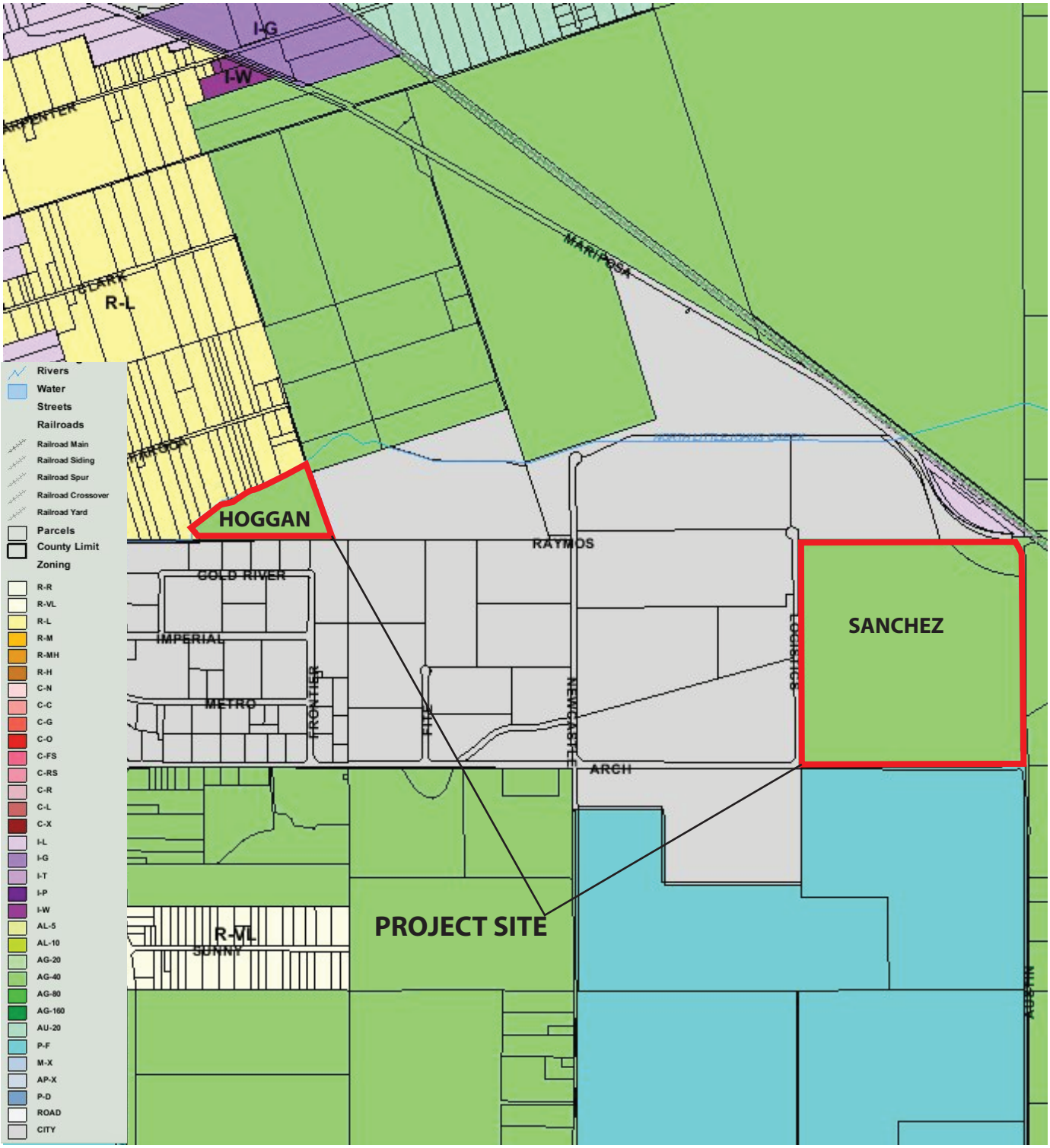
N

Figure 13-1
DISADVANTAGED COMMUNITIES



SOURCE: City of Stockton

Figure 13-2
STOCKTON GENERAL PLAN DESIGNATIONS



SOURCE: San Joaquin County Viewer

Figure 13-3
SAN JOAQUIN COUNTY ZONING DESIGNATIONS

14.0 NOISE

This chapter contains an analysis of noise impacts of the project. Information for this chapter primarily comes from a noise study conducted for the project by J.C. Brennan and Associates, Inc., which is available in Appendix F of this EIR. The noise study measured existing noise levels during a 24-hour period at two locations on the project site and estimated existing and future traffic noise levels based upon inputs provided by the KD Anderson & Associates traffic impact study for the project (see Chapter 16.0, Transportation, and Appendix G of this EIR).

ENVIRONMENTAL SETTING

Noise Background

Noise is typically defined as airborne sound that is loud, unpleasant, unexpected, or undesired. Perceptions of noise are highly subjective from person to person. The effects of noise on people can be placed in three categories: 1) subjective effects of annoyance, nuisance, and dissatisfaction; 2) interference with activities such as speech, sleep, and learning; and 3) physiological effects such as hearing loss or sudden startling.

Noise is measured using the decibel (dB) scale. The dB scale uses the hearing threshold as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Changes in dB levels correspond closely to human perception of relative loudness. As the decibel scale is logarithmic, two sound levels 10 dB apart differ in acoustic energy by a factor of 10.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels, expressed as dBA. There is a strong correlation between dBA and the way the human ear perceives sound; for this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60-dBA sound. All noise levels reported in this chapter are in terms of A-weighted levels but are expressed as dB, unless otherwise noted.

Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state, A-weighted sound level containing

the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} shows very good correlation with community response to noise and is the foundation for other composite noise descriptors such as the Day-Night Average Level (L_{dn}) and the Community Noise Equivalent Level (CNEL). The L_{dn} is based upon the average hourly L_{eq} over a 24-hour day, with a +10-dB weighting applied to noise occurring between 10:00 p.m. and 7:00 a.m. The nighttime weighting is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. The CNEL is the same as the L_{dn}, with an additional +5-dB weighting applied to noise occurring between 7:00 p.m. and 10:00 p.m.

Existing Noise Conditions

The Norcal Logistics Center EIR states that a major source of noise in the area of the project site is traffic on the local roads, primarily Arch Road, Austin Road, and Newcastle Road. Truck traffic was found to be a significant noise source on these roads (ESA 2014). The Stockton General Plan 2040 EIR identified industrial land uses as potentially significant noise sources. Industrial noise is generated from processing machinery, loading dock activity, and heating, ventilating, and air conditioning (HVAC) systems. Industrial noise can be generated continually or intermittently, depending on the processes and types of machinery involved. In addition to on-site mechanical equipment, warehousing and industrial land uses generate substantial truck traffic that contributes to noise from local roadways (City of Stockton 2018b).

As a means of determining the typical background noise environment in the project vicinity, continuous hourly noise measurements were conducted at two locations for a 24-hour period on March 26-27, 2019. Table 14-1 shows the results of the noise measurements. Figure 14-1 shows the locations where the noise measurements were taken.

TABLE 14-1
EXISTING AMBIENT NOISE CONDITIONS

Site	Location	L_{dn} (dBA)	Average Measured Hourly Noise Levels (dBA)					
			Daytime (7am-10pm)			Nighttime (10pm-7am)		
			L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
A	Sanchez Site (Southeast Corner)	62.7	59.4	53.8	77.3	55.5	49.7	70.5
B	Hoggan Site (Southwest Corner)	60.0	54.5	52.1	67.2	53.4	52.4	63.3

Source: j.c. brennan and associates.

Existing traffic noise levels were determined using the Federal Highway Administration (FHWA RD77-108) Traffic Noise Prediction Model. Traffic volumes were based upon inputs from the project traffic impact study. Truck mix percentages were based upon overall traffic counts and vehicle classification conducted for the area roadways. Table 14-2 provides the results of the analysis of existing traffic noise levels.

TABLE 14-2
EXISTING TRAFFIC NOISE LEVELS

Roadway	Segment	Traffic Noise Level 100 ft. from Centerline	Distance to Noise Contours (feet)		
			60 dB	65 dB	70 dB
Arch Road	East of Qantas Lane	73 dB	700	325	151
	East of SR. 99 Frontage Road	71 dB	584	271	126
	East of Frontier Way	71 dB	509	236	11
	East of Fite Court	70 dB	455	211	98
	East of Newcastle Road	69 dB	385	179	83
	East of Logistics Drive	68 dB	366	170	79
Mariposa Road	NW of Austin Road	69 dB	396	184	85
	NW of Newcastle Road Ext	69 dB	408	189	88
	NW of Carpenter Road	70 dB	437	203	94
	East of Austin Road	69 dB	378	175	81
Austin Road	South of Arch Road	65 dB	216	100	47

Source: j.c. brennan and associates.

Noise-Sensitive Land Uses

According to guidelines issued by the California Office of Noise Control (see below), residential land uses are considered sensitive to elevated noise levels. Other sensitive uses include schools, libraries, churches, hospitals, and the like. Commercial, industrial, and recreational uses are substantially less sensitive to noise (Office of Noise Control 1976).

The nearest noise-sensitive receptors to the project site are rural residences across North Littlejohns Creek from the Hoggan property. No noise-sensitive land uses are near the Sanchez property, as the property is surrounded by industrial and institutional land uses.

Industrial land uses also abut the Hoggan property to the south, and industrial development is proposed to the east.

Groundborne Vibration

Groundborne vibration is not a common environmental problem. It is typically associated with transportation facilities, although it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains, trucks and buses on rough roads, and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment. The effects of groundborne vibration include perceptible movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings (FTA 2006).

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second (in/sec). Standards pertaining to annoyance and damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

REGULATORY FRAMEWORK

California Office of Noise Control

Guidelines for the acceptability of noise have been developed by the EPA and adapted by the California Office of Noise Control as planning tools for use by local government in California. These are reflected in the Office of Noise Control's "Guidelines for the Preparation and Content of Noise Elements of the General Plan" (1976). While cities, counties and other agencies are free to adopt their own standards, most general plans incorporate these standards or a modified version of them. The Office of Noise Control guidelines recognize that a more restrictive standard could be appropriate under special circumstances such as quiet suburban or rural settings. The City of Stockton has incorporated the Office of Noise Control standards in Table 5-1 of the Safety Element in the Stockton General Plan 2040.

An exterior noise environment of 50-60 dBA L_{dn} or CNEL is "normally acceptable" for residential uses, and noise levels of up to 70 dBA L_{dn} or CNEL are "conditionally acceptable." For other sensitive land uses such as schools, libraries, churches, hospitals and the like, an exterior noise environment of up to 70 dBA is considered "normally acceptable." Commercial, industrial and recreational uses are substantially less sensitive to noise.

The above composite noise standards are appropriate tools for assessing the acceptability of prevailing noise conditions. They do not recognize the impact of "intrusive" noise sources or sources which involve intermittent, temporary, or similar noise events which are well above ambient levels.

Stockton Municipal Code

Chapter 16.60 - Noise Standards

Stockton Municipal Code Chapter 16.60 incorporates the City's Noise Control Ordinance. Section 16.60.040 states that new or expanded commercial, industrial, and other land use-related noise sources shall mitigate their noise levels such that they do not adversely impact noise-sensitive land uses (e.g., residences) and do not exceed City noise standards. Table 14-3 shows the City noise standards that would apply to the project.

TABLE 14-3
EXTERIOR HOURLY NOISE LEVEL STANDARDS
FOR STATIONARY NOISE SOURCES

	Outdoor Activity Areas	
Noise Level Descriptor	**Day (7:00 a.m. to 10:00 p.m.)**	**Night (10:00 p.m. to 7:00 a.m.)**
Hourly L_{eq}, dB	55	45
Maximum level (L_{max}), dB	75	65

Note: Each of the noise level standards specified above shall be reduced by five dBA for simple tone, noise consisting primarily of speech or music, or recurring impulsive noises.
Source: Stockton Municipal Code Section 16.60.040.

The Stockton Municipal Code specifies other noise standards applicable to industrial land uses. The maximum sound level (L_{max}) produced by industrial land uses or by other permitted noise-generating activities on any industrial (IL, IG, or PT) or public facilities (PF) zoning district shall not exceed 80 dB, and the L_{eq} from these land uses shall not exceed 70 dB during daytime or nighttime hours as measured at the property line of any other adjoining IL, IG, PT, or PF district.

Section 16.60.020 states that the following activities are exempt from the noise standards in Chapter 16.60: emergency activities, warning devices, outdoor play/school ground activities (between 7:00 a.m. and 10:00 p.m.), railroad activities, State or federal pre-exempted activities, public health and safety activities, and maintenance of residential real property. Construction activities within the daytime hours of 7:00 a.m. and 10:00 p.m. are also considered to be exempt from the noise control provisions of the Municipal Code.

Section 16.60.030 deems the following activities as violations of the Noise Control Ordinance: construction noise between the hours of 10:00 p.m. and 7:00 a.m., loading and unloading operations between the hours of 10:00 p.m. and 7:00 a.m., public nuisance noise, and stationary non-emergency signaling devices, among other activities. Regarding construction noise, Section 16.60.030 also includes restrictions on construction noise. Operating or causing the operation of tools or equipment on private property used in alteration, construction, demolition, drilling, or repair work between the hours of 10:00

p.m. and 7:00 a.m. so that the sound creates a noise disturbance across a residential property line is prohibited, except for emergency work of public service utilities.

Per Section 16.60.050, the Community Development Director or other Review Authority, as applicable, must require the preparation of an acoustical study in instances where it has been determined that a project may expose existing or proposed noise-sensitive land uses to noise levels exceeding the noise standards specified above. This determination must be based on the existing and future 65 dB L_{dn} transportation-related noise contours contained in the noise section of the City's General Plan, the proximity of new noise-sensitive land uses to known noise sources, and/or the knowledge that a potential for adverse noise impacts exists (e.g., as determined in a project-level environmental document prepared in compliance with CEQA). Also, per Section 16.60.060, applicants for projects requiring discretionary approval are required to submit evidence to allow the City to determine whether the proposed project complies or will comply with the City's Noise Control Ordinance.

Section 16.32.100 - Vibration

Stockton Municipal Code Section 16.32.100 includes qualitative benchmarks for reducing vibration effects within Stockton. Land uses that generate vibrations may not generate ground vibration that is perceptible without instruments by the average person at any point along or beyond the property line of the parcel containing the activities. Such uses also may not generate vibrations that cause discomfort or annoyance to reasonable persons of normal sensitivity or that endangers the comfort, repose, health, or peace of residents whose property abuts the use. Vibrations from temporary construction and demolition activities are exempt from the provisions of this section, as are vehicles that leave the subject parcel (e.g., trucks, trains, and aircraft).

Stockton Metropolitan Airport Land Use Compatibility Plan

As described in Chapter 11.0, Hazards, the nearest public airport is Stockton Metropolitan Airport, approximately 1.75 miles southwest of the Hoggan property. One of the purposes of the ALUCP, described in Chapter 11.0, Hazards, is to protect the public from the adverse effects of airport noise. The ALUCP established CNEL noise contours around Stockton Metropolitan Airport (Figure 14-2), based upon aircraft activity forecasted in the Stockton Metropolitan Airport Master Plan (Coffman Associates 2016). The compatibility of land uses with these noise contours is set forth in noise criteria in the ALUCP. As shown on Figure 14-2, the outermost noise contour (60 dB CNEL), as delineated in the Stockton Metropolitan Airport ALUCP, does not extend to the project site; in fact, it does not extend beyond SR 99.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies,
- Generation of excessive groundborne vibration or groundborne noise levels, or
- For a project located within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public or public use airport if no plan has been adopted, expose people residing or working in the project area to excessive noise levels.

One means of determining a potential noise impact is to assess a person's reaction to changes in noise levels due to a project. The information in Table 14-4 below is commonly used to show expected public reaction to changes in environmental noise levels. This table was developed based on test subjects' reactions to changes in the levels of steady-state pure tones or broad-band noise and to changes in levels of a given noise source. It is probably most applicable to noise levels in the range of 50 to 70 dBA, as this is the usual range of voice and interior noise levels.

TABLE 14-4
SUBJECTIVE REACTIONS TO CHANGES IN NOISE LEVELS

Change in Level (dBA)	Subjective Reaction	Factor Change in Acoustical Energy
1	Imperceptible (except for tones)	1.3
3	Just Barely Perceptible	2.0
6	Clearly Noticeable	4.0
10	About Twice (or Half) as Loud	10.0

Source: Egan 1988.

Another means of determining a potential noise impact is Table 5-1 of the Stockton General Plan 2040 Safety Element. Table 5-1 provides specific guidance for assessing increases in ambient noise as follows: If existing noise standards are currently exceeded, a proposed project shall not incrementally increase noise levels by more than 3 dBA.

Caltrans has prescribed a methodology for evaluating groundborne vibration impacts from construction related to potential damage to structures and human annoyance, based on transient sources (e.g., blasting, drop balls) or continuous/frequent intermittent sources (e.g., impact and vibratory pile drivers, vibratory compaction equipment). Table 14-5 presents thresholds for impacts related to groundborne vibration, based on the Caltrans methodology.

TABLE 14-5
GROUNDBORNE VIBRATION THRESHOLDS

	Maximum Peak Particle Velocity (in/sec)	
Guidelines for:	**Transient Sources**	**Continuous/Frequent Intermittent Sources**
Structure and Condition		
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5
Human Response		
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.1
Severe	2.0	0.4

Source: Caltrans 2013.

Impact NOISE-1: Increase in Noise Levels in Excess of Standards – Traffic

The potential traffic noise levels associated with the project were determined using the Traffic Noise Prediction Model. Traffic volumes as estimated in the traffic impact study under Existing Plus Approved Projects (EPAP) conditions without and with the project were modified to determine traffic noise levels under the same conditions. Truck mix percentages were based upon overall traffic counts and vehicle classification conducted for the area roadways.

Noise impact analysis results for the proposed project are shown in Table 14-6. As shown in Table 14-6, the project will result in increases in traffic noise levels varying between 0

dB and 1 dB L_{dn} under the EPAP Plus Project scenario. Potential traffic noise impacts of the Market Driven Project were also calculated by J. C. Brennan as described in a subsequent technical report shown in Appendix F. In both cases, the projected increase in noise would be one decibel or less, which is below the 3-dBa impact threshold set in the City of Stockton Noise Element. Project impacts on traffic noise levels under EPAP conditions would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

TABLE 14-6
TRAFFIC NOISE LEVELS – EPAP CONDITIONS

Roadway	Segment	Noise Levels (Ldn, dB) at 100-feet from the Roadway Centerline		
		EPAP No Project	**EPAP Plus Project***	**Change**
Arch Road	East of Qantas Lane	75	75 (76)*	0 (+1)
	East of SR 99 Frontage Road	76	77	+1 (0)
	East of Frontier Way	73	73	0 (0)
	East of Fite Court	73	73	0 (0)
	East of Newcastle Road	71	72	+1 (0)
	East of Logistics Drive	71	71	0 (0)
Mariposa Road	NW of Austin Road	71	72	+1 (0)
	NW of Newcastle Road Ext	71	71 (72)*	0 (+1)
	NW of Carpenter Road	71	72	+1 (0)
	East of Austin Road	70	70	0 (0)
Austin Road	South of Arch Road	68	68 (69)*	0 (+1)

Additional traffic predicted to occur with the Market Driven Project are shown in parenthesis in the table. *. See Chapter 16.0, Transportation, for more information.
Source: j.c. brennan and associates

Impact NOISE-2: Increase in Noise Levels in Excess of Standards – Other Project Noise

Noise generated by loading dock activities includes truck arrivals and departures from the unloading area, trucks backing into the docks (including backup beepers), air brakes, and other related unloading noise. To assess loading dock activity noise impacts at the nearest potentially affected noise-sensitive land uses, the noise study used reference noise levels of 80 dB L_{max} and 60 dB L_{eq} at a distance of 50 feet, a methodology consistent with the analysis used in the Norcal Logistics Center EIR.

The nearest residence to the Sanchez property is approximately 1,700 feet to the southeast from the corner of the project site. Based upon the reference data, the predicted noise levels at this location would be reduced by distance attenuation to 50 dB L_{max} and 30 dB L_{eq}. These levels would comply with the daytime and nighttime noise level standards contained in the Stockton Municipal Code. The nearest residence to the Hoggan property loading docks is approximately 400 feet to the north. Based upon the reference data, the predicted noise levels would be 62 dB L_{max} and 42 dB L_{eq}. These levels also would comply with the daytime and nighttime noise level standards contained in the Stockton Municipal Code. Therefore, loading docks would have noise effects at these locations that are less than significant.

It is also recognized that 41 proposed trailer parking stalls on the Hoggan property are located approximately 200 feet from the nearest residence to the north. It can be expected that the reference data used above could be applied to the trailer stalls. However, given the anticipated trailer traffic that would use the parking stalls, the noise consultant concluded that noise levels would not be elevated to a level that would disturb the nearest residence. Impacts related to other project noise would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact NOISE-3: Increase in Noise Levels in Excess of Standards – Construction

Noise from project construction activities would add to the noise environment in the project vicinity. Activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet, as indicated in Table 14-7. Noise would also be generated during the construction phase by increased truck traffic on area roadways, associated with transport of heavy materials and equipment to and from construction sites.

Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. The truck traffic noise increase would be of short duration and would likely occur primarily during daytime hours. Nevertheless, given the proximity of residences, particularly near the Hoggan property, construction noise impacts are considered potentially significant. Mitigation provided below would further reduce exposure of sensitive land uses to construction noise to a level that would be less than significant.

TABLE 14-7
CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Maximum Level, dB at 50 feet
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: FHWA 2006.

While mitigation would require construction work to occur within certain times, it is acknowledged that certain construction activities related to the construction of the building on the Hoggan property, mainly concrete pours, need to occur outside the hours established in the mitigation. Such activities also need to conform with Stockton Development Code requirements but subject to controls that prevent the project from creating a noise disturbance across a residential property line. As with all construction activities, activities during the night hours would be temporary and would cease when concrete pouring is completed. Also, given the distance of the proposed building from the residence (400 feet), noise from concrete pouring would be substantially attenuated.

Level of Significance: Potentially significant

Mitigation Measures:

NOISE-1: Construction activities associated with the project shall adhere to the requirements of the City of Stockton Municipal Code with respect to hours of operation. The applicant shall limit construction activities to the hours of 7:00 a.m. to 10:00 p.m., Monday through Saturday. No construction shall occur on Sundays or national holidays without a written permit from the city. All equipment shall be in good working order and shall be fitted with factory-equipped mufflers.

Should the project necessitate construction outside of the specified hours, the applicant shall request the Community Development Director's approval of such activities. The applicant shall accompany the request with evidence that the proposed activity will not create a noise disturbance across a residential property line

Significance After Mitigation: Less than significant

Impact NOISE-4: Groundborne Vibration

The project would not involve potential groundborne vibration sources other than operation of construction equipment. In most cases, vibration induced by typical construction equipment does not result in adverse effects on people or structures. Noise from construction equipment typically overshadows any meaningful groundborne vibration effects on people (Caltrans 2013).

As noted in the noise study, the nearest noise-sensitive land use to the project site is a rural residence near the Hoggan property. Using the methodology prescribed by Caltrans, the ground vibration produced by a large bulldozer at the northern portion of the Hoggan property would produce a peak particle velocity of approximately 0.005 in/sec at the nearest residence. The predicted peak particle velocity is substantially below the "Slightly Perceptible" threshold peak particle velocity of 0.012 in/sec. On this basis, project impacts related to groundborne vibration would be less than significant.

Level of Significance: Less than significant

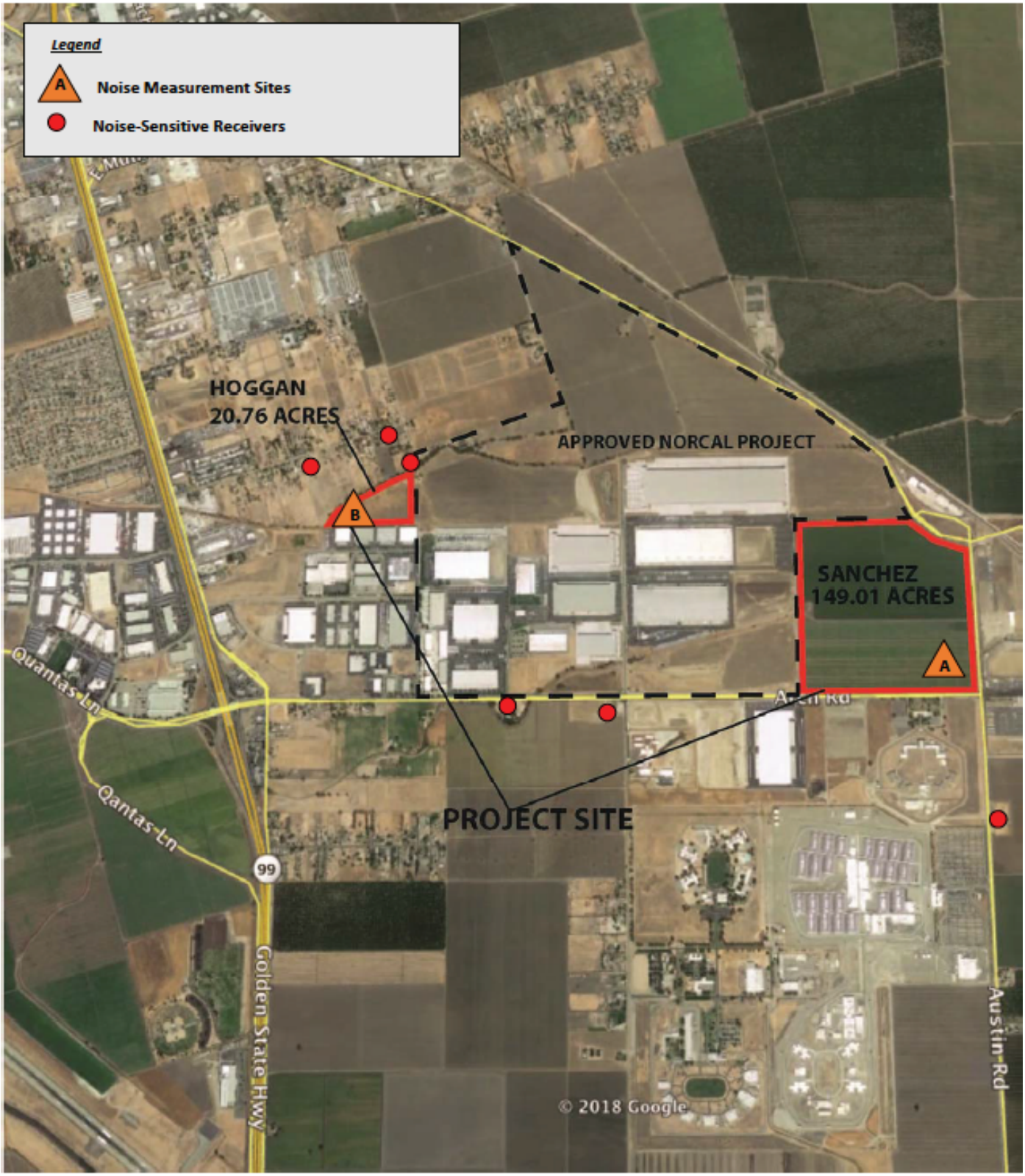
Mitigation Measures: None required

Impact NOISE-5: Airport and Airstrip Noise

As noted, the outermost noise contour (60 dB CNEL) of the Stockton Metropolitan Airport, as delineated in the ALUCP, does not extend to the project site. Because of this, the project would not expose persons working on the project site to excessive airport-related noise. There are no private airstrips in the vicinity, so there would be no noise affecting the project site from airstrips. The project would have no impact related to airport and airstrip noise.

Level of Significance: No impact

Mitigation Measures: None required



SOURCE: J.C. Brennan and Associates

Figure 14-1
NOISE MEASUREMENT SITES

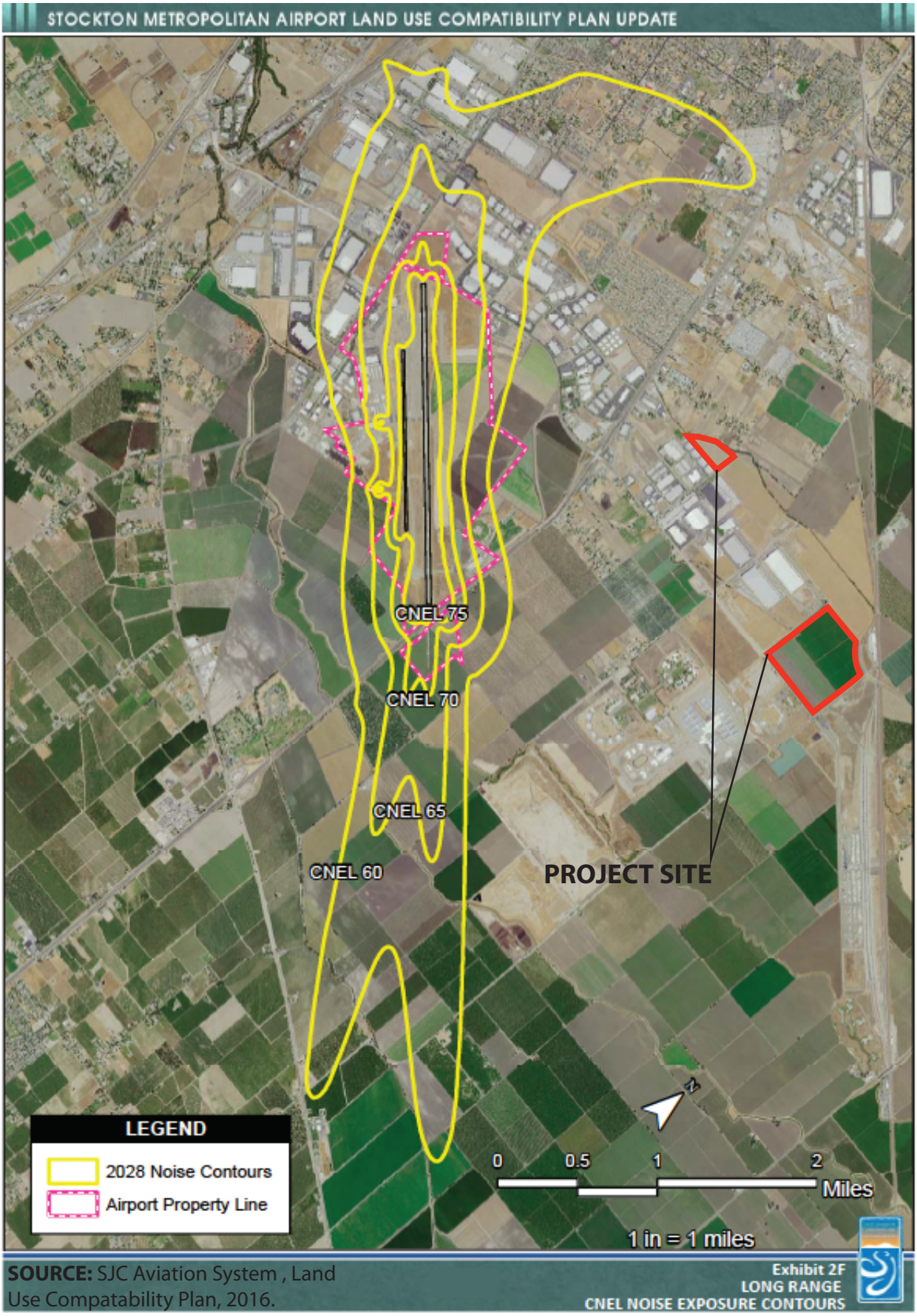


Figure 14-2
STOCKTON METROPOLITAN
AIRPORT NOISE CONTOURS

15.0 PUBLIC SERVICES AND RECREATION

ENVIRONMENTAL SETTING

Fire Protection

The Hoggan property is currently within the Montezuma Fire Protection District. The Montezuma Fire District serves approximately 10 square miles within San Joaquin County, most of which is located adjacent to the southeast portion of Stockton. The Stockton Metropolitan Airport is also within the Montezuma service area. The Montezuma Fire District provides fire protection, suppression, and prevention; hazardous materials-related services; and basic emergency medical service. It has two stations: Station 181 at 2405 South B Street, and Station 182 at the Stockton Metropolitan Airport (City of Stockton 2018b).

The Sanchez property is currently within the Collegeville Rural Fire District. The Collegeville Rural Fire District, based at 13225 East Mariposa Road, serves portions of the rural community of Collegeville, the BNSF Intermodal Facility, the O.H. Close Youth Correctional Facility, and the California Health Care Facility. It provides fire protection, suppression, and prevention; hazardous materials-related services; and basic emergency medical service (City of Stockton 2018b). The Collegeville Rural Fire District has one fire station, which is approximately two miles east of the Sanchez property.

Upon annexation, the Stockton Fire Department would serve both properties. The Fire Department provides fire protection, fire prevention, and paramedic emergency medical services to the city of Stockton. It has 178 firefighters, all certified to at least Emergency Medical Technician level, and 12 stations throughout the Stockton metropolitan area. The Stockton General Plan 2040 states that the City strives to have 1.23 sworn firefighters per 1,000 population. (City of Stockton 2018a). The closest Stockton Fire Department station to the project site is Station 12 at 4010 East Main Street, approximately four miles to the north. Station 12, as are most Fire Department stations, is staffed with a captain, an engineer, and a firefighter. It also has one engine and a grass fire rig (City of Stockton 2019).

In 2014, the latest year for which data are available, the Fire Department responded to 38,275 emergency calls, of which 20,850 were for emergency medical service and 2,331 were for fires, with the remaining calls for other types of emergencies. The average response time to a standard structure fire call is 3-4 minutes, while the average response time for emergency medical service calls is four minutes (City of Stockton 2019). According to the Stockton General Plan 2040, the City strives to achieve a response time of 240 seconds (four minutes) or less travel time for the arrival of the first arriving engine company at a fire suppression incident. For other than high-rise buildings, the response

time standard is eight minutes or less travel time for the deployment of an initial full alarm assignment at a fire suppression incident (City of Stockton 2018a).

All public fire protection agencies in San Joaquin County, including the Stockton Fire Department, operate under a master mutual aid agreement, under which other fire agencies may be called upon to assist should the resources of one agency be inadequate (San Joaquin County 2016b). The nearest fire stations to the project site that are not part of the Stockton Fire Department are the two Montezuma Fire District stations.

Police Protection

Law enforcement services for the project site are currently provided by the San Joaquin County Sheriff's Department, which serves unincorporated San Joaquin County. The Sheriff's Department facility is at 7000 Michael Canlis Boulevard in French Camp. The facility houses all the divisions of the Department, including investigation, patrol, and custody, along with the Coroner's Office.

The Stockton Police Department would provide law enforcement services for the project site upon annexation. The Police Department is headed by a Chief of Police and two Deputy Chiefs. It is further organized into five divisions: Field Operations, Special Operations, Investigations, Administrative Services, and Technical Services, each commanded by a Captain. As of September 2017, the Police Department had 712 staff members, including 485 sworn police officers, 41 police telecommunicators, and 186 civilian personnel. The service ratio of sworn officers to 1,000 population is 1.537 (City of Stockton 2019). The City strives to have 1.5 sworn officers per 1,000 residents (City of Stockton 2018a).

The Police Department's Main Precinct, at 22 East Market Street approximately five miles northwest of the project site, is where field services are located. Central Services, located at 22 East Weber Street, houses investigations and support services. The service area of the Police Department, entirely within City limits, is organized into six Community Policing Districts. The project site is adjacent to the Park Community Policing District, which covers southeastern Stockton. The average response time to in-progress, life-threatening emergencies is between three and five minutes (City of Stockton 2019). The Stockton General Plan states that the City strives for an average law enforcement response time of five minutes or less for priority one calls; that is, calls where a threat to persons may exist (City of Stockton 2018a).

Schools

The project site is currently within the boundaries of the Stockton Unified School District and would remain so upon annexation. The Stockton Unified School District operates 54 schools within the Stockton area – 39 elementary schools, six high schools, and nine specialty schools (City of Stockton 2018b). The District provides education from kindergarten to 12th grade, along with transitional kindergarten, Head Start, adult, and special education programs. As noted in Chapter 11.0, Hazards, the nearest District

school is Nightingale Charter School on 1721 Carpenter Road, approximately 2.5 miles west of the project site.

The Stockton Unified School District provides school services from kindergarten to 12th grade. In general, students from kindergarten to 8th grade attend elementary school, and those in grades 9 to 12 attend high school. As of the 2018-2019 school year, the District enrolled 41,634 students (California Department of Education 2019).

Parks and Recreational Services

San Joaquin County, through its Parks and Recreation Department, owns and operates nine parks in the Stockton area (City of Stockton 2018b). As outlined in the San Joaquin County General Plan, the parks fall into three categories: neighborhood, community, and regional. The nearest County park to the project site is Kennedy Park and Community Center on South D Street, approximately two miles to the northwest. Along with a community center, Kennedy Park has ball fields, a basketball court, a swimming pool, and day-use picnicking. The County also operates a Regional Sports Complex adjacent to Stockton Metropolitan Airport southwest of the project site. This facility has a four-field softball complex and four soccer fields, along with concession stands and a picnic shelter (San Joaquin County 2016b).

The City of Stockton provides park and recreational services within its City limits, managed by its Community Services Department. The City owns and operates 66 parks, which are divided into three categories: neighborhood, community, and specialty parks. In addition, the City owns and operates accessible open space, special purpose facilities, and trails (City of Stockton 2018b). The nearest City Park to the project site is Ernie Shropshire Park, on Logan Lane approximately two miles west of the Hoggan property. Shropshire Park, a neighborhood park, is equipped with picnic tables, tot lots, a tennis court, a basketball court, and barbecue facilities.

Other Public Services

Libraries in San Joaquin County and the City of Stockton have merged to become the Stockton-San Joaquin County Public Library system. The merged system has 15 branches in nine communities; seven of these branches are in Stockton. The nearest library branch to the project site is the Maya Angelou Branch Library at 2324 Pock Lane in Stockton, approximately 2.5 miles to the northwest. This library offers computer workstations and printers for general and Internet use, a reference collection for in-depth research, and a circulating collection of library materials.

Public health care in San Joaquin County is available through the San Joaquin General Hospital, located at 500 West Hospital Road in French Camp, approximately 4.5 miles southwest of the project site. This 236-bed hospital is a general acute care facility providing a full range of inpatient services including general medical/surgical care, high-risk obstetrics and neonatal intensive care. It also functions as the primary base hospital, which is designated by the County Emergency Medical Service Agency and is responsible for directing the advanced life support and pre-hospital care system assigned

to it by the County (San Joaquin County 2016b). In addition to the hospital, comprehensive outpatient facilities are available at the California Street Clinic on 1414 North California Street in Stockton, approximately 5.5 miles northwest of the project site, and at a clinic on the hospital main campus in French Camp.

The Superior Court of California, County of San Joaquin, has jurisdiction over all felonies, misdemeanors, civil cases of all amounts, and other legal proceedings in San Joaquin County and its incorporated cities. These proceedings are conducted at the Stockton Courthouse, the Juvenile Justice Center in French Camp, and branch courts in Manteca and Lodi. The nearest courthouse to the project site is the Stockton Courthouse on 180 East Weber Avenue.

REGULATORY FRAMEWORK

State

California Government Code Sections 65995 to 65998 (School Facilities)

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to issuance of a building permit. Sections 65995 to 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of) the planning, use, or development of real property" [Section 65996(a)]. The legislation goes on to say that the payment of school impact fees is deemed to provide full and complete school facilities mitigation under CEQA [Section 65996(b)]. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code. In accordance with California Government Code Section 65996, developers pay a school impact fee to the school district to offset the increased demands on school facilities caused by their proposed residential development project.

SB 50

SB 50, enacted in 1998, created the present School Facility Program, which is a State/local match program for the funding of new kindergarten-12th grade school facilities and the modernization of existing facilities. SB 50 established a base fee for both residential and commercial/industrial development, the proceeds from which provide capital improvement funding for schools. This base has been adjusted for inflation every two years. School districts must establish the nexus between the development and the need for school facilities via a fee justification study to impose the biannual increase. Fees are levied and collected at the time the building permit is issued. District certification of the payment of the applicable fee is required before a city or county can issue the building permit.

The Stockton Unified School District is eligible to levy Level 1 development impact fees on new residential and commercial development. Development impact fees are $5.51 per square foot of single-family residential development, $3.36 per square foot of multi-family residential development, and $0.54 per square foot of commercial/industrial development (City of Stockton 2018b).

Quimby Act

The Quimby Act of 1975 authorizes cities and counties to pass ordinances requiring developers to set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated by the Quimby Act cannot be used for the operation and maintenance of park facilities. A 1982 amendment (AB 1600) requires agencies to clearly show a reasonable relationship between the public need for a recreation facility or park land, and the type of development project upon which the fee is imposed. Also, local ordinances must now include definite standards for determining the proportion of the subdivision to be dedicated and the amount of the fee to be paid. The City places Public Facility Fees on non-residential development for community recreational centers, but it exempts such development from parkland fees.

Local

Stockton Municipal Code

Chapter 3.52 of the Stockton Municipal Code was adopted to authorize the City of Stockton to impose a transaction and use tax per Bond Measure W, which was approved by Stockton voters in 2004. Per Section 3.52.010(e), revenue from the tax increase will provide funding to maintain the City's current level of police and fire protection services and undertake necessary capital projects to support these services. Section 3.52.040 imposes a one-quarter-cent retail tax upon all retail sales within Stockton.

Chapter 15.12 of the Stockton Municipal Code outlines the standards and regulations of the Stockton Fire Code. Section 15.12.010 incorporates the California Fire Code, 2013 Edition, by reference and adopts these documents as the Fire Code of the City of Stockton.

Section 16.72.260 of the Stockton Municipal Code establishes a public facilities fee on the issuance of permits for development within the city. Subsection B.1 defines public facilities as City offices, fire stations, libraries, police stations, community recreation centers, street improvements, and water and sewage facilities. Per Subsection C, revenue from building permits will be used to pay for design and construction of designated public facilities, program development, and overall maintenance.

City of Stockton Measure M

Measure M, the Library and Recreation Special Tax, is a one-quarter-cent special transactions and use sales tax that passed during the November 2016 General Election,

receiving more than the two-thirds vote needed for approval. The Measure M tax will be implemented for 16 years and will be used to fund library and recreation services in the City.

Stockton General Plan 2040

The following Stockton General Plan 2040 policies and implementing actions are relevant to this project (City of Stockton 2018a):

- Action LU-6.1.G: Maintain adequate staffing levels to support achieving the City's service level goals for police and fire protection.
- Action SAF-1.2.A: Update the City's Design Guidelines and Development Code to require new and retrofitted development to support effective police and fire protection response and services by using the following principles of crime prevention through environmental design:
    - Delineate private and public spaces
    - Enhance visibility
    - Control property access
    - Ensure adequate property maintenance
- Action SAF-2.2.A: Require new development to provide adequate access for emergency vehicles and evacuation routes. [See also Chapter 11.0, Hazards.]
- Action LU-6.3.A: Require development to mitigate any impacts to existing sewer, water, stormwater, street, fire station, park, or library infrastructure that would reduce service levels.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment related to public services if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or generate a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities,

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, or

- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact PSR-1: Fire Protection Services

Project site development would generate new demand for fire protection services. Demand for service at the adjacent Norcal Logistics Center and surrounding industrial areas is currently served by the Stockton Fire Department. New development can be served by the Fire Department. However, the Fire Department has indicated that response times to the project site would be 10-12 minutes due to the traffic typically found on the main access routes, South Airport Way and SR 99 (Phil Simon, electronic mail). This would be a greater response time than the target set in the Stockton General Plan 2040.

The Fire Department notes that most of the new concrete tilt-up warehousing being developed in this area of the city are being designed with Early Suppression Fast Response (ESFR) fire sprinkler systems. The purpose of the ESFR systems is to allow for a variety of commodities to be capable of meeting high-bay storage up to five feet below roof deck. They are considered the best engineered fire protection system that the National Fire Protection Association recognizes, capable of flowing up to 100 gallons per minute per nozzle. Their design purpose is to completely extinguish the fire rather than controlling the spread of fire. Testing results from nationally recognized testing agencies have proven this. The Fire Department states that the ESFR fire sprinkler systems is a part of mitigation for delayed response times (Phil Simon, electronic mail). Mitigation described below would require the installation of an ESFR sprinkler system as part of building construction.

However, the Fire Department acknowledges that it will need to start looking at boundary growth relative to fire station placement and response times (Phil Simon, electronic mail. The project would not specifically trigger the requirement for new or expanded fire protection facilities; however, it would be required to pay Public Facility Fees to the City that would be used for future construction of Fire Department facilities required by urban expansion. Future fire stations would be subject to CEQA review as required.

Level of Significance: Potentially significant

Mitigation Measures:

PSR-1: The developer shall incorporate Early Suppression Fast Response fire sprinkler systems in the project building design and construction. The Stockton Fire Department shall review and approve such systems prior to their installation.

Significance After Mitigation: Less than significant

Impact PSR-2: Police Protection Services

Project development would generate a new demand for police protection services. Demand for service at the adjacent Norcal Logistics Center and surrounding industrial areas is currently served by the Stockton Police Department; such service can be readily extended to the project site. Policing demands will likely be further reduced by the provision of private on-site security by future tenants.

According to staff, the Police Department has outgrown its existing facilities and, given the number of new officers proposed under Measure A, significant renovations to increase capacity will likely be required. The current space allotted for the Police Department is inadequate; in particular, the main facility on East Market Street needs renovations and repair, and the firing range at 3040 Navy Drive needs expansion or relocation. There is a current project underway to create a Master Space Plan for the main facility, as well as the Police Administration and Support facility at 22 East Weber Avenue. Limited funding will require a phased approach to execution of this plan over a number of years (City of Stockton 2018a).

The project would not specifically trigger the requirement for new or expanded police facilities. However, it will be required to pay Public Facility Fees to the City that would be applied to future construction or renovation of Police Department facilities required by urban expansion. With payment of these Public Facility Fees, impacts on police protection services would be less than significant. Future new or expanded police facilities would be subject to CEQA review to determine potential environmental impacts and mitigation for significant impacts.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact PSR-3: Schools

The project site is within the boundaries of the Stockton Unified School District. The project would involve light industrial development, which does not directly generate new student load. Project development would generate new employment opportunities, which could attract employees with children to the Stockton area, leading to new demands for educational services.

As discussed in Chapter 13.0, Land Use, most of the jobs generated by project site development are expected to be filled by existing residents of the Stockton area. The project is not expected to induce population growth such that new or expanded school facilities would be needed. The developer would be required to pay SB 50 development impact fees to the Stockton Unified School District. The fees would be applied to the costs of new facilities required to accommodate any additional student population generated indirectly by industrial development. Under the provisions of SB 50, the payment of impact fees is considered adequate mitigation for CEQA purposes. Project impacts on schools would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact PSR-4: Parks and Recreational Services

The project would not involve any direct effects on parks or recreational facilities. Since the project is unlikely to generate a substantial population increase, it would not generate a demand for new or expanded parks or recreational facilities or services. As noted, Public Facilities Fees are placed on non-residential development for community recreational centers but not for parkland. Project impacts on recreational facilities are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact PSR-5: Other Public Facilities

Since the project is unlikely to generate a substantial population increase, it is anticipated that the project would not generate a demand for additional library, public hospital, or courthouse services. No new or expanded facilities would be required. Project impacts on other public facilities would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

16.0 TRANSPORTATION

This transportation analysis compares the potential transportation impacts of the proposed project and an optional development concept known as the Market Drive Project that reflects current trends in the warehousing and distribution industry. KD Anderson & Associates prepared technical reports for both options. The traffic studies themselves are available in Appendix G. The studies include detailed descriptions of the study methodologies and the streets, intersections and other transportation facilities selected for analysis. The studies were prepared in accordance with the City of Stockton Transportation Impact Analysis Guidelines and with information from Caltrans. Transportation impacts under cumulative conditions are described and analyzed in Chapter 18.0, Cumulative Impacts.

The proposed project analyzed in the 2019 Traffic Impact Study considered the transportation effects of high-cube warehouse development proposed for both the Sanchez and Hoggan properties. Proposed development of the larger Sanchez property would involve a total of four buildings producing a total of 2.8 million square feet of high-cube warehousing space. The Market Driven Project also involves industrial warehousing and distribution development on the Sanchez parcel, but the traffic generation characteristics of this project are expected to vary from those predicted for the proposed project. The traffic analysis reported in this chapter accounts for these possible variations so that the potential traffic effects of the project can be fully accounted for. The following analysis and address the potential traffic impacts of both the proposed project and the Market Driven Project. High-cube warehouse land use continues to be assumed for the Hoggan property even if the Market Driven Project proceeds on the Sanchez parcel.

ENVIRONMENTAL SETTING

Streets and Roads

The project traffic study describes the following roadways that provide access to the project site:

- *State Route 99 (SR 99)* is a north-south state highway that traverses the Central Valley connecting Stockton with Sacramento to the north and with Modesto, Merced, Fresno, and Bakersfield to the south. Near the project site, three travel lanes are provided in each direction, with auxiliary lanes present at some locations. Twelve interchanges are provided along the 12-mile length of SR 99 within and adjacent to the Stockton City limits. Average daily traffic (ADT) volumes on SR 99 range between 77,000 and 87,000 in the vicinity of the project

site, based on Caltrans data. The speed limit on SR 99 in the vicinity of the project site is 65 miles per hour (mph).

- *Arch Road/Arch-Airport Road/Sperry Road* is an east-west roadway with several names. It is classified in the Stockton General Plan as an arterial roadway. The roadway extends from French Camp Road near the Interstate 5/French Camp Road interchange in the west to the BNSF Intermodal Facility east of Austin Road. It passes adjacent to and south of the Sanchez property, where it is named Arch Road. The segment of Arch Road adjacent to the project site is generally a two-lane roadway with a posted speed limit of 45 mph. Additional lanes are provided at other segments, including the segment at the SR 99 interchange. Arch Road is currently undergoing improvements, with some segments being widened to provide additional travel capacity. In some cases, the widened portions are not yet striped to accommodate additional traffic. Sidewalks are provided along some portions of Arch Road, including portions on the north side from Logistics Drive to approximately 100 feet east of Fite Court, and on the south side from Logistics Drive to Newcastle Road. There are no bicycle facilities on Arch-Airport Road/Arch Road in the project study area.

- *Qantas Lane* is a north-south roadway on the west side of SR 99 that begins at Boeing Way to the north. South of Arch-Airport Road, Qantas Lane becomes SR 99 West Frontage Road. North of Arch-Airport Road, Qantas Lane is a two-lane roadway, while four travel lanes are provided south of Arch-Airport Road. Limited pedestrian facilities and no bicycle facilities are provided along Qantas Lane within the project study area.

- *SR 99 East Frontage Road* runs parallel to and east of SR 99. North of Arch Road, this roadway curves to the east, becoming Munford Avenue, and terminates at Mariposa Road. South of Arch Road, the roadway becomes Kingsley Road and terminates approximately 1.5 miles south of Arch Road. SR 99 East Frontage Road is a two-lane roadway with limited pedestrian facilities and no bicycle facilities in the project study area.

- *Frontier Way* is a north-south roadway north of Arch Road that curves west to become Gold River Lane, and then curves south to become Arkansas Place before intersecting with Imperial Way. It is south of the Hoggan property, separated by an existing paved driveway and a dirt road. Frontier Way is a two-lane roadway with a center two-way, left-turn lane providing access to adjacent industrial and warehouse uses. On-street parking is permitted on both sides of the street. There are limited pedestrian facilities and no bicycle facilities on Frontier Way.

- *Fite Court* is a north-south cul-de-sac north of Arch Road that provides access to existing industrial developments. This is a two-lane roadway with limited pedestrian facilities.

- *Newcastle Road* is a north-south roadway with a northern terminus just south of North Littlejohns Creek and a southern terminus approximately 1.5 miles south of Arch Road. North of Arch Road, curb, gutter, and sidewalks are provided. A

center two-way, left-turn lane is also provided to facilitate access to adjacent parcels. A crosswalk and pedestrian signals with pedestrian push buttons and pedestrian countdown signal heads have been installed along the southbound leg of the intersection with Arch Road. There are no bicycle facilities on Newcastle Road. No parking is permitted on Newcastle Road.

- *Logistics Drive* is a north-south roadway extending north from Arch Road to provide access to the adjacent industrial parcels. The two-lane roadway is approximately one-half mile long with a center two-way, left-turn lane provided along much of its length. Sidewalks are provided on both sides of Logistics Drive for its entire length.

- *Austin Road* is a north-south roadway that extends south from Mariposa Road and passes through Manteca before terminating at Caswell Memorial State Park. It passes adjacent to and east of the Sanchez property. Within the project study area, Austin Road is a two-lane roadway with no pedestrian or bicycle facilities.

- *Mariposa Road* is a west-northwest-to-east-southeast roadway connecting Charter Way in south Stockton with Escalon-Bellota Road north of Escalon. It is classified in the Stockton General Plan as an arterial roadway. In the project study area, Mariposa Road is a two-lane roadway with a 45-mph posted speed limit. Mariposa Road crosses a railroad track with a grade-separated railroad crossing located just east of the intersection with Austin Road. Limited pedestrian and no bicycle facilities are provided along the roadway within the project study area.

Existing Traffic Conditions

Existing traffic conditions on study intersections, roadway segments and ramp junctions were analyzed based on Level of Service (LOS). LOS measures the quality of traffic movement on roadways and through intersections. LOS is represented by letter designations from A to F, with A representing the best movement conditions and F representing the worst.

Intersections

Figure 16-1 shows the 14 intersections analyzed by the traffic study. Current intersection delay and LOS are summarized in Table 16-1 below. All intersections currently operate above City LOS standards (see Regulatory Framework below) during morning (AM) and evening (PM) peak hours.

Roadway Segments

Current daily traffic volumes and associated roadway segment LOS are summarized in Table 16-2 below. All 14 study roadway segments currently operate above City LOS standards (see Regulatory Framework below).

Ramp Junctions

Figure 16-2 shows the 10 ramp junctions and weave areas analyzed in the traffic study. Table 16-3 presents a summary of existing AM and PM peak hour LOS at the ramp junctions in the traffic study. Nine of the ramp junctions operate at acceptable LOS C or better during both peak hours, and no improvements are needed at these ramp junctions to achieve acceptable LOS. The northbound SR 99 weave area between the Mariposa Road interchange and the Golden Gate Avenue interchange operates at unacceptable LOS E in the PM peak hour. Improvements to the weave area are considered not feasible, due to existing land use adjacent to SR 99 and the spacing of the two interchanges. As a result, no improvements are recommended to improve LOS at this location.

TABLE 16-1
EXISTING INTERSECTION LEVEL OF SERVICE

			AM Peak Hour		PM Peak Hour	
No.[1]	**Intersection**	**Control[2]**	**LOS**	**Delay (sec)**	**LOS**	**Delay (sec)**
1	Arch-Airport Road/Qantas Lane	Signal	C	21.7	C	21.6
2	Arch-Airport Road/SR 99	Signal	C	32.2	C	23.5
3	Arch Road/SR 99 E. Frontage Road	Signal	C	30.9	C	33.4
4	Arch Road/ Frontier Way	Unsig.	A	1.7	A	3.3
5	Arch Road/Fite Court	Signal	A	8.5	A	7.4
6	Arch Road/Newcastle Road	Signal	A	10.0	B	19.6
7	Arch Road/Logistics Drive	Signal	A	3.5	A	9.0
8	Arch Road/Austin Road	Signal	B	19.2	B	18.5
9	Austin Road/Mariposa Road	Signal	B	15.1	B	16.6
10	SR 99 NB Ramps/Mariposa Road	Signal	A	7.4	A	7.0
11	SR 99 SB Ramps/Mariposa Road	Signal	A	8.7	A	9.7
12	SR 99 W. Frontage Road/Mariposa Road	Signal	B	16.8	B	16.2
13	Mariposa Road/Jack Tone Road	AWSC	B	14.8	C	20.5
14	Austin Road/California Health Care Facility Access	Signal	B	14.5	B	11.6

Notes: NB – northbound, SB – southbound
[1] See Figure 16-1
[2] Signal – signalized light control; Unsig.- unsignalized stop sign control; AWSC – all-way stop sign control
Source: KD Anderson and Associates 2019.

TABLE 16-2
EXISTING ROADWAY SEGMENT LEVEL OF SERVICE

Roadway Segment	Number of Lanes	Daily Volume	LOS
Arch-Airport Road E of Qantas Lane	6	26,889	A
Arch Road E of SR 99 Frontage Road	2	13,578	D
Arch Road E of Frontier Way	2	11,060	C
Arch Road E of Fite Court	2	9,352	C
Arch Road E of Newcastle Road	4	7,279	A
Arch Road E of Logistics Drive	2	6,734	A
Mariposa Road NW of Austin Road	2	8,657	B
Mariposa Road NW of Newcastle Rd Extension	2	9,042	B
Mariposa Road NW of Carpenter Road	2	10,034	C
Austin Road S of Arch Road	2	5,152	A
Mariposa Road E of Austin Road	2	8,149	A
SR 99 N of Mariposa Road	8	93,000	C
SR 99 N of Arch-Airport Road	6	73,000	C
SR 99 S of Arch-Airport Road	6	77,000	C

Source: KD Anderson and Associates 2019.

TABLE 16-3
EXISTING RAMP JUNCTION LEVEL OF SERVICE

No.[1]	Ramp Junction	AM Peak Hour LOS	PM Peak Hour LOS
50	Mariposa SB off-ramp	A	A
51	Mariposa SB on-ramp loop	C	B
52	Mariposa SB on-ramp slip	B	B
53	Arch-Airport SB off-ramp	A	A
54	Arch-Airport SB on-ramp	B	B
55	Arch-Airport NB off-ramp	C	C
56	Arch-Airport NB on-ramp	B	C
57	Mariposa NB off-ramp	C	C
58	Mariposa NB on-ramp loop	C	C
59	Mariposa-Golden Gate NB weave	C	**E**

Bold indicates unacceptable LOS.
[1] See Figure 16-2.
Source: KD Anderson and Associates 2019.

Truck Routes

The City of Stockton *Truck Routes* map and *STAA Truck Routes* map describe truck routes in the Stockton area. Some of the truck routes are designated specifically for use by Surface Transportation Assistance Act (STAA) design vehicle trucks. These are large vehicles that have relatively large turning radii and require roadway design features that accommodate truck turning radii. The following are designated truck routes in the vicinity of the project site:

- Mariposa Road from Martin Luther King Jr. Boulevard to east-southeast of Austin Road is a designated truck route. Mariposa Road from Martin Luther King Jr. Boulevard to Munford Avenue is a designated STAA truck route.

- Arch Road from McKinley Avenue to Austin Road is a designated truck route. Arch Road from Interstate 5 to Austin Road is a designated STAA truck route.

- Newcastle Road north of Arch Road is a designated STAA truck route.

Public Transportation, Bicycle, and Pedestrian Systems

The San Joaquin Regional Transit District (SJRTD) is the primary provider of public transportation service in the Stockton metropolitan area, offering fixed-route and flexible fixed-route services in the Stockton metropolitan area. In addition, SJRTD provides curb-

to-curb paratransit ("dial-a-ride") bus service for passengers who, due to their disability or age, are unable to access fixed route services.

Fixed route services are provided by standard service buses that provide connections to most areas of Stockton and Metro Express buses with increased frequencies along major corridors in Stockton. SJRTD also offers Metro Hopper, nine flexible fixed-route bus lines that can deviate from their route up to one mile, which increases transit coverage to approximately 75 percent of the Stockton metropolitan area for elderly and disabled customers certified under the Americans with Disabilities Act (San Joaquin County 2016b). County Hopper provides the same service on five routes that go from Stockton to other County communities (one County Hopper route goes from Tracy to Mountain House).

There are no standard bus routes, Metro Hopper routes, or County Hopper routes in the project vicinity; the closest bus routes are along SR 99. SJRTD Route 390 provides limited service to the Main Post Office near the SR 99/Arch Road interchange. County Hopper Route 91 connects Stockton with Manteca and Ripon via SR 99, but this route is more than one mile from the Hoggan property.

The City of Stockton has an extensive network of bicycle facilities, including off-street trails and paths, as well as on-street bicycle lanes and routes. Many of these facilities also support pedestrian travel. The City of Stockton Bicycle Master Plan, adopted in 2017, presents a description of existing and future bicycle facilities near the project site. As indicated in the Streets and Roads section above, here are no existing bikeways in the vicinity of the project site.

Sidewalks are limited in the project vicinity. Sidewalks have been installed along Logistics Drive on the western boundary of the Sanchez property. Near the Hoggan property, curb and gutter improvements have been installed along Frontier Way and Gold River Lane, but no sidewalks. The Streets and Roads section above describes existing sidewalks on other roads in the vicinity.

Other Transportation Facilities

As noted in Chapter 11.0, Hazards, Stockton Metropolitan Airport is a public airport approximately two miles southwest of the Hoggan property. Stockton Airport offers scheduled passenger air service, along with general aviation and air cargo services. Issues related to land uses near Stockton Airport are discussed in Chapter 11.0 and in Chapter 14.0, Noise.

The Burlington Northern Railway (BNSF) Intermodal Facility is located east of the Sanchez property and is accessed from Arch Road. Owned and operated by the BNSF Railway Company, the facility occupies 425 acres and is designed to improve the efficiency of moving goods into and out of northern California. The BNSF facility contains two loading and unloading tracks, averaging 7,000 feet in length, with the capacity to hold approximately 150 intermodal railcars. Three storage tracks accommodate 230 intermodal railcars and have more than 800 container and trailer parking spaces (Kilcarr 2001).

California Department of Transportation (Caltrans)

Caltrans is the primary State agency responsible for transportation issues. One of its duties is the construction and maintenance of the State highway system. Caltrans has established standards for roadway traffic flow and has developed procedures to determine if State-controlled facilities require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and LOS, Caltrans may recommend measures to mitigate these traffic impacts.

The nearest Caltrans facility to the project site is SR 99, along with the on- and off-ramps at the SR 99/Arch Road interchange. For all its facilities, Caltrans maintains a minimum LOS at the transition between LOS C and LOS D, based on the facility and its measure of effectiveness (e.g., delay at intersections, traffic density on roadway segments) (City of Stockton 2018a).

State CEQA Guidelines Section 15064.3

The State of California has recently added Section 15064.3 to the CEQA Guidelines, which is meant to incorporate SB 743 into CEQA analysis. SB 743 was enacted in 2013 with the intent to balance congestion management needs and the mitigation of the environmental impacts of traffic with statewide GHG emission reduction goals. SB 743 directed the Governor's Office of Planning and Research to develop an alternative mechanism for evaluating transportation impacts and to amend the CEQA guidelines to provide a transportation impact analysis framework that prioritizes reducing GHG emissions, replacing the prior focus of minimizing automobile delay.

Section 15064.3 states that vehicle miles traveled (VMT) is the preferred method for evaluating transportation impacts, rather than the commonly used LOS. The VMT metric measures the total miles traveled by vehicles as a result of a given project by multiplying the number of vehicle trips by the length of vehicle trips. Unlike LOS, VMT accounts for the total environmental impact of transportation associated with a project, including use of non-vehicle travel modes. Section 15064.3(b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric:

- VMT exceeding an applicable threshold of significance may indicate a significant impact. The City's General Plan has a threshold of significance related to VMT, which is discussed later in this chapter.
- Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing "high-quality transit corridor" should be presumed to cause a less-than-significant transportation impact. There are no transit stops or transit corridors near the project site.

- Projects that decrease VMT in the project area compared to existing conditions should be presumed to cause a less-than-significant transportation impact. Because of proposed development, the project is expected to increase VMT in the project area.

While a quantitative analysis of VMT is preferred, a qualitative analysis may be used if existing models or methods are not available to estimate VMT for the project being considered.

Regional Transportation Plans

Regional transportation plans applicable to Stockton have been prepared by SJCOG. SJCOG is a joint powers authority comprised of the County of San Joaquin and the cities of Stockton, Lodi, Manteca, Tracy, Ripon, Escalon, and Lathrop. The primary role of SJCOG is to foster intergovernmental coordination within San Joaquin County. SJCOG is overseen by a Board of Directors which allocates funding for transportation improvements. The Board also establishes regional transportation policies and programs. SJCOG has prepared several transportation plans, which are described below.

Regional Transportation Plan/Sustainable Communities Strategy

SJCOG adopted the most recent version of its Regional Transportation Plan in 2018. SJCOG, as the designated metropolitan planning organization representing San Joaquin County, is required by both federal and State law to prepare a long-range transportation planning document known as a Regional Transportation Plan. The most recently adopted Regional Transportation Plan plans how the SJCOG region will meet its transportation needs for the period from 2017 to 2042, considering existing and projected future land use patterns as well as forecast population and job growth. It identifies and prioritizes expenditures of anticipated funding for transportation projects of all transportation modes, as well as transportation demand management measures and transportation systems management (SJCOG 2018b).

Roadways projects near the project site that are part of the 2018 Regional Transportation Plan include the widening of Mariposa Road from Stagecoach Road to Jack Tone Road, widening of an existing BNSF grade separation on Mariposa Road, and the widening of Arch Road from Fite Court to SR 99. Other transportation projects in the vicinity include improvements to Stockton Metropolitan Airport and rail improvements between Escalon and Stockton.

The Regional Transportation Plan includes a Sustainable Communities Strategy, as required by SB 375, which links land use and transportation strategies with the intent of meeting specified per capita GHG reduction targets for emissions from cars and light trucks. Chapter 10.0, Greenhouse Gas Emissions, provides a detailed discussion of the Sustainable Communities Strategy.

Regional Congestion Management Plan

The SJCOG adopted the latest version of its Regional Congestion Management Plan (RCMP) in 2018. The RCMP is designed to coordinate land use, air quality and transportation planning to reduce potential congestion from traffic generated by development. State statute requires all State highways be designated as a part of the RCMP. The RCMP has also designated a local roadway and intersection network on which traffic congestion would be monitored and programs to reduce congestion would be targeted. Once an intersection is listed, it cannot be removed. A Regional Transportation Impact Fee is imposed on new development to support improvements to the regional transportation network.

The segments of Arch Road and Austin Road near the project site were added to the RCMP roadway network in 2016. Mariposa Road to the north is also part of the network, as is SR 99 to the west per State statute. The SR 99 ramps at the Arch Airport Road interchange are part of the RCMP intersection network, along with the Austin Road/Arch Road and Austin Road/Mariposa Road intersections (SJCOG 2018c).

Regional Bicycle, Pedestrian, and Safe Routes to Schools Master Plan

In 2012, SJCOG developed the Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan. This regional plan for San Joaquin County serves as a guide to planning, developing, and managing a regional bicycle and pedestrian network. Additionally, the plan identifies bikeways and pedestrian projects of regional significance and includes an implementation and funding strategy to help agencies involved in the implementation of the plan.

Regional Transit Systems Plan

SJCOG adopted the Regional Transit Systems Plan in 2016. The plan is a long-range transit plan that looks at bus and rail transit needs, their related costs, and details a financial forecast of anticipated funding through 2024. The plan was prepared in collaboration with the bus/transit operators in San Joaquin County, including SJRTD. SJRTD indicated plans would include expansion of Metro Hopper to replace traditional dial-a-ride service; MLK and Crosstown Miner bus rapid transit expansion; a restructure of SJRTD commuter service, increasing service to the Bay Area Rapid Transit system, and providing a cost-effective vanpool program.

Interregional STAA Study for I-5 and SR-99

In 2013, the Interregional Truck Operations on I-5 and SR 99 and STAA Routes Improvement Study was released. The study, prepared for both SJCOG and the Sacramento Area Council of Governments, noted that the Surface Transportation Assistance Act of 1982 authorized motor carrier operation of 48-foot and longer semi-trailers on National Network highways, along with other roads designated by the State. Local stakeholder dissatisfaction and possible lack of knowledge regarding the status, use and planning of STAA routes along the Interstate 5 and SR-99 corridors provided the

impetus for this study. The study recommended working more closely with land use and transportation planning agencies to include STAA standards in planning documents, as well as more consistent efforts to sign local STAA-compliant routes. The segment of Arch Road from SR 99 to the BNSF Intermodal Facility has been designated a STAA route, along with the segment of Mariposa Road adjacent to the project site and SR 99 itself (City of Stockton 2018b).

Travel Demand Management Plan

SJCOG adopted its Travel Demand Management Plan in 2010. Development of this plan was tailored to establish an equitable and working framework between SJCOG and its member agencies to address demand management and facility-based demand management strategies to relieve peak period congestion on RCMP roadways. Strategies may include, but are not limited, transit passes or subsidies, bike racks and lockers, rideshare programs, parking cash-out, preferential parking, and telecommute/flex schedules. Although not related to the Travel Demand Management Plan, SJVAPCD Rule 9410 requires similar actions and recommends similar strategies for employers of 100 or more (see Chapter 6.0, Air Quality).

Regional Smart Growth/Transit Oriented Development Plan

In 2012, SJCOG adopted the Regional Smart Growth/Transit Oriented Development Plan. This plan provides key background information that serves as context for smart growth development in San Joaquin County. As defined in the plan, "smart growth" is development that revitalizes central cities and older suburbs, supports and enhances public transit, promotes walking and bicycling, and preserves open space and agricultural lands. "Transit-oriented development" is defined as development within one-half mile of a transit station and of convenience retail uses. As the project is an industrial development with no residential component, this plan is not applicable to the project.

Park-and-Ride Lot Master Plan

The Park-and-Ride Lot Master Plan was adopted in 2007. The plan describes the existing park-and-ride lots facilities in San Joaquin County, their condition and their current level of use. It also identifies future needs for park-and-ride based on expected growth and commute patterns, transit services, and potential high-occupancy-vehicle improvements in the county. There are no park-and-ride lots on or near the project site, and none are planned.

City of Stockton

City of Stockton Transportation Impact Analysis Guidelines

The City of Stockton has issued Transportation Impact Analysis Guidelines for traffic impact studies. The Guidelines affirm LOS D as the minimally acceptable LOS for City streets and intersections. They also state that impacts on road segments with an existing

LOS of E or F (i.e., unacceptable LOS) would be considered significant if project traffic would increase traffic volumes by greater than five percent. Impacts at intersections with an unacceptable LOS would be considered significant if project traffic would increase average delay at the intersection by greater than five seconds.

As noted, the State has adopted VMT as the preferred metric for evaluating transportation impacts rather than LOS. Currently, the City bases its transportation plans and impact analyses on LOS. Because of this, the LOS metric is still used in this analysis to evaluate project impacts. To date, the City has not formally adopted any VMT thresholds, including the baseline VMT per capita. However, Stockton General Plan Action TR-4.3A states that the City shall establish a threshold of 15% below baseline VMT per capita to determine a significant transportation impact under CEQA. The 15% threshold in General Plan Action TR-4.3A is similar to thresholds for residential and office land use types recommended by the Office of Planning and Research in its *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2019) and is used in the traffic study to determine the significance of VMT impacts associated with the project. Under SB 743, the City is required to establish VMT standards by July 1, 2020.

City of Stockton Public Facility Fees

The City has established Public Facility Fees to be imposed on residential and non-residential development to defray the costs of new or improved streets that may be necessary to serve the new development. Among the facilities that would be supported by these fees are street improvements and traffic signals. These fees are revised periodically by the City Council based on findings that, among other matters, identify the purpose to which the fee is to be allocated and demonstrate a reasonable relationship between the fee and purpose for which it is charged.

City of Stockton Bicycle Master Plan

On December 2017, the City adopted an update to its Bicycle Master Plan, which was originally adopted in 2007. The 2007 Plan was developed and adopted as part of the City's General Plan update to provide a comprehensive system of bicycle lanes on arterial streets, bicycle routes on residential streets, and bicycle paths. The 2017 update reorients the selection and prioritization of investments in bicycle facilities and describes the highest priority projects to improve connectivity, safety, and mode shift and access. As noted, no existing bicycle facilities are in the immediate vicinity of the project site; however, a Class II bike lane is proposed along Arch Road from SR 99 to beyond Austin Road.

Stockton Municipal Code

Stockton Municipal Code Section 16.64.100 sets forth bicycle parking requirements and development standards for non-residential land uses. Bicycle parking facilities in parking lots shall be provided at a minimum of one employee bicycle parking space for each 25,000 square feet of gross floor area. For this project, a minimum of approximately 123

bicycle parking spaces would be required. Each bicycle parking space shall include a stationary parking device of a design approved by the City. Bicycle spaces shall be conveniently located and generally within proximity to the main entrance of a structure and shall not interfere with pedestrian access.

Stockton General Plan 2040

The following Stockton General Plan 2040 policies and implementing actions are relevant to this project (City of Stockton 2018a):

- Policy TR-1.1: Ensure that roadways safely and efficiently accommodate all modes and users, including private, commercial, and transit vehicles, as well as bicycles and pedestrians and vehicles for disabled travelers.

- Action TR-1.1.A: Direct truck traffic to designated truck routes that facilitate efficient goods movement and minimize risk to areas with concentrations of sensitive receptors and vulnerable road users, like pedestrians and bicyclists. [See also Chapter 14.0, Noise.]

- Action TR-1.1.B: Maintain and periodically update a schedule for synchronizing traffic signals along arterial streets and freeway interchanges to facilitate the safe and efficient movement of people and goods and to provide signal priority for transit vehicles at intersections.

- Action TR-1.1.C: Require roadways in new development areas to be designed with multiple points of access and to address barriers, including waterways and railroads, in order to maximize connectivity for all modes of transportation.

- Action TR-1.3.A: Protect the [Stockton Metropolitan] Airport and related aviation facilities from encroachment by ensuring that all future development within the Airport Influence Area (AIA) is consistent with the policies adopted by the San Joaquin County Airport Land Use Commission (ALUC), except in cases where the City Council concludes that project approval would provide for the orderly development of the Airport and the areas surrounding it while protecting the public health, safety, and welfare by minimizing the public's exposure to excessive noise and safety hazards. [See also Chapter 11.0, Hazards.]

- Action SAF-5.1.A: Require new development to provide adequate access for emergency vehicles and evacuation routes, including by designing roadway systems to provide multiple escape routes in the event of a levee failure. [See also Chapter 11.0, Hazards.]

- Action TR-2.2.B: Obtain input from local and regional transit operators on major new development projects to ensure projects are designed to support transit and provide adequate transit service and access.

- Action TR-3.1.C: Preserve right-of-way for transit and bicycle uses when designing new roadways and improving existing roadways.

- Policy TR-4.3: Use the threshold recommended by the California Office of Planning and Research for determining whether VMT impacts associated with land uses are considered significant under State environmental analysis requirements.

- Action TR-4.3A: Establish a threshold of 15 percent below baseline VMT per capita to determine a significant transportation impact under the California Environmental Quality Act.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities,

- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b),

- Substantially increase safety hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or

- Result in inadequate emergency access.

The traffic analysis was conducted using near-term background conditions and long-term future background conditions. Future background conditions are based on the City of Stockton General Plan. The traffic study analyzed traffic operating conditions under the following five scenarios:

- Existing Conditions

- No Project

- Existing Plus Approved Project (EPAP) Plus Project and EPAP Plus Market Driven Project

- Cumulative No Project

- Cumulative Plus Project

Existing Plus Approved Projects (EPAP) conditions are a near-term background condition which includes existing traffic levels and traffic associated with approved but unconstructed land use development projects in the vicinity of the project site. The traffic study uses the EPAP No Project condition as the baseline condition to assess the

significance of near-term project impacts on traffic. EPAP conditions are analyzed in this chapter.

Cumulative conditions are a long-term background condition which includes future year forecasts of traffic volumes, based on development of surrounding land uses consistent with the Stockton General Plan 2040. Chapter 18.0, Cumulative Impacts, contains the traffic analysis under cumulative conditions.

Since December 2018, vehicle delay as expressed in LOS cannot be used solely as a threshold of significance for purposes of CEQA analysis. On December 28, 2019 the Governor's Office of Planning and Research adopted revised CEQA Guidelines, which included numerous changes to the questions in the Transportation section of the Environmental Checklist presented in Appendix G of the Guidelines. The revised questions are based on a new traffic analysis methodology based on VMT, as previously described. The use of VMT does not become mandatory for CEQA lead agencies until July 1, 2020. Until that time, lead agencies have the discretion to base traffic impact analysis on the new VMT methodology or on the intersection delay methodology that has been in use for many decades. The analysis presented in this section utilizes both the intersection delay and VMT methodologies. As noted in the Regulatory Framework section above, Stockton General Plan Action TR-4.3A established a significance threshold for VMT impacts. If a project results in a reduction of 15 percent of VMT per capita or more from current land use designations, it is not considered to have a significant impact.

Impact TRANS-1: Consistency with CEQA Guidelines Section 15064.3(b)

As noted, CEQA Guidelines Section 15064.3(b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric. However, these criteria are not a good fit for analysis of the project. The project is not within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor, and the project can only be expected to increase VMT in the project area. The Stockton General Plan, on the other hand, establishes a VMT threshold of significance that can be applied to the project and was used by the traffic study in its evaluation of project VMT impacts.

The 2019 traffic impact study estimated that the proposed project would generate 4,324 vehicle trips per day. Development of the Sanchez and Hoggan properties with the current land use designations would potentially generate an estimated 10,563 vehicle trips per day using a trip generation rate specified by City of Stockton staff for industrial land use in Stockton. Development of the project as proposed would therefore result in a 59.1% reduction in trip generation that would otherwise occur with industrial development of the project sites. Vehicle trip lengths for high-cube warehouse land use and industrial land use are expected to be equivalent. As a result, a change in the number of vehicle trips would cause a corresponding change in VMT. Therefore, the proposed project would result in a 59.1% reduction in VMT that would otherwise occur with industrial development of the project sites. Since this amount of reduction is greater than the significance threshold of a 15% reduction, proposed project impacts on VMT are considered less than significant from this standpoint.

From this same perspective, the Market Driven Project would generate an estimated 5,736 vehicle trips per day, which would be more than would be generated by the proposed project but still substantially below the 10,563 vehicle trips per day that would be generated with development of the current General Plan land use designation. The Market Driven Project option would result in a 45.7% reduction in travel as compared with industrial development under the current General Plan land use designation. Since this amount of reduction is greater than the significance threshold of a 15% reduction, Market Driven Project impacts on VMT are likewise considered less than significant.

An alternative analysis approach, based on Stockton General Plan EIR data, approaches the analysis of project VMT impacts on a per capita/service population basis. Service population is the sum of existing and predicted future population and employment within the City. The GPEIR describes an estimated 2015 VMT baseline of 25.63 miles per unit of service population. Development of new land uses through 2040 as described in the General Plan would increase both the total VMT and service population for the City but would result in a reduction in the overall VMT per capita to 24.16, a reduction of approximately 6%. Narrowing the analysis to consider only the change in VMT and service population of new development through 2040, the VMT per capita would be reduced to 20.31, a reduction of 21% from the baseline 2040 VMT. This reduction exceeds the 15% VMT reduction threshold established by the Office of Planning and Research, and therefore General Plan implementation would have a less than significant VMT impact.

The same approach was applied to analysis of the estimated project VMT distributed over employment increases associated with the project; employment increases would be the minimum project contribution to service population. These calculations, summarized in Table 16-4, show that the project VMT per capita of 24.4 would be slightly above the City's predicted overall 2040 VMT per capita of 24.16 and above the City's predicted 2040 net VMT per capita of 20.31.

Project VMT would, however, be reduced by required conformance with the SJVAPCD Rule 9410 - Employer-Based Trip Reduction. Rule 9410 requires employers with at least 100 employees to implement a trip reduction - transportation demand management - program. The CalEEMod air quality modeling program, which produces VMT data, indicates that implementation of mitigation features that reduce air and GHG emissions, including Rule 9410, would also reduce VMT of the proposed project by 14.5%, and VMT of the Market Drive Project by 15.4%. CalEEMod does not report VMT reductions associated with each mitigation feature, but because Rule 9410 is clearly related to trip reduction, it has a direct relationship to VMT reduction and likely accounts for most of the "mitigated" VMT reduction.

With the application of the required SJVAPCD mitigation, the VMT per capita for the proposed project would be 20.9, which is 15% below the 2040 baseline VMT for the City as a whole and just under the 21% reduction in the 2040 VMT expected from urban development under the General Plan. The Market Driven Project, incorporating the same required mitigation, would produce a project VMT of 18.4, which is 28% below the City's 2040 baseline VMT per capita of 25.63 and substantially below the 21% reduction in the 2040 VMT expected from urban development under the General Plan.

TABLE 16-4
PROJECT VS. GENERAL PLAN 2040 VMT PER CAPITA RATES

Scenario	Project VMT* (million/yr)	Employees	VMT/ employee/ day	Reduction
Proposed Project	12.62	1,417	24.4	5%
Proposed Project (mitigated)	10.79	1,417	20.9	19%
Market Driven Project	16.68	2,104	21.7	15%
Market Driven Project (mitig)	14.11	2,104	18.4	28%

*VMT as calculated by CalEEMod, Appendix B

The 5% VMT reduction associated with the proposed project would equal the projected citywide 2040 VMT and would approach the 21% predicted VMT reduction for all urban development. More simply, the VMT rate for the mitigated project would be substantially lower (better) than the predicted 2040 baseline VMT rate and close to the VMT reduction predicted to be achieved by development pursuant to the General Plan. This reduction would exceed the OPR significance threshold of 15%, resulting in a less than significant transportation impact based on VMT analysis.

The Market Driven Project scenario would produce even better VMT results. With no mitigation, this scenario would result in VMT reduction of 15% below the City's 2040 baseline VMT. With mitigation, the project would result in a 28% reduction in the baseline VMT. Both VMT results equal or exceed the 15% reduction specified in the OPR significance threshold.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-2: Motor Vehicle Transportation Plans - Intersections

Traffic impacts were evaluated under EPAP conditions without and with the project. Table 16-4 presents LOS at the study intersections under EPAP No Project and EPAP Plus Project conditions during AM and PM peak hours. More detailed information is available in the traffic impact studies in Appendix G of this EIR. LOS resulting from the alternative scenarios development is also presented in Table 16-5; results are shown in parentheses.

TABLE 16-5
INTERSECTION LOS - EPAP CONDITIONS

No.[1]	Intersection	EPAP No Project LOS		EPAP Plus Project LOS	
		AM Peak	PM Peak	AM Peak	PM Peak
1	Arch-Airport Road/Qantas Lane	**F**	**E**	**F (F)**	**E (E)**
2	Arch-Airport Road/SR 99	**F**	**F**	**F (F)**	**F (F)**
3	Arch Road/SR 99 E. Frontage Road	**F**	**F**	**F (F)**	**F (F)**
4	Arch Road/ Frontier Way	A	C	B (D)	D **(E)**
5	Arch Road/Fite Court	A	A	A (A)	A (A)
6	Arch Road/Newcastle Road	B	C	B (B)	C (C)
7	Arch Road/Logistics Drive	B	B	B (B)	B (C)
8	Arch Road/Austin Road	C	C	C (C)	B (B)
9	Austin Road/Mariposa Road	C	C	C (D)	C (D)
10	SR 99 NB Ramps/Mariposa Road	A	A	A (A)	A (A)
11	SR 99 SB Ramps/Mariposa Road	B	B	B (B)	B (B)
12	SR 99 W. Frontage Road/Mariposa Road	A	B	A (A)	B (B)
13	Mariposa Road/Jack Tone Road	C	D	C (C)	D (D)
14	Austin Road/California Health Care Facility Access	B	B	B (B)	B (B)
21	Logistics Drive/North Driveway	-	-	A (A)	A (A)
22	Logistics Drive/North-Central Driveway	-	-	A (A)	A (A)
23	Logistics Drive/South-Central Driveway	-	-	A (A)	A (A)
24	Logistics Drive/South Driveway	-	-	A (A)	A (A)
25	Austin Road/North Driveway	-	-	A (A)	A (A)
26	Austin Road/North-Central Driveway	-	-	A (A)	A (A)
27	Austin Road/South-Central Driveway	-	-	A (A)	A (A)
28	Austin Road/South Driveway	-	-	A (A)	A (A)

Notes:
NB – northbound, SB – southbound
Bold indicates unacceptable LOS.
[1] See Figure 16-1
Source: KD Anderson and Associates 2019, 2020.

Under EPAP Plus Proposed Project conditions, three intersections were determined to operate at unacceptable LOS:

- *#1. Arch-Airport Road & Qantas Lane*. This intersection would operate at LOS F with 99.9 seconds of delay during the AM peak hour, and LOS E with 61.2 seconds of delay during the PM peak hour. LOS E and F are considered unacceptable. However, LOS would also be unacceptable under EPAP No Project conditions, and the project-related increase in delay would not be greater than five seconds. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

- *#2. Arch-Airport Road & State Route 99 Ramps*. This intersection would operate at LOS F with 267.4 seconds of delay during the AM peak hour, and LOS F with 111.2 seconds of delay during the PM peak hour. LOS F is considered unacceptable. However, LOS would also be unacceptable under EPAP No Project conditions, and the project-related increase in delay would not be greater than five seconds. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

- *#3. Arch Road & SR 99 East Frontage Road.* This intersection would operate at LOS F with 150.8 seconds of delay during the AM peak hour, and LOS F with 98.0 seconds of delay during the PM peak hour. LOS F is considered unacceptable. However, LOS would also be unacceptable under EPAP No Project conditions, and the project-related increase in delay would not be greater than five seconds. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

In summary, for all three intersections operating at an unacceptable LOS under EPAP Plus Project conditions, LOS values would be the same even without the project, and the project-related increases in delay would not be greater than five seconds. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, impacts on these intersections are considered less than significant. Since impacts on intersections are less than significant, the project would not significantly conflict with transportation plans related to intersections such as the RCMP.

Under EPAP Plus conditions, four intersections were determined to operate at unacceptable LOS, three of which are described above. Impacts on the Arch-Airport Road & Qantas Lane intersection are similar to those under the proposed project, and impacts are considered less than significant. However, the Arch-Airport Road & State Route 99 Ramps and Arch Road & SR 99 East Frontage Road intersections would result in unacceptable LOS that would require major restructuring of the SR 99 interchange to result in acceptable LOS. Reconstruction of the interchange in the near-term future is not considered feasible; therefore, impacts at these intersections are considered significant and unavoidable. The fourth intersection, Arch Road & Frontier Way, would operate at LOS D with 26.3 seconds of delay during the AM peak hour, and LOS E with 39.7

seconds of delay during the PM peak hour. LOS E is considered unacceptable. However, mitigation presented below would allow this intersection to operate at an acceptable LOS during the PM peak hour, making impacts at this intersection less than significant.

Level of Significance: Less than significant, Significant and unavoidable

Mitigation Measures:

TRANS-1: The project applicant shall contribute fair-share costs to the installation of a traffic signal at the intersection of Arch Road and Frontier Way and related improvements. If needed to meet short-term traffic needs, the City may require applicant to design and construct the signal, subject to reimbursement. The project applicant shall submit a traffic analysis for the City's approval to determine if the intersection improvements can be aligned with development related impacts should the proposed site be constructed in phases.

Significance After Mitigation: Less than significant at the Arch Road/Frontier Way intersection, but significant and unavoidable at the Arch-Airport Road & State Route 99 Ramps and Arch Road & SR 99 East Frontage Road intersections. No feasible mitigation measures are available at those locations.

Impact TRANS-3: Motor Vehicle Transportation Plans - Roadway Segments

Table 16-6 presents LOS at the study roadway segments under EPAP No Project and EPAP Plus Project conditions. More detailed information is available in the traffic impact studies in Appendix G of this EIR. LOS resulting from the Market Driven Project is also presented in Table 16-5; results are in parentheses.

Under EPAP Plus Proposed Project conditions, two roadway segments were determined to operate at unacceptable LOS:

- *Arch-Airport Road – east of Qantas Lane.* This roadway segment would operate at LOS E. LOS E is considered unacceptable. However, LOS would also be unacceptable under EPAP No Project conditions, and the project-related increase in volume would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

- *Arch Road – east of SR 99 East Frontage Road.* This roadway segment would operate at LOS F. LOS F is considered unacceptable. However, LOS would also be unacceptable under EPAP No Project conditions, and the project-related increase in volume would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

TABLE 16-6
ROADWAY SEGMENT LOS – EPAP CONDITIONS

Roadway Segment	EPAP No Project LOS	EPAP Plus Project LOS
Arch-Airport Road E of Qantas Lane	**E**	**E (E)**
Arch Road E of SR 99 Frontage Road	**F**	**F (F)**
Arch Road E of Frontier Way	B	B (B)
Arch Road E of Fite Court	A	B (B)
Arch Road E of Newcastle Road	A	A (A)
Arch Road E of Logistics Drive	A	A (A)
Mariposa Road NW of Austin Road	A	A (A)
Mariposa Road NW of Newcastle Rd Extension	A	A (A)
Mariposa Road NW of Carpenter Road	A	A (A)
Austin Road S of Arch Road	C	C (C)
Mariposa Road E of Austin Road	A	A (A)
SR 99 N of Mariposa Road	C	C (C)
SR 99 N of Arch-Airport Road	D	D (D)
SR 99 S of Arch-Airport Road	C	C (C)

Note: LOS in parenthesis are for the Market Driven Project
Bold indicates unacceptable LOS.
Source: KD Anderson and Associates 2019, 2020.

In summary, for both roadway segments operating at an unacceptable LOS under EPAP Plus Proposed Project conditions, LOS values would be the same even without the project, and the project-related increase in volume would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, impacts on these roadway segments are considered less than significant. Since impacts on roadway segments are less than significant, the project would not significantly conflict with transportation plans related to roadway segments such as the RCMP.

Under EPAP conditions, two roadway segments were determined to operate at unacceptable LOS – the same roadway segments described above. However, LOS would also be unacceptable under EPAP No Project conditions on these segments, and the project-related increase in volume would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, impacts on these roadway segments under the development scenario are considered less than significant, and no mitigation measures are required.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-4: Motor Vehicle Transportation Plans - Ramp Junctions

Table 16-7 presents LOS at the study ramp junctions and weave areas under EPAP No Project and EPAP Plus Project conditions. More detailed information is available in the traffic impact stud in Appendix G of this EIR. LOS resulting from the Market Driven Project is also presented in Table 16-7; results are in parentheses.

TABLE 16-7
RAMP JUNCTION LOS – EPAP CONDITIONS

		EPAP No Project LOS		**EPAP Plus Project LOS**	
No.[1]	**Ramp Junction**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**
50	Mariposa SB off-ramp	A	A	A (A)	A (A)
51	Mariposa SB on-ramp loop	D	C	D (D)	C (C)
52	Mariposa SB on-ramp slip	C	B	C (C)	B (B)
53	Arch-Airport SB off-ramp	A	A	A (A)	A (A)
54	Arch-Airport SB on-ramp	B	C	B (B)	C (C)
55	Arch-Airport NB off-ramp	C	C	C (C)	C (C)
56	Arch-Airport NB on-ramp	C	**F**	C (C)	**F (F)**
57	Mariposa NB off-ramp	C	D	C (C)	D (D)
58	Mariposa NB on-ramp loop	C	**F**	C (C)	**F (F)**
59	Mariposa-Golden Gate NB weave	D	**F**	D (D)	**F (F)**

Notes:LOS in parenthesis are for the Market Driven Project
Bold indicates unacceptable LOS.
[1] See Figure 16-2.
Source: KD Anderson and Associates 2019, 2020.

Under EPAP Plus Project conditions, three ramp junctions were determined to operate at unacceptable LOS:

- *#56. Arch-Airport Road Northbound On-Ramp*. This ramp junction would operate at LOS C during the AM peak hour, and LOS F during the PM peak hour. LOS F is considered unacceptable. However, LOS would also be unacceptable under EPAP No Project conditions, and the project-related increase in freeway and ramp volumes would not be greater than five percent. Therefore, based on criteria in the

City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

- *#58. Mariposa Road Northbound On-Ramp Loop*. This ramp junction would operate at LOS C during the AM peak hour, and LOS F during the PM peak hour. LOS F is considered unacceptable. However, LOS would also be unacceptable under EPAP No Project conditions, and the project-related increase in freeway and ramp volumes would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

- *#59. Mariposa Road – Golden Gate Avenue Northbound Weave Area*. This weave area would operate at LOS D during the AM peak hour, and LOS F during the PM peak hour. LOS F is considered unacceptable. However, LOS would also be unacceptable under EPAP No Project conditions, and the project-related increase in freeway and ramp volumes would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

In summary, for all three ramp junctions operating at an unacceptable LOS under EPAP Plus Project conditions, LOS values would be the same even without the project, and the project-related change in volume would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, impacts on these ramp junctions are considered less than significant. Since impacts on ramp junctions are less than significant, the project would not significantly conflict with transportation plans related to ramp junctions such as the RCMP.

Under EPAP Plus conditions, three ramp junctions were determined to operate at unacceptable LOS – the same ramp junctions described above. However, LOS would also be unacceptable under EPAP No Project conditions at these ramp junctions, and the project-related increase in volume would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, impacts on these ramp junctions under the development scenario are considered less than significant, and no mitigation measures are required.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-5: Motor Vehicle Transportation Plans - Truck Routes

As noted above, the proposed project would have no significant impacts on transportation facilities analyzed in the traffic study. This includes facilities designated as truck routes. The traffic study included anticipated truck traffic in its analysis of impacts. Since the proposed project would have impacts on truck routes that are less than significant, the project would not conflict with transportation plans related to trucks, including the

RCMP and the Interregional STAA Study for I-5 and SR-99. Impacts on truck routes under the Market Driven Project would likewise be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-6: Conflicts with Non-Motor Vehicle Transportation Plans

The traffic study indicated that implementation of the project could generate an increase in demand for public transit service. Currently, there is no direct public transit service to the project site. A recent Unmet Transit Needs Assessment conducted by SJCOG did not identify any transit needs in the project vicinity (SJCOG 2019). The frequency and proximity of future transit service is not known at this time, so demand for transit cannot be quantified. However, it is expected that SJRTD can accommodate the additional passengers the project would generate. Public transit impacts are considered less than significant, and no mitigation measures are required.

The traffic study also noted that implementation of the project would result in an increase in demand for bicycle and pedestrian facilities. As noted, there are no bikeways in the area, although a future bikeway is planned, and there are limited sidewalks. Sidewalks would be installed along the Arch Road and Austin Road frontages of the Sanchez property, which would improve the safety and convenience of pedestrian travel along Arch Road and Austin Road. Impacts on bicycle and pedestrian facilities are considered less than significant, and no mitigation measures would be required.

The project would not conflict with plans that encourage alternative modes of transportation. It would not interfere with the installation of the future bikeway should that be implemented. Project impacts on non-vehicular transportation plans would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-7: Safety Hazards

The traffic impact study did not identify any traffic hazards that would result from the proposed development. Improvements would be made in accordance with the City's standard specifications, adopted in part to ensure vehicle safety. Project construction would involve movement of construction equipment onto and from the site and in-street construction to provide infrastructure and vehicle access. As discussed in Chapter 11.0, Hazards, construction work on Arch Road and Austin Road is not expected to require closure or any major restriction on public use of the roads. Once construction work is completed, project development would not obstruct any roadways. Contractors will be required to provide traffic safety control as warranted. Project impacts related to road hazards would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-8: Emergency Access

As described in Chapter 3.0, Project Description, the project proposes to add three driveways from Logistics Drive and four driveways off Austin Road to access the Sanchez property. This would provide seven access points for emergency vehicles to the property and development on it.

Access to the Hoggan property would be provided by an extension from an existing driveway off Frontier Way using existing easements; an additional entrance can also be extended from the Building 8 area of the Norcal Logistics Center. This would provide two access points for emergency vehicles to the Hoggan property. Project impacts on emergency access would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

SOURCE: KD Anderson

Figure 16-1
TRAFFIC STUDY INTERSECTIONS

SOURCE: KD Anderson

Figure 16-2
TRAFFIC STUDY RAMP JUNCTIONS

17.0 UTILITIES AND ENERGY

ENVIRONMENTAL SETTING

Wastewater Systems

As neither the Sanchez nor Hoggan property is developed, there are no wastewater systems on the project site, such as septic tanks or other individual collection systems. Upon annexation, future development on the project site would be served by the City of Stockton's wastewater collection and treatment system. The system is subdivided into 10 existing sub-collection systems. The project site is within the service area of the City's Wastewater Collection System No. 8.

The City's wastewater collection system consists of 884 miles of gravity mains and 30 miles of force (pressure) mains. These mains range in size from less than six inches to 72 inches in diameter. The gravity mains receive flows from approximately 554 miles of service laterals currently in use. The system also has 28 pump stations that range in capacity from 0.46 to 21.6 million gallons per day (mgd).

Existing wastewater lines greater than 18 inches in diameter have been installed along Arch Road and in the northern portion of the Norcal Logistics Center site. Smaller mains, between 10 and 18 inches in diameter, have been installed throughout the Norcal Logistics Center site. These lines lead to an existing City pump station located along Arch Road near the SR 99 interchange (West Yost 2017a).

Collected wastewater from all portions of the City flows to the City of Stockton's Regional Wastewater Control Facility, located on Navy Drive in southwest Stockton. The Regional Wastewater Control Facility provides secondary and tertiary treatment of wastewater, after which the treated effluent is discharged into the San Joaquin River in accordance with the terms of NPDES permit No. CA0079138 issued by the RWQCB. The NPDES permit includes recent California Code of Regulations Title 22 requirements related to reclaimed wastewater.

The Regional Wastewater Control Facility has a main treatment plant with a designed average dry weather flow capacity of 48 mgd, and a tertiary treatment plant with a designed average dry weather flow and permitted capacity of 55 mgd. Approximately 35 mgd of average dry weather flow was processed in 2005, but the amount has decreased to an estimated 27 mgd in 2017 due to water conservation measures associated with a recent drought and economic recession (West Yost 2017a).

Water Systems

There are no municipal water systems currently serving the project site. An irrigation well is located along the eastern boundary of the Sanchez property, adjacent to Weber Slough. An additional irrigation well is adjacent to the southeast corner of the Hoggan property. Upon annexation, future development on both properties would be served by the City of Stockton's domestic water system. As a consequence, it is expected that both wells would be abandoned, in accordance with County Environmental Health Department requirements.

Municipal water service to the project area generally is provided by the City of Stockton Municipal Utilities Department (COSMUD). The COSMUD water distribution system is separated into a northern and southern system, which are separated by the service area for Cal Water, a private water company. The project site is within the southern COSMUD system, which serves the Stockton Metropolitan Airport and Arch Road areas, including the Norcal Logistics Center site.

COSMUD's water supply is derived from both surface and groundwater. Surface water comprises approximately 73% of the water supply, and the other 27% is produced by municipal wells. Surface water is provided by purchases from the Stockton East Water District (SEWD) and the Woodbridge Irrigation District, and from the City's Delta Water Supply Project (DWSP). The City operates a total of 32 municipal groundwater wells, seven of which are in South Stockton. Total available water to COSMUD's water system in 2015 was 24,843 acre-feet (City of Stockton 2018b). COSMUD has a total water right or safe yield capacity of 96,480 acre-feet (Brown and Caldwell 2016).

Water treatment is provided by SEWD's Water Treatment Plant, with 60 mgd capacity, and COSMUD's DWSP water treatment facility, with 30 mgd capacity. The latter facility treats surface water from the Delta and from the Woodbridge Irrigation District. COSMUD operates storage facilities with a total capacity of 33.7 million gallons, and it has pumping facilities with a total capacity of 88,592 gallons per minute (City of Stockton 2018b). Water for the southern COSMUD system is provided by the seven groundwater wells, ranging in capacity from 900 to 2,500 gallons per minute (ESA 2014).

The City's water distribution system consists of 590 miles of distribution pipelines and transmission mains (Brown and Caldwell 2016). Water lines have been extended to the Norcal Logistics Center area, including along Arch Road and Logistics Drive and to development along Gold River Lane.

Storm Drainage

Currently there are no constructed storm drainage systems serving the project site. Storm water generally percolates into the ground or runs to adjacent North Littlejohns Creek or Weber Slough. Upon annexation, the project site would be served by the City's storm water drainage system. The storm drain system includes 620 miles of 4-inch to 96-inch diameter storm drains and over 22,500 drain inlets. A total of 58 pump stations and 19 lift stations are used to pump drainage into receiving waters. Within the Norcal Logistics

Center area, there are three storm drainage lines at least 39 inches in diameter and one drainage line along Logistics Drive between 24 and 36 inches in diameter. There are also two pump stations located along Newcastle Road, with a third located downstream from the project site along North Littlejohns Creek (West Yost 2017b).

Storm drainage from the Norcal Logistics Center is routed to two existing detention basins before terminal discharge. One, at the intersection of Arch Road and Newcastle Road, discharges collected drainage into Weber Slough. The other, at the northern end of Newcastle Road, discharges into North Littlejohns Creek (see Chapter 12.0, Hydrology). Drainage waters are discharged to the terminal drainage when capacity is available so as not to exceed the capacity of the waterways (ESA 2014). The Hoggan property is included in the storm drain master plan for the Norcal Logistics Center, and a drainage main has been extended to the boundary between the Hoggan property and the adjacent center parcel (see Chapter 3.0, Project Description).

As discussed in Chapter 12.0, Hydrology, storm water quality is regulated by the SWRCB pursuant to the federal Clean Water Act and the NPDES program. The City of Stockton implements these regulations through the provisions of its Storm Water Management Program and Storm Water Quality Control Criteria Plan as required by its MS4 storm water permit.

Solid Waste

No solid waste collection services are currently provided to the project site; it is not within an area where collection service is mandatory. The City's exclusive franchise haulers, Republic Services and Waste Management, Inc., provide solid waste collection service Stockton to both residential and commercial uses, including source-separated curbside recycling. Upon annexation, the project site would be served by Waste Management. In 2017, the City of Stockton generated approximately 348,714 tons of solid waste (CalRecycle 2019a).

According to the General Plan 2035 Background Report, the City's solid waste is transported and disposed of primarily at three active sanitary landfills in San Joaquin County: the Forward Landfill on South Austin Road with available capacity to 2020, the North County Landfill on East Harney Lane with available capacity to 2048, and the Foothill Sanitary Landfill on North Waverly Road with available capacity to 2082. The latest information indicates that total capacity available at all three landfills is approximately 182.5 million cubic yards; however, some of the information is dated. The total maximum throughput permitted at all three landfills is 11,013 tons per day (CalRecycle 2019b).

There are 50 solid waste diversion programs in Stockton. These include composting; facility recovery, household hazardous waste collection and education programs, recycling, source reduction programs, and waste-to-energy. For 2015, the latest year for which data are available, target disposal rates in accordance with AB 939 (see below) for the City of Stockton were 6.9 pounds per day per resident and 21.0 pounds per day per

employee. Actual rates were 5.1 pounds per day per resident and 16.9 pounds per day per employee (City of Stockton 2018b).

Communications Systems

AT&T provides telephone services to the Stockton area. Services are available to the project site from existing lines located on joint pole systems with electrical facilities. Comcast provides cable television services to the City of Stockton and vicinity; existing cables are generally located on the electrical pole system. These state-regulated franchise utilities are obligated to extend services to new development sites as necessary. The Stockton Municipal Code requires the extension of services to any area annexed during the term of the franchise.

Energy

CEQA requires that an EIR includes a discussion of the potential energy impacts of a proposed project, with emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. Appendix F of the CEQA Guidelines provides guidance for a discussion of energy impacts. Subjects may include identifying wasteful, inefficient, and unnecessary consumption of energy during project construction, operation, maintenance, and/or removal that cannot be feasibly mitigated, and the pre-emption of future energy development or future energy conservation. The most recent revisions to the CEQA Guidelines include a new section in the Environmental Checklist in Appendix G that addresses energy.

Energy Usage

According to the latest information from the U.S. Energy Information Administration, California consumed 7,830 trillion British thermal units (BTUs) of energy in 2016. Only Texas consumed more energy. However, consumption per capita in California was 197 million BTUs, which was lower than all states and the District of Columbia except for two states. Transportation accounted for approximately 39.8% of the energy consumed in California, followed by industrial with 23.7%, commercial with 18.9%, and residential with 17.7%. Natural gas accounted for approximately 2,250 trillion BTUs of the energy consumed in California, while motor gasoline accounted for approximately 1,700 trillion BTUs. California ranked third in the U.S. in petroleum production, third in conventional hydroelectric generation, second in net electricity generation from all other renewable energy resources combined, and first as a producer of electricity from solar, geothermal, and biomass resources (EIA 2017).

Electricity is a major energy source for residences and businesses in California. In 2016, electricity consumption in California totaled approximately 285,701 gigawatt-hours (CEC 2018a). In San Joaquin County, electricity consumption in 2016 totaled approximately 5,457 million kilowatt-hours (kWh) [5,457 gigawatt-hours], of which approximately 3,698 million kWh were consumed by non-residential uses and the remainder by residential uses (CEC 2018b). As indicated above, natural gas is another

major energy source. In 2016, natural gas consumption in California totaled approximately 12,750 million therms (CEC 2018a). In San Joaquin County, natural gas consumption in 2016 totaled approximately 195 million therms, of which approximately 115 million therms were consumed by non-residential uses and the remainder by residential uses (CEC 2018c).

Motor vehicle use accounts for substantial energy usage. The SJCOG estimated countywide VMT in 2015 was approximately 6.52 billion, which led to the consumption of approximately 511.36 million gallons of gasoline and diesel fuel (SJCOG 2018). Travel mileage in San Joaquin County is influenced by the County's relative jobs/housing imbalance and the resulting commute patterns, which involve relatively long commute trips. Approximately 30% of the employed workforce living within San Joaquin County commute to out-of-county job sites (SJCOG 2018).

Energy Systems and Facilities

Electrical usage within most of the County, including Stockton, is served from a transmission network owned by PG&E. Principal elements of the PG&E network are several transmission lines ranging in voltage from 115 kilovolts (kV) to 500 kV, the highest voltage lines that are in the southwestern corner of the County. In the project vicinity, a 230-kV transmission line traverses the approximate northern boundary of the Norcal Logistics Center site (San Joaquin County 2016b). PG&E electrical facilities in the project vicinity include overhead 12-kV distribution lines along Austin Road and Arch Road and along the eastern boundary of the Hoggan property, and underground facilities along existing streets within the Norcal Logistics Center site.

Natural gas service is available in Stockton from PG&E, the only provider of such service. Interregional gas mains are located along the SR 99 corridor, and branch lines extend to and through the cities, with service pipelines located primarily within city streets. Existing PG&E utility infrastructure is located near the intersection of Arch Road and Newcastle Road (ESA 2014).

As with the communications systems, state-regulated energy franchise utilities are obligated to extend services to new development sites as necessary. The Stockton Municipal Code requires the extension of services to any area annexed during the term of the franchise.

REGULATORY FRAMEWORK

State

Solid Waste Regulations

The California Integrated Waste Management Act (AB 939), enacted in 1989 and subsequently amended, requires local jurisdictions to divert at least 50% of their solid

waste from landfills by 2000. The 50% recycling of solid waste places the City in compliance with AB 939. More recent legislation, AB 341, increased the recycling requirement to 75% of solid waste by 2020. Beginning April 1, 2016, the State's Mandatory Organic Waste Recycling law (AB 1826) phases in requirements for businesses, including multifamily properties of five or more units, based on the amount and type of waste the business produces weekly, with full implementation in 2019.

- January 1, 2017: Businesses that generate 4 cubic yards of organic waste per week arrange organic waste recycling services.
- January 1, 2019: Businesses that generate 4 cubic yards or more of commercial solid waste per week arrange organic waste recycling services.

Stockton Municipal Code Sections 8.28.020 through 8.28.070 is the City's Construction and Demolition Debris Waste Reduction Ordinance. The ordinance requires all permit applicants identify the debris the project will generate and recycle accordingly. Permit applicants for covered project are required to meet the waste diversion requirement of at least 50 percent of materials generated as discards by the project, regardless of whether the permit applicant performs the work or hires contractors, subcontractors or others to perform the work.

California Energy Code

California has adopted comprehensive energy efficiency standards as part of its Building Standards Code, California Codes of Regulations, Title 24. Part 6 of Title 24, also known as the California Energy Code, contains energy conservation standards applicable to all residential and non-residential buildings throughout California, including schools and community colleges. These standards are occasionally updated. The California Energy Commission estimated that the implementation of the 2013 California Energy Code may reduce statewide annual electricity consumption by approximately 613 GWh per year, electrical peak demand by 195 megawatts, and natural gas consumption by 10 million therms per year (CEC 2012). The City of Stockton has adopted the 2013 version of the California Energy Code as part of its building codes.

California Green Building Standards Code (CALGreen)

In 2009, the California Building Standards Commission adopted a voluntary Green Building Standards Code, also known as CALGreen. In January 2010, the Commission made CALGreen mandatory, effective January 1, 2011, and it has since been incorporated in the State's Building Standards Code, California Codes of Regulations, Title 24. Part 11. CALGreen sets forth mandatory measures, applicable to new residential and nonresidential structures as well as additions and alterations, on water efficiency and conservation, building material conservation, interior environmental quality, and energy efficiency. Mandatory energy efficiency measures for nonresidential structures include compliance with the latest building energy efficiency measures adopted by the State. While CALGreen sets forth energy efficiency measures, it does so through the California Energy Code rather than by its own regulations.

The City of Stockton has not adopted CALGreen as part of its building codes. However, as noted above, it has incorporated the 2013 California Energy Code, which contains the measures deemed mandatory by CALGreen.

Renewables Portfolio Standard

In 2002, California adopted a Renewables Portfolio Standard, and subsequently modified it in 2006 and 2011. Under the 2011 modifications, all electricity retailers in the state must generate 20% of electricity they sell from renewable energy sources (i.e., solar, wind, geothermal, hydroelectric from small generators, etc.) by the end of 2013, 25% by the end of 2016, and 33% by the end of 2020. As of the end of 2017, California derived 30% of its electricity from renewable sources, which is within 3% of the 2020 target and within 20% of the 2030 target (CEC 2018a).

In 2015, SB 350 was signed into law, which increased the electricity generation requirement from renewable sources to 50% by 2030. Most recently, in 2018, SB 100 was enacted. SB 100 accelerated the schedule for 50% electricity generation from renewable sources to 2026 and set a goal of 60% electrical generation from renewable sources by 2030. It also set the goal that zero-carbon resources will supply 100% of electricity to California by 2045. Although not associated with Executive Order B-55-18, the goals of SB 100 are consistent with the carbon neutrality goal of the executive order (see Chapter 10.0, Greenhouse Gas Emissions).

City of Stockton

Wastewater Master Plan and Supplement

The City of Stockton adopted its 2035 Wastewater Master Plan in 2008. The plan describes the major elements of the wastewater collection system and treatment facilities needed to serve development anticipated in the 2035 General Plan. A supplement to the Wastewater Master Plan was prepared in 2017 based on anticipated development in the Stockton General Plan 2040. The supplement evaluated the future needs of the City's wastewater system overall and in specific areas. The wastewater system was divided into ten existing sub-collection systems and four future sub-collection systems. The project site is in System 8. According to the supplement, fewer trunk upsizing projects and extensions into new service areas will be needed by 2040 than previously identified for the 2035 buildout (West Yost 2017a).

Water Master Plan and Supplement

The City of Stockton adopted its Water Master Plan in 2008. The plan describes the major elements of the COSMUD potable water system needed to serve development anticipated in the 2035 General Plan. A supplement to the Water Master Plan was prepared in 2017 based on anticipated development in the Stockton General Plan 2040. The supplement evaluated the future needs of the City's water system overall. According to the supplement, in the COSMUD service area, the average day water demands for

2040 would be 60% less than those estimated for the 2035 buildout. Required new storage would be less for 2040 than previously identified for 2035, and potentially no new booster capacity would be needed (West Yost 2017c).

Storm Drain Master Plan and Supplement

The City of Stockton adopted its Storm Drain Master Plan in 2008. The plan defines a process and criteria for future detailed sub-watershed storm drain planning in growth areas within the City's 2035 General Plan boundary. A supplement to the Storm Drain Master Plan was prepared in 2017 based on anticipated development in the Stockton General Plan 2040. The supplement evaluated the future needs of the City's storm drainage system overall, including detention basins and pump stations (West Yost 2017b). The supplement did not compare storm drainage system requirements for buildout under the General Plan 2040 and buildout under the 2035 General Plan.

Stockton General Plan 2040

The following Stockton General Plan 2040 policies and implementing actions are relevant to this project (City of Stockton 2018a):

- Action LU-5.1.C: Require landscape plans to incorporate native and drought-tolerant plants in order to preserve the visual integrity of the landscape, conserve water, provide habitat conditions suitable for native vegetation, and ensure that a maximum number and variety of well-adapted plants are maintained.

- Policy LU-5.4: Require water and energy conservation and efficiency in both new construction and retrofits.

- Action LU-5.4.A: Require all new development, including major rehabilitation, renovation, and redevelopment, to adopt best management practices for water use efficiency and demonstrate specific water conservation measures.

- Action LU-5.4.B: Require all new development, including major rehabilitation, renovation, and redevelopment, to incorporate feasible and appropriate energy conservation and green building practices, such as building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.

- Action LU-6.3.A: Require development to mitigate any impacts to existing sewer, water, stormwater, street, fire station, park, or library infrastructure that would reduce service levels. [See also Chapter 15.0, Public Services.]

- Action SAF-4.1.A: Require the construction and operation of new development to implement best practices that reduce air pollutant emissions, including through installation of Energy Star-certified appliances.

- Action CH-5.2.B: Continue to require recycling in private and public operations, including construction/demolition debris.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects,
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years,
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments,
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or
- Not comply with federal, state, and local statutes and regulations related to solid waste.

Recently, CEQA Guidelines Appendix G was updated to include questions regarding energy consumption and conservation. According to the updated Appendix G, a project may have a significant impact on the environment if it would:

- Result in potentially significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

All calculations are based on the proposed project. The Market Driven Project would have less of an environmental impact related to solid waste and energy, since factors based on building square footage were used in the project calculations. Storm drainage impacts would not vary significantly between the two development scenarios.

Impact UTIL-1: Wastewater Services and Facilities

The proposed development on the project site would require wastewater service and off-site service and thus connection to the City's wastewater system, including the installation of new on-site sewer lines and connection to existing City mains in the area. This is not expected to have a significant environmental impact, as much of the area is

already developed and has connections to the City's wastewater system. Existing sewer lines in the vicinity are adequately sized to collect wastewater from proposed development.

A technical supplement to the City's 2035 Wastewater Master Plan uses a flow factor for new industrial development of 1,400 gallons per day per acre (West Yost 2017a). Based on this factor, it is estimated that development on the project site would generate 237,678 gallons per day of wastewater, or approximately 0.2 mgd. The RWCF currently has approximately 21.0 mgd of main treatment plant capacity to serve additional development. The proposed project would involve an increase in sewage generation that would not exceed the City's treatment capacity. Proposed development under the project would be consistent with the development anticipated in the supplement to the City's Wastewater Master Plan. Project impacts on the City's wastewater system would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-2: Water Services and Facilities

As with wastewater, the proposed development on the project site would require water service and thus connection to the City's water system, including the installation of new on-site water lines and connection to existing City mains in the area. This is not expected to have a significant environmental impact, as much of the area is already developed and has connections to the water system.

As of 2015, the City had 96,480 acre-feet of water per year available by right or from safe yield. Based upon the 2015 water demand of 26,319 acre-feet per year, the City had 70,161 acre-feet of water available to serve additional development (Brown and Caldwell 2016). A technical supplement to the City's 2035 Wastewater Master Plan uses a water demand factor for industrial development of 1,785 gallons per day per acre (West Yost 2017a). Based on this factor, it is estimated that proposed project development would generate a water demand of approximately 303,039 gallons per day, or approximately 339.45 acre-feet per year. The City has adequate water supplies to serve the proposed development.

The proposed project would involve an increase in water demand, but the City would not be required to obtain additional supplies. Proposed development under the project would be consistent with the development anticipated in the supplement to the City's Water Master Plan. Project impacts on the City's water system would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-3: Stormwater Services and Facilities

There are no existing impervious surfaces on both properties, which are currently undeveloped lands covered with grasses and weeds. Proposed development would result in the construction of new rooftop, pavement, and other impermeable surfaces that would increase runoff from the project site.

Drainage from the Hoggan property would be collected by on-site storm drains routed to proposed detention basins. Runoff collected in these proposed on-site basins would be conveyed to the drainage system of the Norcal Logistics Center. The ultimate configuration of one of the center's detention basins has been designed to accommodate drainage collected from the Hoggan property, and it would pump storm drainage at a metered flow into North Littlejohns Creek. This basin currently is operating as an interim retention basin and has limited service capacity (Mahoney pers. comm.).

Storm drainage from the Sanchez property would be collected in a detention basin to be constructed in the northwest corner of the property. The collected runoff would be discharged from the detention basin to Weber Slough. Chapter 12.0, Hydrology, discusses the proposed discharge to Weber Slough, which would be controlled by flow monitoring devices in the slough, thereby ensuring that slough capacity would not be exceeded. Project impacts related to storm drainage facilities are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-4: Solid Waste

Development of the project site would generate a substantial new demand for solid waste disposal services. CalRecycle posted a solid waste generation rate for warehouses from a solid waste guide for development projects in Santa Barbara County. According to this source, the amount of solid waste generated by a warehouse would be 1.42 pounds per 100 square feet per day (CalRecycle 2019c). Based upon this factor, the estimated amount of solid waste generated by proposed project development would be approximately 43,841 pounds per day, or approximately 8,000 tons per year. While the content of a ton of solid waste varies, it has been approximated that a cubic yard of solid waste weighs 300 pounds, so the project would generate approximately 53,333 cubic yards of solid waste per year. As noted, all three County landfills have an approximate capacity of 182.5 million cubic yards, so adequate capacity exists for the project's solid waste. The total maximum daily throughput at the County landfills is 11,013 tons, so daily solid waste loads from project development can be accommodated.

As indicated in the Environmental Setting above, existing landfills in the County would have adequate capacity to accommodate the amount of solid waste that would be generated by the project. The project would comply with applicable state and local statutes and regulations related to solid waste as discussed above. Project impacts on solid waste are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-5: Energy and Telecommunications Facilities

As noted above, existing electrical, natural gas, and telephone lines are available adjacent to or near the project site, and the Stockton Municipal Code requires the extension of services to any area annexed during the term of the franchise. The project site would have access to these services without requiring significant expansion of these systems, since lines are available.

Recently, PG&E filed for bankruptcy protection in anticipation of substantial legal liabilities the company expects to incur as a result of recent destructive wildfires in its service area, some of which were determined to have been started by PG&E transmission lines. PG&E has stated that the bankruptcy will not disrupt delivery of electricity and natural gas to its customers. It is expected that PG&E would extend its services to the project site as required, especially since existing utility facilities are in the area. Project impacts on energy and communications systems would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-6: Project Energy Consumption

The project proposes development of approximately 2.8 million square feet of warehouse space, with maximum space of approximately 3.1 million square feet. According to the 2012 Commercial Buildings Energy Consumption Survey by the EIA, the most recent such survey conducted, warehouse and storage facilities consumed on average 6.6 kWh of electricity per square foot annually and 19.4 cubic feet of natural gas per square foot annually (EIA 2012). Based upon these factors, proposed development on the project site would consume approximately 18,705,377 kWh of electricity and 54,982,471 cubic feet of natural gas annually. The maximum energy consumption would be approximately 20,383,546 kWh of electricity and 59,915,270 cubic feet of natural gas annually.

Development on the project site would be required to comply with the adopted California Energy Code, which specifies building energy efficiency standards. Compliance with the California Energy Code would likely lead to less electricity and natural gas consumption by project development. Along with compliance with the Renewables Portfolio Standard targets, the project would consume a smaller amount of fossil fuels.

As indicated in the CalEEMod run (see Appendix C), VMT generated by traffic associated with project development would be 15,147,997 miles annually under unmitigated conditions. With the project features and regulations that would mitigate GHG emissions, as described in Chapter 10.0, Greenhouse Gas Emissions, total annual VMT would be 12,943,595 miles. Based on estimates by SJCOG, this would lead to a

reduction of approximately 172,834 gallons of gasoline and diesel fuel consumed annually by project traffic from business-as-usual conditions.

Project construction would consume substantial amounts of energy in grading, development of buildings and site improvements, and installation of utilities and street improvements. Implementation of GHG emission reduction mitigation measures (see Chapter 10.0, Greenhouse Gas Emissions) would result in reductions in energy expenditures associated with construction. Because of the relatively flat topography of the site, the project would not require any extraordinary grading requirements. Project construction is not expected to involve substantially inefficient, wasteful, or unnecessary consumption of energy.

In summary, the project would consume less energy in building operations and vehicle trips associated with project development, and the project would implement measures that would reduce energy consumption. The project would not consume energy in a manner that is wasteful, inefficient, or unnecessary.

Level of Significance: Less than significant

Mitigation Measures: None required

18.0 CUMULATIVE IMPACTS

18.1 INTRODUCTION TO CUMULATIVE IMPACTS

A cumulative impact is an environmental effect that may result from the combination of two or more environmental effects associated with the proposed project, or from the combination of one or more project environmental effects with related environmental effects caused by other closely related projects. Cumulative impacts may also result when a project's environmental effects compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines Section 15355).

CEQA Guidelines Section 15130 states an EIR must discuss the cumulative environmental impacts of a project "when the project's incremental effect is cumulatively considerable." As described in CEQA Guidelines Section 15065(a)(3), "cumulatively considerable" effects occur when the incremental effects of an individual project are significant when viewed in connection with the effects of other closely related projects, including past projects, current projects, and probable future projects.

If the project does not involve a considerable contribution to a significant cumulative effect, then the project's effect does not need to be considered significant, and discussion in the EIR can be limited to the basis for that conclusion. A project's contribution is not cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. As provided in *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996), a project's considerable contribution to a significant cumulative impact can be reduced to a level that is less than considerable with mitigation measures.

The analysis of cumulative impacts is to be based on either 1) a list of past, present, and probable future projects producing related or cumulative impacts, or 2) on a summary of projections contained in an adopted general plan or related planning document, or in a prior certified environmental document which described or evaluated regional or area-wide conditions contributing to the cumulative impact. For this EIR, the projection approach is used, based upon the Stockton General Plan 2040.

For each environmental issue area, the cumulative impact analysis:

- Describes the geographic context for the analysis,
- Evaluates whether there exists the potential for a significant cumulative impact in that environmental issue area,

- Analyzes whether the project would make a cumulatively considerable contribution to a significant cumulative impact, or make significant a cumulative impact that was otherwise less than significant, and

- Determines whether and how a significant cumulative impact, or a considerable contribution to such an impact, can feasibly be avoided or reduced to a less than significant or less than considerable level.

Where significant cumulative impacts are identified, the EIR must examine reasonable, feasible options for mitigating or avoiding the project's contribution to a level that is less than considerable. In some cases, the only feasible mitigation may involve the adoption of ordinances or regulations.

18.2 CUMULATIVE IMPACT SETTING

The potential cumulative impacts of long-range urban development in the City of Stockton through the year 2040 are analyzed in the Stockton General Plan 2040 EIR (City of Stockton 2018b). The General Plan 2040 EIR considered the environmental effects of buildout of all lands designated in the Stockton General Plan for urban development, including development of the project site and other undeveloped lands in southeastern Stockton. The proposed project would contribute to the long-range cumulative environmental impacts identified in the General Plan 2040 EIR, including potential cumulative impacts of planned urban development on the resources and environmental conditions addressed at a project level in this EIR.

More specifically, the GPEIR Section 6.2 (Unavoidable Significant Effects) identified certain cumulatively significant and unavoidable impacts as part of implementing the 2040 General Plan. This required the Stockton City Council to adopt a Statement of Overriding Considerations as part of the overall 2040 General Plan adoption.

The proposed project would involve development consistent with the existing Industrial land use designation of the site and quantities of buildout development assumed in the General Plan 2040 EIR. As a result, the project would contribute to the potential cumulative impacts associated with urban development in the City of Stockton in a manner consistent with the General Plan 2040 EIR analysis. It would not involve any known change in, or any considerable new contribution to, the significant cumulative impacts identified in the General Plan 2040 EIR.

18.3 CUMULATIVE IMPACTS OF PROJECT

18.3.1 Aesthetics and Visual Resources

Cumulative impacts on aesthetics are assumed to be localized; that is, aesthetic changes at a site will not generally impact aesthetics at another site if the sites are not visually

connected in some fashion. A visual connection could be established by juxtaposition or by location along a travel corridor, among other possibilities.

The potential aesthetic effects of urban development were addressed extensively in the Stockton General Plan 2040 and associated EIR. Planned urban development in the Stockton area would result in extensive changes in viewsheds as lands surrounding the existing urban area are converted from rural agricultural to urban use. The proposed project would result in industrial development in a portion of southeastern Stockton. As discussed in Chapter 4.0, Aesthetics, the project would substitute views of new industrial development for existing views of agricultural and vacant land and surrounding light industrial development.

The project vicinity is subject to extensive night lighting including parking and circulation areas on existing Norcal Logistics Center industrial sites, CDCR facilities to the south, and the extensively illuminated BNSF intermodal facility to the east. The proposed project, along with other development projects in the area, would be required to meet City design review standards through requirements imposed during their respective project review processes. These would include applicable city outdoor lighting standards intended to minimize any light and glare impacts on adjacent properties. These standards require that all light sources be shielded and directed downwards so as to minimize trespass light and glare on nearby residences. Additionally, all outdoor lighting sources of 1,000 lumens or greater are required to be fully shielded. With the observance of these standards, the project would not involve a considerable contribution to existing prevailing lighting in the project area.

There are no scenic vistas or resources in the project area, other than the riparian area along North Littlejohns Creek, which would be protected from development by a buffer area designated under a USFWS agreement. The aesthetic environment of the project site, particularly the Hoggan property, is already dominated by views of adjoining light industrial and warehouse uses. Proposed development would be consistent with the existing industrial/warehouse landscape. The project would not result in a considerable new contribution to any cumulatively significant aesthetic effect.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.2 Agricultural Resources

Cumulative impacts on agricultural land resources may be assessed on a regional or local level; analysis at a local level yields a more conservative result. The Hoggan property had been used for past agricultural activities but is now vacant. Development proposed for the Hoggan property would result in the conversion of approximately 20 acres of Farmland of Local Importance, which is not considered Farmland as defined by the Environmental Checklist in CEQA Guidelines Appendix G. The Sanchez property is currently being used for agricultural production, and land within this property is designated Prime Farmland and Farmland of Statewide Importance, which are considered Farmland under CEQA Guidelines Appendix G.

Development of the project site will be subject to the City's Agricultural Land Mitigation Program. The Program applies to all projects under City jurisdiction that would result in the conversion of agricultural land to a non-agricultural use. The mitigation program requires that projects provide "agricultural mitigation land" - land encumbered by an agricultural conservation easement - on a 1:1 basis for each acre of important agricultural land converted by the project to be dedicated to a qualifying management entity, such as the Central Valley Farmland Trust. Alternatively, projects may pay the City's established Agricultural Land Mitigation Fee, which is collected by the City, held in a dedicated account, and then used to acquire agricultural mitigation land or to pay for the monitoring and administrative costs of the program. The fees may also be transferred to a qualifying entity for the same purpose.

Despite the applicability of the Agricultural Land Mitigation Program, the impacts of conversion of agricultural land in conjunction with urban development as proposed in the Stockton General Plan 2040 was identified in the Stockton General Plan 2040 EIR as a significant and unavoidable adverse effect. A Statement of Overriding Considerations for this issue was adopted by the Stockton City Council and remains operative. CEQA Guidelines Section 15152(d) states that where an EIR has been prepared and certified for a plan, a lead agency for a later project consistent with the plan should limit an EIR on the later project to effects which 1) were not examined as significant effects on the environment in the prior EIR, or 2) are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.

As noted, development of the Hoggan property would not result in the conversion of Farmland. The Sanchez property would be subject to the City's Agricultural Lands Mitigation Program. Compliance with the Agricultural Lands Mitigation Program would compensate for the impact of Farmland conversion on the Sanchez property. Significant and Unavoidable impacts related to agricultural land conversion have already been analyzed in the Stockton General Plan 2040 EIR and include:

- Impact AG-1: Although the proposed General Plan includes policies and actions that would reduce and partially offset the conversion of farmland, it designates approximately 16,160 acres of farmlands of concern under CEQA for non-agricultural uses.

- Impact AG-2: The proposed General Plan designates 2,464 acres of lands with active Williamson Act contracts for non-agricultural uses.

Specifically, the GPEIR anticipated farmland conversation for the Sanchez Parcel (GPEIR Figure 4.2-4) while acknowledging it was still subject to the Williamson Act. Agriculture on the Hoggan site has been inactive for some time, and the site is surrounded by non-agricultural uses on all four sides. No new or more severe impacts are associated with the project. Therefore, based upon the criteria set by CEQA Guidelines Section 15152(d), as noted in Chapter 5.0, the project would not involve a considerable contribution to any cumulative agricultural resource impacts.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None feasible

18.3.3 Air Quality

Cumulative impacts on air resources may be assessed at both a regional and local level. The project would involve contributions to potential air quality impacts both at the regional level - the San Joaquin Valley Air Basin - and the local level. Air Basin conditions are described in detail in Chapter 6.0, Air Quality. Past and present agricultural, urban, and other development within the Air Basin has resulted in significant air quality impacts. The Air Basin has been designated "nonattainment" for federal and/or state ambient air quality standards for two criteria air pollutants: ozone and particulate matter. Exceedance of these defined standards results in adverse health effects on Air Basin residents; the potential health effects associated with the two pollutants are discussed in Chapter 6.0.

The potential air quality impacts of planned urbanization in the City of Stockton were addressed in the Stockton General Plan 2040 EIR and were found to be significant. These impacts included:

- Impact AQ-1: Implementation of the proposed General Plan would result in the generation of substantial long-term criteria air pollutant emissions that would exceed the San Joaquin Valley Air Pollution Control District (SJVAPCD) regional significance thresholds and would therefore not be considered consistent with the existing Air Quality Management Plans.

- Impact AQ-2: Construction activities associated with implementation of the proposed General Plan and UMPS could exceed the SJVAPCD regional significance thresholds.

- Impact AQ-3: Operation of development projects allowed under the proposed General Plan would generate emissions that would exceed the SJVAPCD regional significance thresholds for VOC, NOX, CO, PM10, and PM2.5.

- Impact AQ-4: Development allowed under the proposed General Plan and UMPS could result in short- and long-term emissions that could cause or contribute to a violation of the ambient air quality standards.

- Impact GHG-1: Implementation of the proposed General Plan would result in a substantial increase in greenhouse emissions.

The General Plan 2040 EIR identified mitigation measures, including source controls and transportation management systems, and these measures were incorporated into the General Plan 2040 and are a part of the City's environmental review, permitting and fee structures. Nevertheless, even with the adopted mitigation measures, the cumulative impact of planned urbanization on ozone precursor emissions would be significant and unavoidable. A Statement of Overriding Considerations was adopted for this impact in conjunction with the approval of the Stockton General Plan 2040. In accordance with CEQA Guidelines Section 15152(d), this EIR focuses on project-specific effects.

Chapter 6.0 quantifies and describes the criteria air pollutant contributions of the proposed project to the Air Basin. The contributions, which include ozone precursors and particulate matter, would be added to both existing and predicted future levels of these pollutants. While SJVAPCD air quality management plans and programs are oriented to reduction of existing air pollution and attainment of ambient air quality standards, air pollution generated by the project would contribute at least to existing, significant exceedances of air standards.

CalEEMod estimates of air pollutant emissions from construction and operation of the proposed project and Market Driven Project indicate that neither SJVAPCD construction nor operational significance thresholds would be exceeded, with application of SJVAPCD rules. The SJVAPCD's Guide for Assessing and Mitigating Air Quality Impacts notes that project emissions may be cumulatively considerable even if they are below SJVAPCD significance thresholds. However, as discussed in Chapter 6.0, Air Quality, the significance thresholds are applied to evaluate regional impacts of project-specific emissions of air pollutants. Regional impacts of a project can be characterized in terms of total annual emissions of criteria pollutants and their impact on SJVAPCD's ability to reach attainment of criteria pollutant standards. On that basis, the proposed project would not result in a considerable contribution to a significant cumulative air quality impact in the Air Basin.

The proposed project would involve emissions of TACs, mainly diesel PM from truck traffic. The Norcal Logistics Center was estimated to generate 3.35 tons per year of operational PM_{10} exhaust emissions, which contain diesel PM (ESA 2014). The proposed project, as described in Chapter 6.0, would generate approximately 0.18 tons of operational PM_{10} exhaust emissions, which is approximately five percent of the Norcal Logistics Center emissions. The Norcal Logistics Center EIR concluded that impacts from diesel PM emissions would be less than significant (ESA 2014). Since the proposed project would contribute minimally to diesel PM emissions, it would not result in a considerable contribution to diesel PM impacts.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.4 Biological Resources

Cumulative impacts on biological resources can be addressed in several potential contexts, including bioregions, watersheds, or habitat areas for individual sensitive species. The project vicinity has been subject to significant biological resource impacts because of agricultural activities and urban development. As a result, and as characterized in Chapter 7.0, Biological Resources, the project vicinity does not support substantial populations of common or sensitive wildlife species. However, trees in the project vicinity may be used for nesting by protected and sensitive bird species, particularly in the riparian area along North Littlejohns Creek. As discussed in Chapter 3.0, Project Description, a buffer area approximately 50 feet from the south bank of North Littlejohns

Creek would be in place, which would avoid any loss of riparian vegetation that could provide nesting habitat.

All projects would be required to participate in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) by the respective permitting agencies. The SJMSCP would require preservation of existing sensitive lands, creation of new comparable habitat on the project site, or payment of fees that would be used to secure preserve lands outside the project site to compensate for the loss of sensitive habitat. In addition, the SJMSCP would require compliance with ITMMs that avoid direct impacts of development on special-status species. SJMSCP compliance would reduce any potential contribution to cumulative biological impacts of the project to a level that is not considerable.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.5 Cultural Resources and Tribal Cultural Resources

The geography of cultural resource impacts can be defined by region, by political subdivision, or by the geography of the cultural resources present in an area when adequate inventory data are available to define it. Cultural resource information is ordinarily available only for those areas that have been intensively surveyed, which generally are a small percentage of a given area.

The Stockton General Plan 2040 EIR evaluated cultural resource impacts of development under the Stockton General Plan 2040 and concluded that impacts would be less than significant. No known important archaeological or historically significant resources are located on the project site. Mitigation measures described in Chapter 8.0, Cultural Resources, would ensure that impacts on any discovery of cultural resources would be reduced to a level that is less than significant. The project would not involve a considerable contribution to any cumulative cultural resource impact in the project vicinity.

Like the geography of cultural resource impacts, the geography of tribal cultural resource impacts can be defined by region, by political subdivision, or by the geography of the cultural resources present in an area, where adequate inventory data are available to define it. However, AB 52 indicates that another area of consideration is the geographic area that is traditionally and culturally affiliated with a tribe. At this time, such an area is known only when a tribe requests consultation on a project in accordance with AB 52. Also, like cultural resources, information on tribal cultural resources is ordinarily available only for those areas that have been intensively surveyed.

As noted in Chapter 8.0, the City has sent out formal notification letters for compliance with AB 52 for this project. While responses were received, no comments for or against the project were submitted. As discussed in Chapter 8.0, no known important archaeological or historically significant resources are located within the project vicinity, and mitigation measures would reduce potential impacts on tribal cultural resource

impacts to a level that would be less than significant. The project is not expected to involve a considerable contribution to any cumulative tribal cultural resource impacts in the City of Stockton.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.6 Geology, Soils, and Mineral Resources

Potential cumulative impacts associated with geology and soils are assumed to be localized. The Stockton General Plan 2040 EIR did not identify any significant geology, soil, or mineral resource impacts associated with development under the Stockton General Plan 2040.

As discussed in Chapter 9.0, Geology, the proposed project would not result in potential geology and soils impacts, including potential project exposure to geologic hazards, seismic shaking, soil-related hazards and soil erosion. Soil impacts associated with the project can be mitigated to a level that would be less than significant. The proposed project would not involve the potential for combined geology or soils impacts or for a considerable contribution to any cumulative geology or soils impacts. Potential cumulative impacts on water quality associated with soil erosion are addressed in Section 18.3.9, Hydrology.

As discussed in Chapter 9.0, there are no mineral resources on the project site. Therefore, the project would not contribute to cumulative mineral resource impacts in the County.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.7 Greenhouse Gas Emissions

GHG emissions are related to global climate change. Global climate change is a distinct CEQA issue in that, while a project may generate GHG emissions, the impacts of such emissions are global. As such, the impacts of a project's GHG emissions are considered cumulative in nature.

The potential GHG impacts of planned urbanization in the City of Stockton were addressed in the Stockton General Plan 2040 EIR and were found to be significant. This impact included:

- Impact GHG-1: Implementation of the proposed General Plan would result in a substantial increase in greenhouse emissions.

The General Plan 2040 EIR identified mitigation measures, including adoption of the CAP, and these measures were incorporated into the General Plan 2040 and are a part of the City's environmental review, permitting and fee structures. Nevertheless, even with

the adopted mitigation measures, the cumulative impact of planned urbanization on GHG emissions would be significant and unavoidable. A Statement of Overriding Considerations was adopted for this impact in conjunction with the approval of the Stockton General Plan 2040.

In accordance with CEQA Guidelines Section 15152(d), this EIR focuses on project-specific effects. The analysis in Chapter 10.0, Greenhouse Gas Emissions, addresses the potential GHG impacts of project operations. It was concluded that operational GHG emissions, with incorporation of project features, would be consistent with the GHG reduction objectives of the City's CAP, along with emission reduction goals of SB 32 and its implementing Scoping Plan. On that basis, the proposed project would not result in a considerable contribution to a significant cumulative GHG impact.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.8 Hazards and Hazardous Materials

Potential cumulative impacts associated with health and safety are assumed to be localized. Any project exposure to hazards would occur on or in the immediate vicinity of the site, and any potential on- or off-site impact of hazardous materials use associated with the project would also be limited to the immediate vicinity.

The Stockton General Plan 2040 EIR did not identify any significant hazard or hazardous material impacts associated with development under the Stockton General Plan 2040. There are no recorded sites of known contamination on the project site or vicinity. Development of the project site and vicinity would be subject to existing permitting requirements related to hazardous materials handling and emissions control, which would reduce the potential for hazardous material releases, and consequently any off-site health effects, to a level that would be less than significant. The project would not involve a considerable contribution to any cumulative hazard or hazardous material impacts.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.9 Hydrology and Water Quality

The Hoggan property is adjacent to North Littlejohns Creek, while Weber Slough crosses the Sanchez property. Both streams discharge into French Camp Slough, so all three streams are part of the French Camp Slough watershed.

The hydrology and water quality impacts of planned urbanization under the Stockton General Plan 2040 were analyzed in the Stockton General Plan 2040 EIR. The EIR identified one potentially significant impact – existing and planned storm drainage infrastructure could be undersized or otherwise inadequate, leading to potential flooding and polluted runoff. Mitigation described in the Stockton General Plan 2040 EIR would

require preparation of a citywide storm drainage master plan that includes hydrologic and hydraulic modeling for existing and Year 2040 land uses. Preparation and implementation of this master plan would reduce drainage impacts to a level that would be less than significant.

The proposed project would involve potential water quality impacts, mainly sediment discharges from soil disturbance. However, as discussed in Chapter 12.0, Hydrology, BMPs and other provisions of the Construction General Permit, the Storm Water Management Program, and the Storm Water Quality Control Criteria Plan would reduce potential sedimentation and other contamination of surface waters. As a result, the projects would not involve a considerable contribution to any significant cumulative surface hydrology or water quality effects.

The project site is located within the Eastern San Joaquin Valley Subbasin, which is the geographic context for cumulative groundwater analysis. The proposed project would involve no potential groundwater effects that are not already accounted for in existing demand projections and analyses. The project vicinity would obtain its potable water from the City's water system, which derives 75% of its supply from surface water sources. As a result, the project would not involve a considerable contribution to any significant cumulative groundwater supply or water quality effects.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.10 Land Use, Population, and Housing

Cumulative land use impacts are related to the scale of the project and the presence or absence of a defined community or land use entity; the geographic context for cumulative land use analysis can range from a project site and adjacent parcels to an entire community or region. The project site is currently under County jurisdiction but is within an area that has a mix of City, County, and State jurisdictions.

The Stockton General Plan 2040 EIR did not identify any significant land use impacts associated with development under the Stockton General Plan 2040. The proposed project is adjacent to an approved light industrial development – the Norcal Logistics Center. The proposed development on the project site would be similar to that on the Norcal Logistics Center site and would be consistent with the land use designations under the Stockton General Plan 2040. The CEQA analysis for this project identified potentially significant impacts on the environment that could be reduced with mitigation to a level that would be less than significant. The project would not make a cumulative considerable contribution to impacts related to land use.

The population and housing impacts of planned urbanization in the City of Stockton were addressed in the Stockton General Plan 2040 EIR and were found to be significant. Specifically, development under the General Plan 2040 would induce substantial job growth that would exceed SJCOG employment projections.

- Impact POP-1: The proposed General Plan and UMPS would induce substantial employment growth within the EIR Study Area.

No feasible mitigation measures could be identified to reduce this impact to a level that would be less than significant, so this impact was considered significant and unavoidable. A Statement of Overriding Considerations was adopted for this impact in conjunction with the approval of the Stockton General Plan 2040. While the General Plan identified a significant increase in growth and employment, the plan emphasized infill housing and infrastructure as a means to accommodate these increases. In accordance with CEQA Guidelines Section 15152(d), this EIR focuses on project-specific effects.

As discussed in Chapter 13.0, LAFCo is required to make certain determinations when the annexation is adjacent to unincorporated communities that include 12 or more registered voters and have an annual median income that is less than 80% of the statewide annual median household income. SB 244 prohibits LAFCo from approving such an annexation unless 1) an application to annex the adjacent community has been filed in the past five years, or 2) the LAFCo finds, based upon written evidence, that a majority of the residents within the adjacent community are opposed to annexation. The proposed Hoggan annexation is adjacent to one such area. The applicant is surveying this area to determine whether residents would support or opposed annexation. If the voters do not oppose the Hoggan annexation, additional action may be required to satisfy SB 244, and the proposed annexation of the Hoggan parcel may be delayed.

No existing residents or housing units are located on or adjacent to the project vicinity, other than rural residences across North Littlejohns Creek from the Hoggan property. These residences would not be removed or otherwise altered by project site development. While the project would contribute to employment growth, this employment growth would be consistent with the land use designations under the Stockton General Plan 2040, which anticipates industrial development on the project site and vicinity. The project would not involve a significant contribution to cumulative population or housing effects beyond what was established in the GPEIR.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.11 Noise

Cumulative noise impacts are assumed to be localized. The impacts of noise are reduced with distance; unless there is a very significant existing or proposed noise source, the potential for cumulative impacts will ordinarily be limited to a few hundred yards.

The potential noise impacts of planned urbanization in the City of Stockton were addressed in the Stockton General Plan 2040 EIR and were found to be significant. Specifically, noise from traffic along identified road segment would be substantially greater than under existing conditions.

- Impact NOISE-3: Increased traffic from projected development allowed by the proposed General Plan would result in a significant increase in traffic noise levels compared to existing conditions along the following roadway segments:
    - SR-99 between Farmington Road and Mariposa Road
    - SR-4 west of I-5
    - Eight Mile Road between Mokelumne Drive and Trinity Parkway
    - Eight Mile Road between West Lane and SP Railroad
    - Eight Mile Road between SR-99 and west of Bear Creek
    - March Lane between West Land and Bianchi
    - French Camp Road between McDougald and E.W.S Wood
    - California Street between Park and Weber
    - California Street between Weber and Crosstown Freeway
    - Airport Way between Main and Market
    - Airport Way between Ninth and Tenth
    - Airport Way between Sperry and CE Dixon St
    - Mariposa Road between Stagecoach and SR-99
    - B Street between Ralph Avenue and Arch Airport

No feasible mitigation measures could be identified to reduce this impact to a level that would be less than significant, so this impact was considered significant and unavoidable. A Statement of Overriding Considerations was adopted for this impact in conjunction with the approval of the Stockton General Plan 2040. In accordance with CEQA Guidelines Section 15152(d), this EIR focuses on project-specific effects. It should be noted that none of the impacted road segments identified in the General Plan 2040 EIR are on or near the project site.

Traffic noise levels associated with the project were determined using the Traffic Noise Prediction Model, based upon inputs from the traffic impact study under Cumulative conditions without and with the project. Truck mix percentages were based upon overall traffic counts and vehicle classification conducted for the area roadways. Table 18-1 shows the results of the traffic noise analysis.

Based upon the information in Table 18-1, the project would not result in an increase in traffic noise levels under the Cumulative Plus Project Scenario, and traffic noise levels would decrease in some cases, compared to the trip generation assumptions used in the General Plan under the Cumulative No Project Scenario.

TABLE 18-1
TRAFFIC NOISE LEVELS – CUMULATIVE CONDITIONS

Roadway	Segment	Noise Levels (dB L_{dn}) at 100 Feet from the Roadway Centerline		
		Cumulative No Project	Cumulative Plus Project	Change
Arch Road	East of Qantas Lane	77	77	0
	East of SR. 99 Frontage Road	76	76	+1
	East of Frontier Way	75	75	0
	East of Fite Court	75	75	0
	East of Newcastle Road	77	76	-1
	East of Logistics Drive	76	76	0
Mariposa Road	NW of Austin Road	73	72	-1
	NW of Newcastle Road Ext	74	73	-1
	NW of Carpenter Road	75	75	0
	East of Austin Road	71	71	0
Austin Road	South of Arch Road	68	68	0

Note: Noise level changes of 0.5 dB or more are rounded to the nearest integer.

Source: j.c. brennan and associates

Development of the Hoggan property would also incrementally increase noise levels in the area. As discussed in Chapter 14.0, Noise, rural residences are located across North Littlejohns Creek from the Hoggan property. Noise from Hoggan property development would not have a significant impact on these residences with implementation of identified mitigation, so noise impacts from this development would not be significant. As indicated in the Noise analysis, all construction activities will be subject to the City's noise standards. All equipment shall be fitted with factory muffler equipment Overall, the project would not make a considerable contribution to cumulative noise impacts.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.12 Public Services and Recreation

Potential cumulative impacts related to public services are appropriately addressed at the City level, as the City of Stockton would provide most of the public services for the project site.

The Stockton General Plan 2040 EIR did not identify any significant public service or recreation impacts associated with development under the Stockton General Plan 2040. The project would not involve demands on public schools or parks and recreation, and therefore would have no cumulative impact on these services, or a considerable contribution to any such effect.

As discussed in Chapter 15.0, Public Services, project impacts on fire protection services would be mitigated by the required installation of ESFR sprinkler systems in proposed building development. Annexation of the project site will require the detachment of the Hoggan and Sanchez parcels from the respective fire protection districts. So that these districts are not economically challenged, the applicant will be required to enter into an agreement with each district prior to annexation. Despite detachment of the project from the rural fire districts, fire protection in the project vicinity will continue to be provided by the agency most capable of responding in accordance with adopted mutual aid agreements. As described in Chapter 15.0, fire risks associated with longer response times will be addressed with ESFR sprinkler system.

The project will with other planned development result in long-term needs for additional fire stations. The Stockton Fire Department has indicated that it intends to address fire response times to southeast Stockton at a future date, including the potential construction of a fire station. The project would pay Public Facility Fees that could be used for the future construction of a fire station. Development of new fire stations would be subject to CEQA review as required.

Police facilities would need to be renovated or moved to another location, as discussed in Chapter 15.0. As with fire facilities, the project would pay Public Facility Fees that could be used for future improvements to police facilities which also would be subject to CEQA review and must mitigate for any identified significant impacts. The project would not make a considerable contribution to cumulative impacts on fire or police facilities.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.13 Transportation

Cumulative transportation impacts, primarily vehicular traffic, are addressed within the area potentially impacted by a proposed project, typically within a certain radius from the project site. This is the case with the proposed project, the potential traffic impacts of which are addressed in Chapter 16.0, Transportation.

The potential transportation impacts of planned urbanization in the City of Stockton were addressed in the Stockton General Plan 2040 EIR and were found to be significant. The General Plan 2040 EIR identified mitigation measures, including specific improvements. These measures were incorporated into the Stockton General Plan 2040 and are a part of the City's environmental review, permitting, and fee structures. Nevertheless, even with the adopted mitigation measures, the cumulative transportation impacts were determined to be significant and unavoidable.

- Impact TRAF-1: Implementation of the proposed General Plan, in combination with regional growth, would result in increased vehicle traffic, which would affect the operation of local roadways and freeway segments. As shown in Table 4-14.2 and discussed above, the proposed General Plan would result in significant level of service impacts to roadway and freeway segments.

- Impact TRAF-2: Implementation of the proposed General Plan, in combination with regional growth, would result in increased vehicle traffic, which would affect the operation of regional roadways and freeway segments. As discussed above, the proposed General Plan would result in significant level of service impacts to roadway and freeway segments.

A Statement of Overriding Considerations was adopted for this impact in conjunction with the approval of the Stockton General Plan 2040. In accordance with CEQA Guidelines Section 15152(d), this EIR focuses on project-specific effects.

The project's potential for cumulatively considerable contributions to traffic impacts was considered in the project traffic study by KD Anderson and Associates (2019), available in Appendix G of this EIR. As described in Chapter 16.0, cumulative conditions with the Stockton General Plan are a long-term background condition which includes future year forecasts of traffic volumes, based on development of surrounding land uses. The cumulative scenarios assume future development that is consistent with the Stockton General Plan 2040. The analysis also assumes roadway improvements consistent with the long-term future context. These include improvements from the Stockton General Plan and from the *Draft Environmental Impact Report – Mariposa Lakes Specific Plan*. Mariposa Lakes is a very large proposed urban development near the project site that would, if ultimately constructed, require extensive street and intersection improvements in the general project area. The improvements considered in the traffic study include:

- Widening of Arch Road east of SR 99 East Frontage Road to six lanes.

- Widening of Arch Road between Frontier Way and Austin Road to four lanes.

- Widening of Mariposa Road northwest of Carpenter Road to six lanes.

- Widening of Mariposa Road east of Austin Road to four lanes.

- Widening of SR 99 south of Mariposa Road to eight lanes.

Project impacts under Cumulative conditions were evaluated in the traffic study for roadway segments only; no intersections or ramp junctions were studied. Table 18-2 shows LOS at the study roadway segments under Cumulative No Project and Cumulative Plus Project conditions.

TABLE 18-2
ROADWAY SEGMENT LOS – CUMULATIVE CONDITIONS

Roadway Segment	Cumulative No Project LOS	Cumulative Plus Project LOS
Arch-Airport Road E of Qantas Lane	**F**	**F**
Arch Road E of SR 99 Frontage Road	C	C
Arch Road E of Frontier Way	D	D
Arch Road E of Fite Court	D	D
Arch Road E of Newcastle Road	**F**	**F**
Arch Road E of Logistics Drive	**E**	**E**
Mariposa Road NW of Austin Road	C	A
Mariposa Road NW of Newcastle Rd Extension	D	C
Mariposa Road NW of Carpenter Road	C	B
Austin Road S of Arch Road	C	C
Mariposa Road E of Austin Road	A	A
SR 99 N of Mariposa Road	**E**	**E**
SR 99 N of Arch-Airport Road	C	C
SR 99 S of Arch-Airport Road	C	C

Bold indicates unacceptable LOS.
Source: KD Anderson and Associates 2019.

Under Cumulative Plus Project conditions, four roadway segments were determined to operate at unacceptable LOS:

- *Arch-Airport Road – east of Qantas Lane.* This roadway segment would operate at LOS F. LOS F is considered unacceptable. However, LOS would also be unacceptable under Cumulative No Project conditions, and the project-related increase in volume would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

- *Arch Road – east of Newcastle Road.* This roadway segment would operate at LOS F. LOS F is considered unacceptable. However, LOS would also be unacceptable under Cumulative No Project conditions, and the project-related change in increase would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

- *Arch Road – east of Logistics Drive*. This roadway segment would operate at LOS E. LOS E is considered unacceptable. However, LOS would also be unacceptable under Cumulative No Project conditions, and the project-related increase in volume would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

- *SR 99 – north of Mariposa Road*. This roadway segment would operate at LOS E. LOS E is considered unacceptable. However, LOS would also be unacceptable under Cumulative No Project conditions, and the project-related increase in volume would not be greater than five percent. Therefore, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines, this impact is considered less than significant, and no mitigation measures are required.

The project was determined to have mostly no adverse impacts on the roadway segments analyzed in the traffic study. A few facilities were determined to operate at a LOS that does not meet City standards with the project. However, all these facilities would operate at an unacceptable LOS even without the project, and the project would not have a significant impact on the LOS at these facilities, based on criteria in the City of Stockton Transportation Impact Analysis Guidelines.

Since the project is considered to have impacts that are less than significant, the project would not significantly conflict with transportation plans oriented primarily toward motor vehicles. Therefore, the cumulative impacts of the project on traffic would be less than considerable.

The traffic study discussed impacts related to VMT under proposed project Cumulative Plus Project conditions (KD Anderson 2019). The same significance threshold used to determine VMT impacts under Existing Plus Approved Projects Plus Project conditions (see Chapter 16.0, Transportation) was used - a reduction of 15% of VMT per capita or more from current land use designations. The traffic study found that project would result in a 59.1% reduction in vehicle, which was considered to be an equivalent reduction in VMT. As this amount of VMT reduction is greater than 15%, cumulative project impacts related to VMT were considered less than considerable. The Market Driven Project would produce a 45.7% reduction in vehicle trips, with an equivalent reduction in VMT (KD Anderson 2020). Under both scenarios, cumulative impacts related to VMT would be less than considerable.

As documented in Chapter 16.0, an alternative analysis method defines VMT impacts on a per capita/service population basis based on Stockton General Plan EIR data. The GPEIR describes an estimated 2015 baseline VMT baseline of 25.63 miles per unit of service population, and development of new land uses under the General Plan would reduce the overall VMT per capita to 24.16, a reduction of approximately 6%. Considering only the changes in land use and VMT, the 2040 VMT per capita would be reduced to 20.31, a reduction of 21% from the baseline 2040 VMT. This reduction exceeds the 15% VMT reduction threshold established by the Office of Planning and Research, and therefore General Plan implementation would have a less than significant VMT impact.

The same approach was applied to estimate the contributions of project VMT to those identified in the GPEIR as moderated by required conformance with SJVAPCD Rule 9410 - Employer-Based Trip Reduction. The CalEEMod air quality modeling program, which produces VMT data, indicates that implementation of mitigation features that reduce air and GHG emissions, including Rule 9410, would also reduce VMT of the proposed project and the Market Driven Project by about 15%. With the application of the SJVAPCD mitigation, the VMT per capita for the proposed project would be 20.9, which is 15% below the 2040 baseline VMT for the City as a whole and just under the 21% reduction in the 2040 VMT expected from urban development under the General Plan. The Market Driven Project would produce even lower VMT. The VMT rate for the mitigated project would be substantially lower (better) than the predicted 2040 baseline VMT rate and close to the VMT reduction predicted to be achieved by development pursuant to the General Plan. This reduction would exceed the OPR significance threshold of 15%, resulting in a less than significant transportation impact based on VMT analysis.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.14 Utilities and Energy

Cumulative utility impacts are appropriately considered at the level of the utility service area. For water, sewer, storm drainage, and solid waste services, this would be the City of Stockton, since the City either provides these services directly or contracts these services out to franchisees. For energy and communications services, the service area is regional or statewide, but the project would involve no potential effects that could reasonably extend outside the immediate project vicinity.

The Stockton General Plan 2040 EIR indicates that the City would have adequate water, wastewater, and storm drainage capacity available to serve proposed development under the Stockton General Plan 2040, with which the proposed project is consistent. Also, energy and solid waste needs would be served. While the individual projects would contribute new utility demands, the combined projects would not result in a significant cumulative impact on utilities or make a considerable contribution to any such effect.

The Stockton General Plan 2040 EIR did not identify any significant energy issues associated with development under the Stockton General Plan 2040. PG&E obtains its electricity from power plants and hydroelectric facilities it owns, along with purchases from other power sources. It is expected that PG&E can generate additional electricity for the proposed project without expanding its facilities. PG&E imports most of its natural gas from other states, although it also uses in-state gas wells. PG&E can provide additional natural gas to the project without expanding its infrastructure. Since future development would be required to comply with energy efficiency standards in building codes, energy demands of the project on PG&E's energy supplies would be reduced. The project would not make a considerable contribution to cumulative impacts related to energy.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

19.0 ALTERNATIVES

19.1 INTRODUCTION

CEQA Guidelines Section 15126.6(a) requires that an EIR "consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation." The EIR shall "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The alternatives analysis must identify the potential alternatives and include adequate information about each one to allow meaningful evaluation, analysis, and comparison with the proposed project. Even an alternative that would be costlier or would impede to some degree the attainment of the project objectives shall be considered if it meets the criteria of CEQA Guidelines Section 15126.6.

There are no set rules governing the nature and scope of the alternatives to be discussed, other than the "rule of reason." If an alternative is not feasible or does not provide an opportunity to avoid or substantially reduce environmental effects, the alternative need not be analyzed in detail; if this is the case, the reasons for limiting the analysis should be identified. Measures of the feasibility of an alternative may include site suitability, economic viability, availability of infrastructure, general plan consistency, consistency or conflict with other plans or regulatory limitations, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to the alternative site. The environmentally superior alternative must be identified among the alternatives considered.

The following sections describe the process used to select alternatives for evaluation in this chapter, including identification of project alternatives that were considered but that were not subjected to further analysis. The analysis of alternatives conforms to CEQA and the CEQA Guidelines and represents the best professional opinion of the EIR preparer, City of Stockton staff, and their technical reviewers. However, it must be recognized that the authority for the approval of the proposed project, the selection or rejection of alternatives, and the feasibility or infeasibility of alternatives rests with the decision-makers of the City of Stockton.

19.2 SELECTION OF ALTERNATIVES

Alternatives to the project were selected for evaluation in this EIR based on the criteria set forth in CEQA Guidelines Section 15126.6. These criteria include:

1) Ability of the alternative to meet most of the basic objectives of the project;

2) Feasibility of the alternative; and

3) Ability of the alternative to avoid or substantially reduce one or more of the significant environmental effects of the project.

Ability of the Alternative to Meet Project Objectives

Potential alternatives to the project were evaluated and selected with respect to the objectives of the project. As identified and discussed in Section 3.2 of this EIR, the main project objective is the further development of the Norcal Logistics Center by entitling the project site for predominantly high-cube warehouse building spaces and supporting facilities. Related objectives include creation of employment opportunities and generation of additional revenue for the City.

Feasibility of the Alternative

Alternatives to the project were evaluated with respect to the "rule of reason" and general feasibility criteria suggested by the CEQA Guidelines, including such criteria as the suitability of the site or alternative site, the economic viability of the alternative, the availability of infrastructure, the consistency of the alternative with general plan designations, zoning or other plans or regulatory limitations, the effect of applicable jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to an alternative site, including consideration of whether or not the site is already owned by the applicant. The application of these criteria to potential alternatives to the proposed project is described in Sections 19.2 and 19.3.

Avoidance or Substantial Reduction of Significant Effects

The evaluation of alternatives must also consider the potential of the alternative to avoid or substantially lessen any of the significant environmental effects of the project, as identified in Chapters 4.0 through 17.0 of this EIR. The potential effects of the project are summarized in Chapter 2.0, Summary.

The alternatives analysis accounts for the potentially significant environmental effects of the alternatives as compared to the proposed project. Some of the potential effects of the project and the alternatives are common to virtually all development in the Stockton vicinity and would not vary from alternative to alternative. Similarly, certain environmental effects are addressed by routine requirements that would apply uniformly to any alternative. Since the focus of the alternatives analysis is comparison to the proposed project, issues that do not vary between the alternatives are not extensively analyzed. These include the following:

> *Aesthetics*. The project would involve a loss of open space and its visual character that is inherent in proposed development. Otherwise, the project would involve effects that are less than significant. Potential light and glare impacts are typically addressed by the proposed lighting design and existing Stockton Municipal Code requirements.

Biological Resources. While the project would involve conversion of existing open space, it would not involve large-scale habitat conversion and impacts on associated sensitive species use. Conversion impacts are common to "greenfield" development in the Stockton area and are addressed through implementation of the SJMSCP or equivalent measures. The buffer along North Littlejohns Creek and required setbacks from Weber Slough would apply under all alternatives, so loss of special-status species habitat is not addressed in the alternatives analysis. The project would have no substantial impacts on wetlands and Waters of the U.S., so this issue is also not considered in detail.

Cultural Resources and Tribal Cultural Resources. Planned development has the potential to impact currently unknown archaeological resources within the project site. These potential impacts can be avoided by mitigation measures typically required of development projects. Also, tribes with a traditional and cultural affiliation have been contacted about consultation, and mitigation measures have been identified for potential impacts on tribal cultural resources, with revisions to be made upon receipt of any comments from tribes. As such, this issue is not considered in detail in the alternatives analysis.

Geology, Soils and Mineral Resources. The project site has soils with characteristics that impose potential development constraints. These constraints, common in the Stockton area, would be addressed through routine soils engineering that would be required for the project. Soil erosion is a potential issue that would be addressed through City of Stockton storm water requirements and by the required Construction General Permit process. Potential impacts on paleontological resources can be avoided by inadvertent discovery mitigation measures typically required of development projects. As no mineral resources have been identified on the project site, this issue is not considered in the alternatives analysis.

Greenhouse Gas Emissions. Project impacts associated with greenhouse gases and global climate change are considered cumulative in character, rather than project-specific. Chapter 10.0, Greenhouse Gas Emissions, discusses potential impacts.

Land Use, Population, and Housing. The project would not involve significant land use effects or Stockton General Plan inconsistency, as the project is consistent with City General Plan designations. Pre-zoning that would occur as part of the annexation process would ensure consistency with City zoning. Because the project is consistent with the City General Plan, it would not involve significant population, housing, or employment effects. These issues are not considered in detail in the alternatives analysis.

Public Services and Recreation. The project would generate potential impacts for public services that are common to new land development in the City of Stockton. Application of routine mitigation measures, including the payment of required Public Facilities Fees, school impact fees, and park fees, would reduce these potential effects to a level that would be less than significant. This issue is not considered in detail in the alternatives analysis.

Utilities. The project would involve new demands for sewer, water, storm drainage, and other utilities. The project site is located within defined service areas for these utilities, and capacity is available to serve the project. Issues identified in the EIR are routine matters that would be addressed by City review of development design and improvements. Utility issues are not considered in detail in the alternatives analysis.

19.3 ALTERNATIVES NOT CONSIDERED IN DETAIL

The following alternatives were not addressed in detail, as they did not meet the criteria for detailed analysis defined above. That is, the following alternatives 1) would not meet most of the basic objectives of the project, 2) were clearly infeasible, or 3) did not have the ability to avoid or substantially lessen the significant environmental effects of the proposed project. Alternatives that might conceivably meet the analysis criteria were subject to detailed analysis, as documented in Section 19.4.

19.3.1 Agricultural Development

As noted in Chapter 5.0, Agricultural Resources, the Farmland Mapping and Monitoring Program has designated the Sanchez property as having Prime Farmland and Farmland of Statewide Importance, while the Hoggan property has been designated as having Farmland of Local Importance. Also, the Sanchez property has been used for agricultural production in the past. Under this alternative, the project site would be used for agriculture rather than the proposed warehouse development. The project site could be used for row crops or for higher-value orchard crops such as fruit, nuts, or olives. Vineyards also could be planted, with an associated winery if wine grapes are planted.

This alternative could avoid or reduce some of the adverse impacts of the proposed project: traffic, air pollution, noise, GHG emissions, and public service demands. However, this alternative would not be consistent with the objectives of the proposed project, which seek high-cube warehouse development. An agricultural operation would not be compatible with the existing urban development in the area. It is uncertain if agricultural operations would even be viable in the long term, given its location in an area predominantly developed for industrial purposes. The existing City General Plan designation for the project site anticipates industrial development. Since no development would occur on the project site, less property tax revenue would be generated for the City, thereby reducing funds for public services. In addition, farm equipment would likely use the streets adjacent to the project site, thereby creating conflicts with more urban traffic. There also would be potential issues with the disposal of agricultural waste, particularly if burning is involved. Finally, this alternative would deal with similar issues as the proposed project regarding biological resources and contaminated soils.

In summary, this alternative generally would have fewer environmental impacts than the proposed project on some issues, but it could have more adverse impacts on other issues, plus it would not meet project objectives. Given this, this alternative is not analyzed further in this EIR.

19.3.2 Alternative Sites

CEQA Guidelines Section 15126.6(f)(2) indicates that alternative locations for a proposed project should be considered if any of the significant effects of the project would be avoided or substantially lessened at an alternative location. Only locations that have the potential to avoid or substantially reduce any of the significant effects of the project need be considered for inclusion in the EIR. As with all potential alternatives, project location alternatives must be reasonable, feasible, and able to meet most of the basic objectives of the project. The analysis may also consider the fact that a proposed project site is currently owned or controlled by the project developer.

The availability of an alternative site that would support proposed project development was considered. The most feasible alternative sites are in the areas designated for industrial development in southern Stockton, mainly around Stockton Metropolitan Airport and the Norcal Logistics Center site. Alternative locations near the airport would eliminate the environmental impacts on or near the project site; however, it would most likely move those impacts to the alternative location and surrounding area. It is possible that, depending on the location, some impacts would be reduced by the alternative; for example, public transit is available in the area near the airport, providing an alternative to motor vehicle use. However, it is also possible that new or more severe environmental impacts could be introduced, including traffic on the local roadways and compatibility of development with airport operations.

In addition to the potential for new or more severe environmental impacts, there is the potential lack of availability of these alternative locations for the proposed development. Locations may not be for sale, or the owners may not be interested in selling the property. Other locations may have issues that make the property less desirable; for example, access for truck traffic may be inadequate or inconvenient. The project applicant has obtained control of the project site and has prepared site plans specifically for this site. For all the reasons described, the use of alternative sites was not analyzed further.

19.3.3 Alternative Site Design

This alternative would involve site designs for the proposed project that would avoid or substantially lessen one or more of the potentially significant effects identified in this EIR. Regarding the proposed development of both properties, there are no apparent design changes that could be implemented that would reduce the potential impacts of the proposed development under the project. The anticipated type of development would be high-cube warehouse, which limits potential site design as such use requires large floor areas and heights. Given these limitations, this alternative was not analyzed further.

19.4 ALTERNATIVES CONSIDERED IN DETAIL

The alternatives to the proposed project that have been considered in detail are addressed in the following sections. The overall analysis is summarized in Table 19-1.

TABLE 19-1
COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT IMPACTS

Issue Area	*Proposed Project*	Alt 1: No Project	Alt 2: Alternative Sanchez Development	Alt 3: Alternative Hoggan Light Industrial Development	Alt 4: Hoggan Truck/Trailer Storage Area	Alt 5: Reduced Project Site Development
Agricultural Land Conversion	*Potentially significant*	Avoided	No reduction	No reduction	No reduction	No reduction
Air Pollutant Emissions	*Potentially significant*	Avoided	Possibly more severe	No reduction	Likely less than significant	Reduced
Hazardous Materials	*Less than significant*	Possibly more severe (agriculture chemicals)	Possibly more severe	Possibly more severe	Reduced	Reduced
Water Quality	*Potentially significant*	Avoided	No change	No change	Possibly reduced	Reduced
Noise Generation	*Potentially significant*	Avoided	No change	No change	Potential increase, can be mitigated	Minimal reduction
Traffic Generation	*Less than significant*	Avoided	No change	No change	Reduced	Reduced

19.4.1 No Project Alternative

CEQA Guidelines Section 15126.6(e) states that the alternatives analysis must include evaluation of a "no project" alternative. "No project" is defined as no action with respect to the proposed project and continuation of existing circumstances without approval of the project. CEQA Guidelines Section 15126.6(e)(3)(B) further explains:

> If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation

> of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.

For the purposes of this EIR, the No Project Alternative is defined as no annexation to the City of Stockton, no development as proposed by the project, and no future urban development of the project site. However, the alternative would not be a complete "no development" alternative, as the project site is designated for agricultural uses under current County zoning, and the Sanchez property has been recently used for agricultural activities. Based upon this, it is presumed that the project site would be used for agricultural production under the No Project Alternative. Given its size, it is probable that the Sanchez property could be farmed for economic benefit; the Hoggan property may be more difficult to economically farm with its size and location.

Since urban development would not occur under this alternative, there would be no impacts associated with such development on the project site. Existing public services and utilities from the County and other agencies would continue to be provided; no public services and utilities from the City would be extended to the project site. No changes would be made to roads adjacent to the Sanchez property, including curb, gutter, and sidewalk improvements. Most environmental impacts associated with the proposed project would be avoided, particularly air pollutant emissions, construction noise, and traffic.

However, this alternative would meet none of the objectives of the proposed project. It also would be inconsistent with both the City of Stockton and San Joaquin County General Plans, which anticipate development of the project site. No annexation and development of the site also would mean that the City would realize no additional increase in revenue from property taxes. With no development, only limited employment opportunities associated with agricultural work would be created.

The No Project Alternative would not require hazardous materials that may be used as part of the proposed high-cube warehouse development. However, the potential agricultural use may require agricultural chemicals such as pesticides, herbicides, and fertilizers, which could contaminate the soils and adjacent streams if not properly applied. Agricultural activities also could generate dust emissions to which nearby land uses may be exposed. Although the surrounding land uses are not considered "sensitive receptors," employees and other people in the area could be exposed to these dust emissions. Agricultural equipment and vehicles moved to and from the fields could disrupt the flow of vehicle traffic in the area, particularly that of heavy-duty trucks.

If the Hoggan property is not used, this may have adverse aesthetic impacts as it may attract illegal dumping, as has been observed there. Also, if neither property is used for agriculture, grasses and weeds would likely grow on the project site and would require ongoing maintenance to avoid a potential fire hazard.

Thus, while this alternative would avoid most of the environmental impacts of the proposed project, it would involve other potentially significant impacts. It should be noted that potential environmental impacts of the proposed project would be reduced to

levels that are less than significant with the implementation of mitigation measures, while still realizing the project objectives.

19.4.2 Alternative Sanchez Property Development

This alternative proposes development of the Sanchez property other than the high-cube warehouses proposed by the project. For this alternative, it is assumed that the City would annex the Sanchez property and pre-zone the property as General Industrial (IG). The Hoggan property would be annexed and developed as described by the proposed project.

The IG zone is intended to allow a wide range of industrial land uses, including uses that may be conducted outdoors or associated with nuisance or hazardous impacts. Examples of such uses that are permitted by right include electronics, equipment and appliance manufacturing; fabric product manufacturing; food and beverage product manufacturing; furniture and fixtures manufacturing; metal products fabrication and machine/welding shops; research and development; and wholesaling and distribution. In addition, activities allowed in the IG zone with additional approvals include heavy manufacturing, electricity generating plants, petroleum storage and distribution, recycling facilities and transfer stations, and scrap and dismantling yards. Other non-industrial uses are allowed in the IG zone, but it is assumed for this analysis that the Sanchez property would be developed with industrial uses.

Development under this alternative would have similar impacts to the proposed project. Ground disturbance impacts related to soil erosion, surface water quality, and drainage would be similar. Public services and utilities from the City would be extended to the project site. Road improvements, including curb, gutter, and sidewalk improvements, would be made to the project site. Potentially significant impacts would be similar, particularly related to traffic, air quality, noise, soil erosion, and drainage.

This alternative would not meet the objectives of the proposed project related to warehouse development. Depending on the type of industrial activity located on the Sanchez property, this alternative may have new or more severe impacts than the proposed project. For instance, a heavy manufacturing or petroleum product activity could generate potentially significant air pollutant emissions, including TACs. They also may use or store a greater quantity of hazardous materials, releases of which could have a more adverse impact on the vicinity than would occur under the proposed project. Uses involving exposed process machinery and extensive outdoor storage or raw materials or products may involve adverse visual impacts as well as soil and water contamination concerns. In general, heavier manufacturing uses would not be consistent with the general development existing or proposed in the area, which consists mainly of logistics and warehouse development.

In summary, this alternative would have similar environmental impacts to the proposed project on some issues, but it would potentially have new or more severe impacts on others. As noted, potential environmental impacts of the proposed project would be reduced to levels that are less than significant with the implementation of mitigation measures while still realizing the project objectives.

19.4.3 Alternative Hoggan Light Industrial Development

This alternative proposes development of the Hoggan property with land uses other than the high-cube warehouse proposed by the project. For this alternative, it is assumed that the City would annex the Hoggan property and pre-zone the property as Limited Industrial (IL), as under the proposed project. As described in Chapter 2.0, Project Description, the IL zone generally allows light manufacturing uses that may generate more nuisance impacts than are acceptable in commercial zoning districts and whose operations are totally conducted indoors. Other non-industrial uses are allowed in the IL zone, but it is assumed for this analysis that the Hoggan property would be developed with allowable industrial uses. Under this alternative, a driveway would likely be extended from Frontier Way to the Hoggan property, as with the proposed project.

Development under this alternative would have similar impacts to the proposed project. Ground disturbance impacts related to soil erosion, surface water quality, and drainage would be similar. Public services and utilities from the City would be extended to the project site. Recognizing that a range of industrial uses would be allowable under the IL zoning, the potentially significant impacts of this alternative would be similar to the proposed project as it is presently understood, including those related to traffic, air quality, soil erosion, and drainage. As industrial land uses within the IL zone must be conducted indoors, this alternative would not result in any substantial increases in potential noise effects. However, the alternative would not meet the objective of furthering development of the Norcal Logistics Center, which is focused on logistics.

19.4.4 Hoggan Truck/Trailer Storage Area

This alternative proposes development of the Hoggan property as an auxiliary truck/trailer storage area for approved industrial development on the adjacent Norcal Logistics Center property known as Building 8 (see Figure 3-3). Other features of this alternative would remain the same as the proposed project, including annexation and pre-zoning of the Hoggan and Sanchez properties and high-cube warehouse development of the Sanchez property. Truck/trailer storage is an allowable use in the proposed IL zone. Development of the Hoggan property would make as many as 489 truck and trailer parking spaces available to support the industrial development and use of Building 8. No buildings or other structures would be constructed. The required setback from North Littlejohns Creek would be observed.

Primary access to and from the Hoggan property would be gained directly from the Building 8 site to the east; however, it is also anticipated that Frontier Way would be extended to the site from its current endpoint, as under the proposed project, providing a vehicle linkage between Building 8, the truck/trailer storage area and the intersection of Frontier Way and Arch Road. While this connection would likely add traffic to the Frontier Way/Arch Road intersection, the traffic contribution would be less than the proposed project due to the elimination on the Hoggan property of the proposed warehouse building, a substantial traffic generator.

In general, development under this alternative would have similar impacts to those of the proposed project. Potential impacts related to, soil erosion, and drainage would be similar. Some impacts would be reduced compared to the proposed project. With no structures proposed, the project may have a reduced effect on views from the nearby rural residences. As the storage area would involve traffic primarily between the site and adjacent Norcal Logistics Center, it would not by itself be a traffic generator. The storage area would require less equipment and construction time than a building; therefore, less overall construction noise would occur.

This alternative would involve additional truck and trailer movements between the Hoggan property and the adjacent Building 8 site within the approved Norcal Logistics Center project. Movements between these two sites would amount to a fraction of the number of parking spaces provided but would generate additional noise and potentially result in a significant noise effect on nearby rural residences. The degree of noise effect would be dependent on the number and diurnal timing of movements; the level of impact and mitigation requirements if significant noise would be involved, would need to be determined if this alternative is selected. Noise analysis conducted for the project (Brennan, pers. comm.) indicates that such noise could be reduced to a level that would less than significant by construction of a masonry noise wall eight or more feet high, along the north boundary of the Hoggan property.

As a result of increased truck movements, this alternative may also result in increased emissions of diesel PM (a TAC) in the vicinity of nearby rural residences. Although California has adopted the Truck and Bus Rule (California Code of Regulations Title 13, Section 2025) and requirements applicable to idling engines to reduce such emissions. Based on analyses conducted for the project, these emissions are not expected to involve significant health risks. However, the extent and potential significance of diesel PM emissions is uncertain and would need to be quantified if this alternative is selected. Also, it should be noted that this alternative would generate less traffic than the proposed warehouse development on the Hoggan property, which would reduce the amount of air pollutants generated by traffic. With no warehouse development, there also would be no use of cleaning products, a source of ROG. The overall amount of Rog and other pollutant emissions would decrease under this alternative.

This alternative would be somewhat contrary to the stated objectives of the project in that the amount of warehouse development generated by the project would be reduced. However, the availability of additional truck/trailer parking for the Building 8 site would expand the range of industrial uses that could be accommodated on that existing development site. The reduced amount of building development of the site may mean a reduction in potential revenue from property taxes and possible reductions in operational employment.

In summary, this alternative would avoid or minimize many of the environmental impacts of the proposed project, although it may involve additional impacts in defined issue areas. These impacts could be reduced to a level that would be less than significant with mitigation measures.

19.4.5 Reduced Development

Under this alternative, the project site would be annexed to the City of Stockton and pre-zoned as under the proposed project. Also, proposed development of the project site would be like the proposed project. However, proposed development would be reduced. Specifically, the proposed light industrial development on the Sanchez property would be reduced in floor area. A previous site plan for the Sanchez property proposed just one Industrial Building 1, and the total development proposed was 2,579,640 square feet with no mezzanines. For the purposes of this analysis, this square footage is considered the Reduced Development alternative. The Hoggan property would be developed as under the proposed project, but total development on both properties would be 2,579,640 square feet.

This alternative would be consistent with the objectives of the proposed project. As with the proposed project, it would contribute to increased City revenue potential, though at a lower level. Employment opportunities also would be created, again at a lower level than under the proposed project. As with the proposed project, utilities provided by the City would need to be extended to the project site, but this extension would not have significant environmental impacts since utilities are available in the vicinity.

The environmental impacts of the proposed project would be lessened by this alternative. Air pollutant emissions from both mobile and area emissions would be reduced, although a CalEEMod run indicates that ROG emissions would remain above the SJVAPCD significance threshold for ROG. The alternative would also reduce the amount of traffic that would be generated, along with attendant air quality and noise impacts. With the reduced development, a lower amount of hazardous materials would be used. Effects on biological resources, cultural resources, soils, hydrology, and construction noise would be the same as the proposed project, and mitigation would likely be required to reduce some of these impacts.

19.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As the No Project Alternative would eliminate or avoid all potential environmental effects associated with the proposed project, it would be considered the environmentally superior alternative. However, this alternative would meet none of the project objectives, while it could generate adverse environmental impacts of its own.

CEQA Guidelines Section 15126.6(e)(2) requires that, if a No Project Alternative is identified as the environmentally superior alternative, then an EIR shall identify an environmentally superior alternative from the other alternatives. Most of the other alternatives analyzed in this EIR would involve environmental effects similar to the proposed project. The Reduced Development Alternative would involve some reduced impacts in certain issue areas, while also meeting the objectives of the proposed project. Therefore, the Reduced Development Alternative would be considered the environmentally superior alternative after the No Project Alternative.

20.0 OTHER CEQA ISSUES

20.1 IRREVERSIBLE ENVIRONMENTAL COMMITMENTS

CEQA Guidelines Section 15126.2(c) states that an EIR shall discuss significant irreversible environmental changes which would be involved if a proposed project is implemented. CEQA Guidelines Section 15126.2(c) states, in part:

> "Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

The project would involve the irreversible commitment of materials to the construction of buildings, parking spaces, and supporting infrastructure. Construction materials would involve sand and gravel, concrete, asphalt, plastics and metals, as well as renewable resources such as wood. These materials would not be used in highly significant or unusual quantities when compared to similar projects and would be obtained from existing commercial sources. Some of these materials could be recycled if some or all the project facilities were demolished in the future. As noted in Chapter 17.0, Utilities, permit applicants are required to meet the waste diversion requirement of at least 50 percent of waste materials generated by project construction.

Commitment of the project site to the proposed uses would involve an irreversible loss of agricultural land to urban development, which is documented in detail in Chapter 5.0 of this EIR. As documented in Chapter 5.0, potential agricultural land losses associated with urban development have been recognized in prior General Plans and most recently in the City's approval of the Envision Stockton General Plan 2040 and the corresponding General Plan EIR certified by the City in December 2018.

Commitment of the project site to urban uses would involve an essentially irreversible loss of open space and the potential aesthetic and biological resource values associated with it. As discussed in Chapter 7.0, Biological Resources, impacts would be reduced with maintenance of the USFWS-required buffer along North Littlejohns Creek and the proposed corridor along Weber Slough. Project site development would involve an essentially irreversible reduction in groundwater recharge area and increase in runoff during rainfall events. Groundwater recharge losses are not, however, considered significant; potential increases in runoff would be minimized by storm water treatment

and detention requirements, thereby mitigating impacts of runoff increases to a level that would be less than significant, as documented in Chapter 12.0, Hydrology.

There are no other changes associated with the project, or with resources impacted by the project, that are irreversible, other than the use of energy during project construction and operations. Energy use is discussed in Chapter 17.0, Utilities, where it was determined that the project would not consume energy in a wasteful, inefficient, or unnecessary manner.

20.2 GROWTH-INDUCING IMPACTS

CEQA Guidelines Section 15126.2(d) requires an EIR to discuss the potential growth-inducing impacts of a project or program. "Growth-inducing impacts" are ways in which a proposed project could foster economic or population growth or the construction of additional housing in the surrounding environment, either directly or indirectly. CEQA Guidelines Section 15126.2(d) further notes that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Growth can be induced in a variety of ways. New development can create demands for other types of development. For example, new industrial development which provides substantiation numbers of jobs may attract new residents to an area, creating a demand for more housing. The same project in an area with an available supply of labor may have no growth-inducing effect at all. In a more general sense, new urban development in rural areas may induce growth by providing both a nucleus for a change in land use and economic incentives for conversion of nearby agricultural lands.

Growth may also be induced through the removal of development obstacles. One potential obstacle is the lack of utilities or infrastructure to support development. The provision of new utilities or other infrastructure that can serve development, particularly in an area that is undeveloped, may induce growth. For example, construction of new or larger domestic water systems in areas with no water infrastructure may facilitate development of such areas. Expansion of other utility systems, like electrical systems, can have similar effects. However, in some cases, the extension of new infrastructure may not have a distinguishable growth-inducing effect, such as extension into already developed areas.

Chapter 13.0, Land Use, analyzed the potential effects of the project on population and housing and analysis concluded that project impacts would be less than significant. The project is unlikely to induce population growth because employees would be drawn mainly from the existing Stockton area population.

As described in Chapter 17.0, Utilities, utility infrastructure designed to accommodate the project either already exists in proximity to the project site or are planned to as part of an approval. No major utility lines would need to be extended to the project site, and utility improvements associated with the project would not extend urban utility service to an substantial areas of undeveloped land. The area surrounding the project site is developed or approved for development with industrial, logistic, and institutional land uses, and

proposed development would be consistent with the land use designations under the Stockton General Plan. The extent of this existing and approved development is illustrated on Figure 1-6. While the project site is too large to be considered an "infill" site, it is surrounded by other development and does represent the last remaining tract of undeveloped land in the project vicinity. In view of this and the other relevant factors discussed above, the project would not have a significant growth-inducing impact.

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