PUBLIC REVIEW DRAFT

SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

FOR THE

VETERANS AFFAIRS CLINIC OFF-SITE IMPROVEMENTS PROJECT

Stockton, CA

September 2019

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
ALUCP	Airport Land Use Compatibility Plan
APN	Assessor's Parcel Number
ARB	California Air Resources Board
BMP	Best Management Practice
CalEnviroScreen	California Communities Environmental Health Screening Tool
Cal Fire	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CBOC	Community-Based Outpatient Clinic
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CLC	Community Living Center
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
EA	Environmental Assessment
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
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
NEPA	National Environmental Policy Act
NO_x	nitrogen oxide
NOP	Notice of Preparation

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
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SEIR	Supplemental Environmental Impact Report
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
VA	U.S. Department of Veterans Affairs
VMT	vehicle miles traveled

1.0 INTRODUCTION

1.1 PROJECT AND SEIR OVERVIEW

This document is a Supplemental Environmental Impact Report (SEIR). The SEIR is tiered to the Stockton General Plan 2040 Environmental Impact Report (EIR), which was certified by the City of Stockton in 2018. The SEIR analyzes the potential environmental impacts of the proposed Department of Veterans Affairs (VA) Off-Site Improvements project, hereinafter referred to as the "project." The City of Stockton (City) is the project proponent and the CEQA lead agency for the project. This SEIR was prepared in accordance with the California Environmental Quality Act (CEQA) and generally follows the analysis sequence of the latest Environmental Checklist in Appendix G of the State CEQA Guidelines.

The SEIR is a supplement to the Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements (General Plan 2040) EIR, as it relates to the proposed project, which involves the extension of water and sanitary sewer trunk lines from the City's existing potable water and sanitary sewer systems in southwest Stockton (Figures 1-1 through 1-5) to serve a new Community-Based Outpatient Clinic (CBOC) and a Community Living Center (CLC) medical facility to be built by the VA in the unincorporated area. The purpose of the project is to provide potable water and sanitary sewer collection services to the CBOC/CLC. The off-site utilities project would require discretionary approvals from the City of Stockton and other agencies, as discussed in more detail in Chapter 3.0 Project Description. The General Plan 2040 EIR is available for review at:

> http://www.stocktonca.gov/government/departments/communityDevelop/cdPlanGenDocs.html

1.2 PROJECT BACKGROUND

The VA proposes to construct and operate a CBOC/CLC at 6505 South Manthey Road in the community of French Camp, an unincorporated community located south of Stockton in San Joaquin County. The purpose of the CBOC/CLC project is to expand currently offered services for military veterans in the Central Valley, provide increased access to state-of-the-art specialty care, ensure a smooth transition of provision of cases, expand the VA Palo Alto Health Care System academic programs, provide a more efficient use of resources, and attract and retain a highly qualified and innovative workforce. This project is needed as a component of the VA's plan to improve services and facilities in the East Bay, Central Valley, and Palo Alto areas in preparation for the eventual closure of the Livermore VA Medical Center, an aging 1940s-era facility that requires a

disproportionate amount of VA resources to maintain (Department of Veterans Affairs 2019).

The CBOC/CLC would be constructed on approximately 37 acres of a 58.5-acre lot, which is adjacent to and north of San Joaquin General Hospital, a County facility south of Stockton. The CBOC would be a four-story structure of approximately 158,000 gross square feet. It would provide primary care, mental health services, medical/surgical sub-specialty clinics, audiology and speech pathology, dental, eye clinic, basic blood laboratory, pharmacy, physical medicine and rehabilitation, prosthetics, radiology (general x-ray), and business office functions. It would not include an emergency room, an urgent care facility, or outpatient surgery services. The new CBOC would replace the existing Stockton CBOC, currently located in a leased building approximately 0.6 miles south of the new CBOC site; the existing CBOC lease expires in 2022.

The proposed CLC is a patient residential facility that would consist of three buildings, referred to as "neighborhoods," each containing 40 bedrooms for a total of 120 beds. The neighborhoods include clusters of 10- to 20-bedroom units connected by a service core. A 30,000-square-foot community center would connect to each of the neighborhoods by an enclosed walkway. The CLC would include some medical exam rooms, but most medical services would be provided at the CBOC.

The CBOC/CLC would include associated infrastructure, such as a central utility plant, an engineering and logistics building, parking areas, utilities, and landscaping. On-site parking for up to 704 vehicles would be provided for patients, visitors, and employees. The CBOC/CLC proposes to connect to off-site potable water, sanitary sewer, and gas utility lines. The off-site water and sanitary sewer lines are the proposed extensions of the City's potable water and sanitary sewer systems being considered in this SEIR.

In accordance with the National Environmental Policy Act (NEPA), the VA prepared an Environmental Assessment (EA) for the CBOC/CLC project. The EA and a Finding of No Significant Impact were first adopted in 2011. A supplement to the adopted EA was released for public review in April 2019. The EA supplement was prepared due to changes in the original project, mainly the importing of fill to raise the ground level to address floodplain issues and the proposed installation of off-site water and sanitary sewer infrastructure. The public review period for the EA supplement ended May 28, 2019, and a Finding of No Significant Impact was adopted by the VA on August 8, 2019.

Both the original EA and the supplemental EA considered the potential environmental impacts of the proposed off-site water and sanitary sewer extensions, in accordance with NEPA requirements. Potential environmental effects identified in the EA included erosion/sedimentation, impacts on agricultural lands, potential disturbance of unknown archaeological resources, and fugitive dust emissions and noise from construction activities. The EA concluded that these potential effects would not substantially affect the environment or would not have a substantial effect with implementation of actions or regulations that would minimize or mitigate these effects (Department of Veterans Affairs 2019).

The potential environmental effects of the proposed potable water and sanitary sewer facilities are also considered in this SEIR in accordance with the requirements of CEQA. The City of Stockton is responsible for the maintenance, operation and extension of the potable water and sanitary sewer systems as required and would provide the needed water and sanitary sewer services to the CBOC/CLC project. Because the City is the project proponent and is responsible for compliance with CEQA whenever it makes discretionary decisions that could involve significant environmental effects, it was determined that a CEQA document should be prepared for these proposed off-site improvements.

The City of Stockton Municipal Utilities Department (COSMUD) provides sanitary sewer service to City residents. COSMUD also provides water service to residents in the northern and southern ends of Stockton (residents in central Stockton are served by a private water utility). The nearest area receiving City water and sanitary sewer services is the Weston Ranch residential development, located north of French Camp Road near the project site. Part of the water system serving this development is Weston Ranch Reservoir, which consists of two large storage tanks. The reservoir is north of the west end of Yettner Road.

On December 4, 2018, the Stockton City Council adopted the Envision Stockton 2040 General Plan (Stockton General Plan 2040) and certified the EIR for the plan. The Stockton General Plan 2040 is the City government's primary tool to guide development and related physical change anticipated to occur to the year 2040 both within the City limit and in a Sphere of Influence where City services may someday be provided as land is annexed to the City. The General Plan 2040 EIR analyzed the potential environmental impacts of future development as anticipated in the Stockton General Plan 2040. The adopted land use map for the Stockton General Plan 2040, which indicates the area covered by the plan, includes the proposed CBOC/CLC site, which is within the City's Sphere of Influence.

Concurrently with adoption of the Stockton General Plan 2040, the City adopted supplements to the City's master plan for its water, sanitary sewer, and storm drainage systems. The supplements updated the existing master plans for these facilities by assessing future demand for these services and proposing infrastructure improvements to meet these demands, based upon development anticipated in the Stockton General Plan 2040. The General Plan 2040 EIR analyzed the potential environmental impacts of constructing proposed water, sanitary sewer, and stormwater service improvements identified in the utility master plan supplements. Chapter 17.0 Utilities and Energy discusses these utility plans in more detail.

1.3 SEIR 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 is considered a project as defined by CEQA.

This SEIR has been prepared in accordance with the requirements of CEQA and the State CEQA Guidelines (California Code of Regulations Title 14, Chapter 3). 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 and implementation authority over the project, it is the lead agency for CEQA purposes.

As noted, this SEIR generally follows the analysis sequence of the latest Environmental Checklist in CEQA Guidelines Appendix G. Since the General Plan 2040 EIR was certified, a revised Appendix G was formally adopted. The revised Appendix G has two new categories – Energy and Wildfire. Project impacts on both these issues are analyzed in this SEIR. For other categories in Appendix G, questions have been revised or eliminated. The revised questions have been incorporated within this SEIR in the Significance Thresholds section of each technical chapter.

Supplemental EIR

As noted, this SEIR is being prepared as a supplement to the General Plan 2040 EIR. In general, the certification of an EIR closes the CEQA review process for a project. However, when there are changes to a project or its circumstances that require revisions to the CEQA document, CEQA offers options to streamline the subsequent environmental review. These include preparation of a subsequent EIR, a supplement to an EIR, or an addendum. CEQA Guidelines Section 15162 describes the conditions under which a subsequent CEQA document may be prepared, while CEQA Guidelines Section 15163 describes the same for a supplemental EIR. Section 15163 also describes when use of a SEIR is appropriate, with reference to Sections 15162.

CEQA Guidelines Section 15162(a) states that once an EIR has been certified or a Negative Declaration has been adopted for a project, no subsequent CEQA documentation shall be prepared for that project unless the lead agency determines one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or Negative Declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found to be not feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative.

CEQA Guidelines Section 15163 states that a supplement to an EIR may be prepared instead of a subsequent EIR if any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and only minor additions or changes would be necessary to make the previous EIR adequately apply to the changed project. The SEIR need contain only the information necessary to make the previous EIR adequate for the project as revised. A SEIR shall be given the same kind of notice and public review as is given to a draft EIR; however, it may be circulated by itself without recirculating the draft or final EIR.

For this project, a SEIR was considered the proper document to prepare, as the project proposes minor changes to the future development as described in the Stockton General Plan 2040 and as analyzed in the General Plan 2040 EIR. In accordance with the requirements for use of a SEIR, the analysis of environmental impacts in the General Plan 2040 EIR is considered adequate and applicable to the proposed project with minor project-specific changes. The draft and final General Plan 2040 EIR is available for public review at the Stockton Community Development Department office on 345 N. El Dorado Street in Stockton, and on the Community Development Department website under General Plan Update at:

http://www.stocktonca.gov/government/departments/communityDevelop/cdPlanGenDocs.html

1.4 CEQA PROCEDURES FOR THE SEIR

On August 7, 2019, 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 SEIR. The 30-day comment period closed on September 9, 2019. Appendix A of this SEIR contains the NOP and comment letters submitted to the City. Letters were received from two agencies:

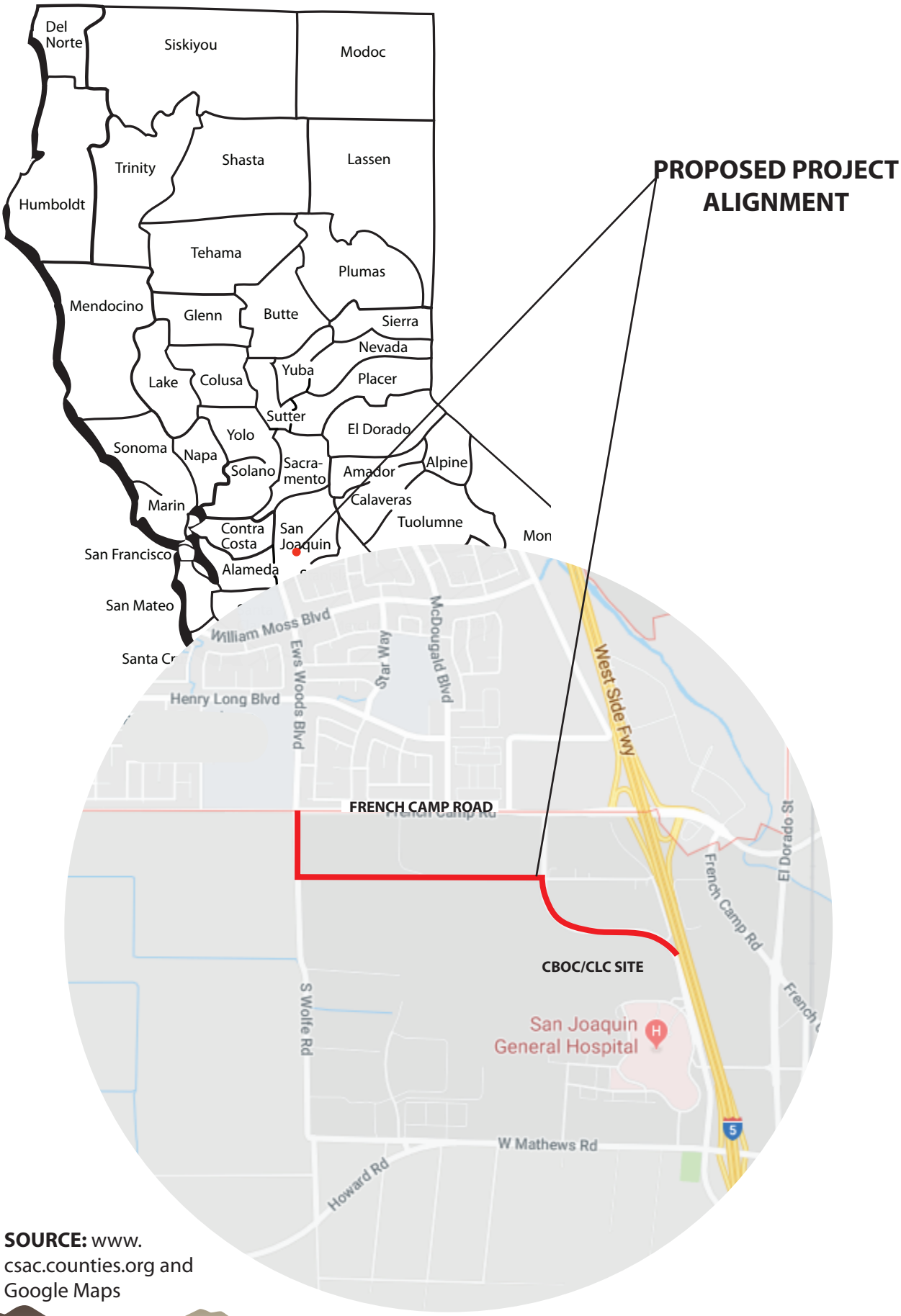
- The Native American Heritage Commission (NAHC), in a letter dated August 21, 2019, reviewed procedures for consultation with tribes under Assembly Bill (AB) 52 and Senate Bill (SB) 18 and provided recommendations for cultural resource assessments. It did not provide comments specific to project impacts that should be reviewed in the SEIR.

- The Central Valley Regional Water Quality Control Board (RWQCB), in a letter dated August 29, 2019, discussed the general regulatory framework for water quality issues, including permits and other regulatory actions. It did not provide comments specific to project impacts that should be reviewed in the SEIR.

As noted in the Notice of Availability, the SEIR will be made available for public review from September 13, 2019 to October 28, 2019. Any comments or questions regarding this SEIR 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: David Kwong, Community Development Director
345 N. El Dorado Street
Stockton, CA 95202

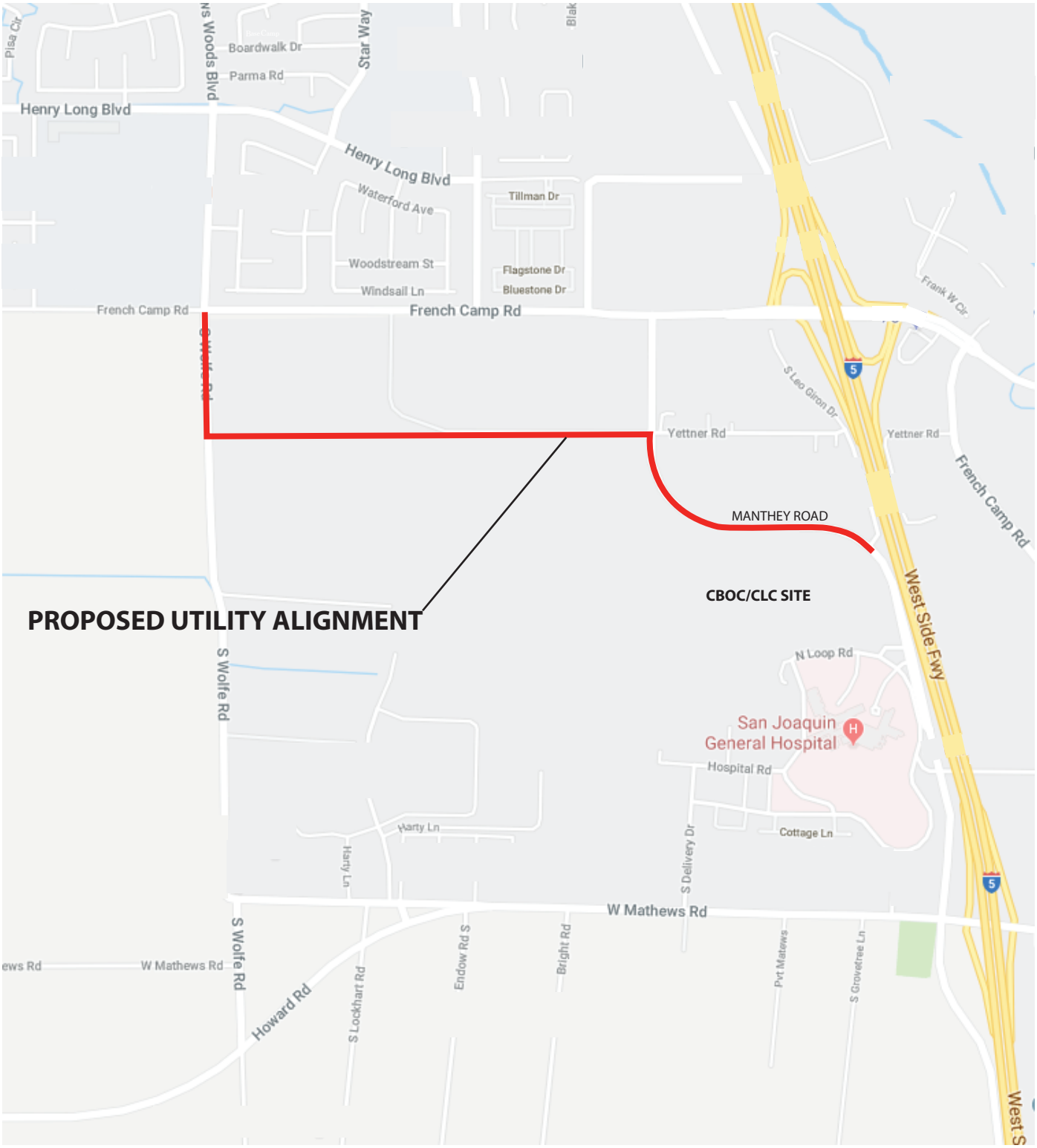
After the close of the public review period, the City is obligated to provide written responses to the comments received, and these responses will be published in a Final SEIR. The Final SEIR must be considered by the City decision-makers (i.e., the Stockton City Council) prior to a decision on the project. Before the City can decide upon the project, it must first certify that the SEIR was completed in compliance with the provisions of CEQA, that the City has reviewed and considered the information in the Final SEIR, and that the Final SEIR 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 SEIR. If the project is found to involve any significant and unavoidable environmental effects, the CEQA findings will need to include a Statement of Overriding Considerations. If mitigation measures have been included in the Final SEIR, the City also must revise the Mitigation Monitoring and Reporting Program for the General Plan 2040 EIR to include the measures.



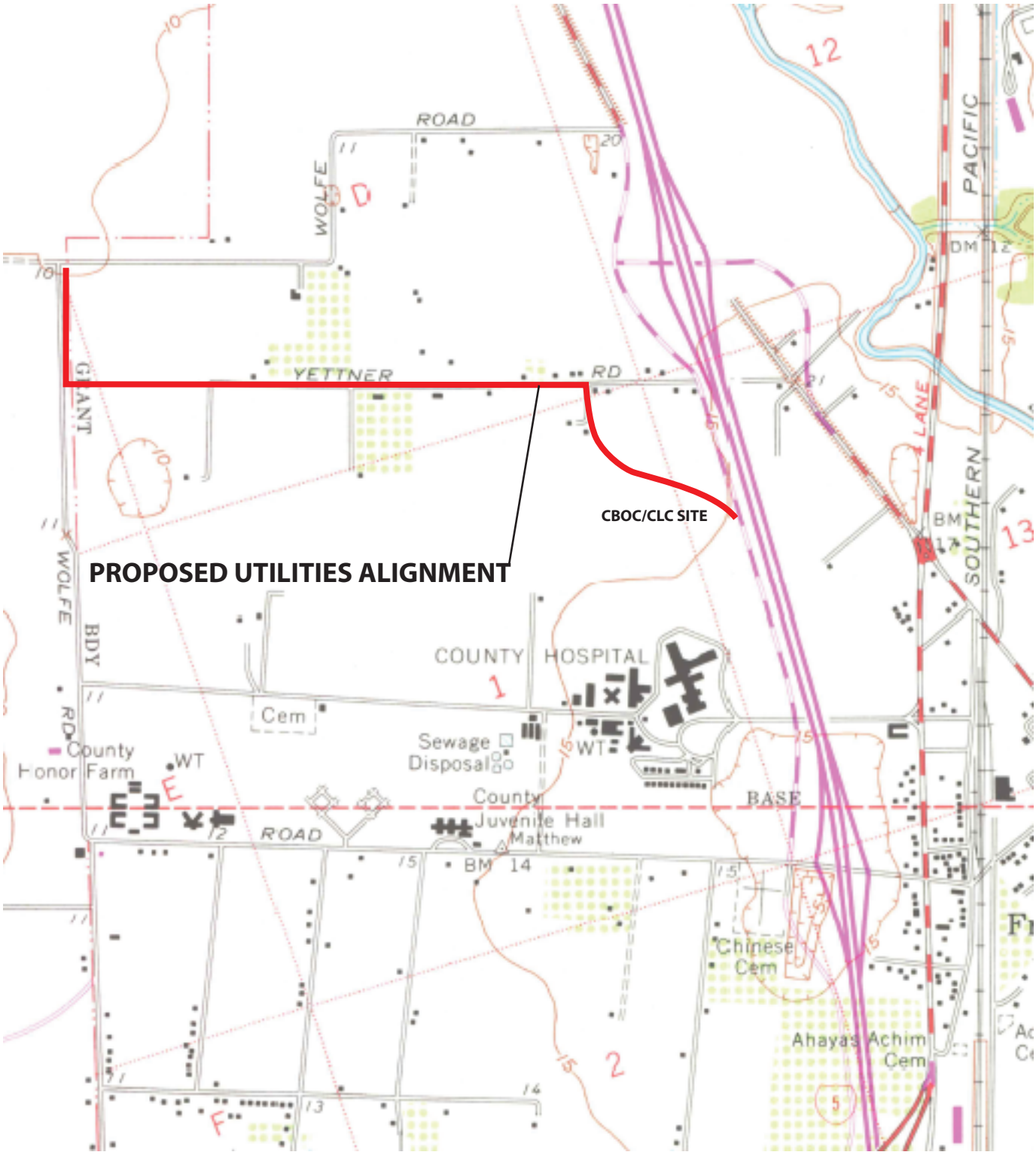
SOURCE: www.csac.counties.org and Google Maps

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Figure 1-1
REGIONAL LOCATION MAP



SOURCE: Google Maps

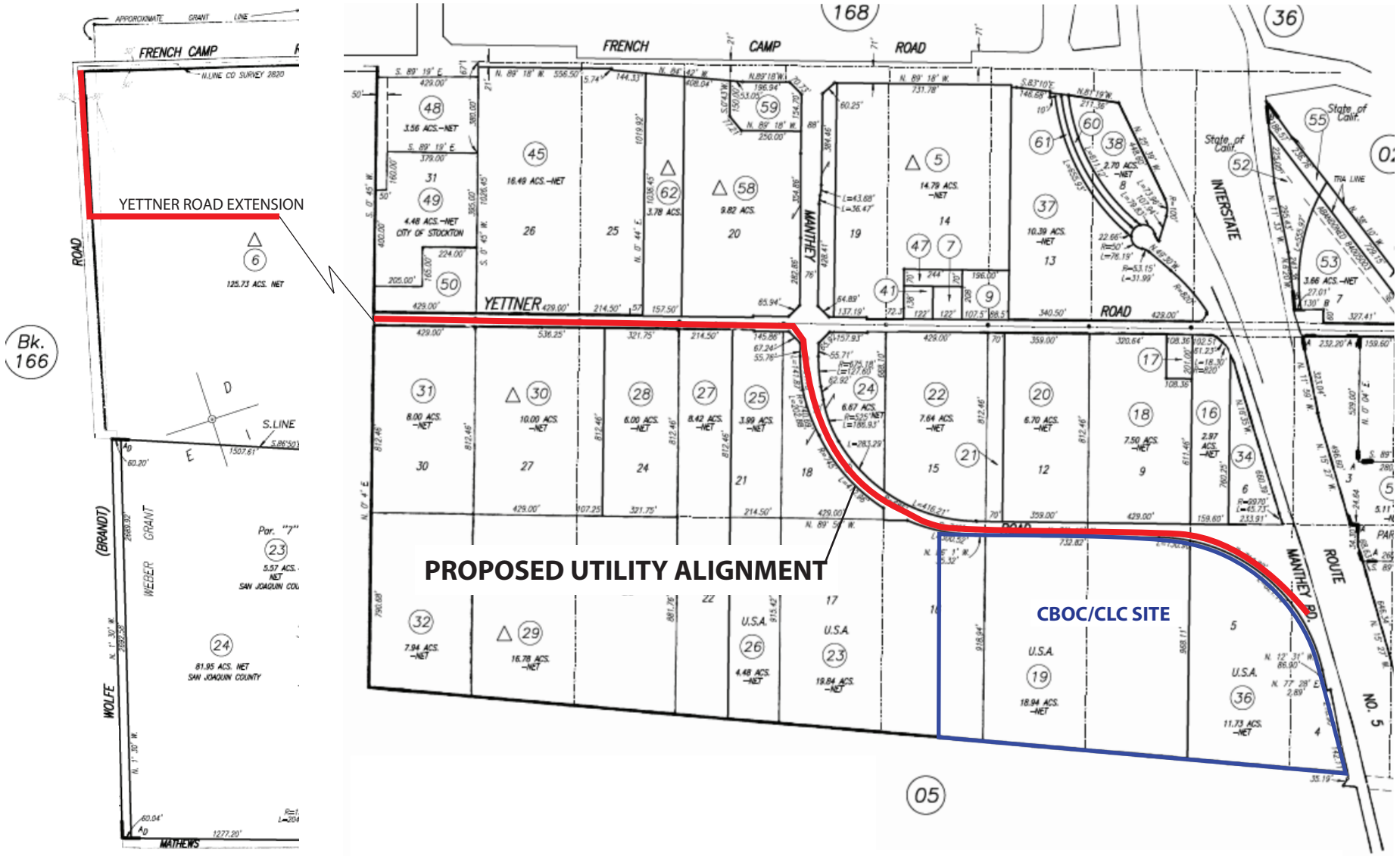


SOURCE: Stockton West USGS Quadrangle Map, T1N, R6E, S1, 1968.



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Figure 1-4
AERIAL PHOTO



SOURCE: San Joaquin County Assessor's Office, 193-06-36,19,18,22,23,25,27,28,30,31. 193-05-06

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Figure 1-5
ASSESSOR PARCEL MAP

2.0 SUMMARY

2.1 PROJECT DESCRIPTION

The project proposes an extension of water and sanitary sewer lines from existing City trunk line and storage facilities in southwest Stockton to a CBOC/CLC medical and residential facility to be constructed by the VA in unincorporated San Joaquin County.

The proposed water line would connect at the Weston Ranch Reservoir, then would run east along Yettner Road, then south along South Manthey Road to the project site, all within the road right-of-way (see Figure 3-1). A second segment would be extended west of Yettner Road to an existing water line along Wolfe Road. The total length of the proposed off-site water line would be approximately 1.1 miles.

The proposed alignment for the sanitary sewer line would begin at the intersection of French Camp Road and Wolfe Road, then run south along Wolfe Road, and east across private property to Yettner Road; the line would then extend further east along Yetter Road to the intersection with South Manthey Road, then run along South Manthey Road to an intersection with an existing frontage road at the CBOC/CLC site, where the extension would end. The total length of the off-site sewer line would be approximately 1.4 miles.

The project would require City approvals for construction of the proposed water and sewer lines and an agreement for connection of the VA facilities to these new elements of the City's system. Permits from San Joaquin County and other agencies also would be required. The City would need to acquire both temporary and permanent easements for the portion of the project that crosses private property. The City also proposes to acquire private property around the Weston Ranch Reservoir as part of the project.

2.2 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The potential effects of the project on specific environmental issues are summarized in Table 2-1 at the end of this chapter, along with mitigation measures proposed to minimize these effects. 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 of the potential environmental effects of the project would be reduced to a level that is less than significant.

2.3 AREAS OF CONTROVERSY

A NOP for this SEIR was issued on August 7, 2019 with a request for comment from public agencies and other interested parties. The NOP and written responses to the NOP are shown in Appendix A. Two comment letters were received, neither of which raised any substantive environmental issues or areas of controversy.

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 Sewer Alignment

The alternatives identified in this SEIR are the same alternatives that were identified in the CBOC/CLC EA.

The No Project alternative is defined as no development as proposed by the project. There would be no water or sewer lines extended to the CBOC/CLC site. There would be no impacts associated with line installation on the proposed project alignment and adjacent properties. However, this alternative would meet none of the objectives of the proposed project, and the proposed CBOC/CLC either would not be developed or would require on-site water and wastewater facilities. The former situation would not meet the need of veterans residing in the Central Valley and would lead to continued high vehicle miles traveled. The alternative also would leave unresolved the issue of CBOC/CLC wastewater disposal and the associated potential environmental impacts.

The Alternative Sewer Alignment alternative is an alternative to the proposed location of the proposed sewer line along Wolfe, Yettner and South Manthey roads. The alternative alignment would begin at the intersection of French Camp Road and Wolfe Road, run east along French Camp Road, then south along South Manthey Road to the CBOC/CLC site. The total length of sewer line would be approximately 1.45 miles. This alternative would meet the objectives of the proposed project. Development under this alternative would have similar impacts to the proposed project, except the alternative would avoid placement of a portion of the line within private agricultural land. However, this alternative would be lengthier than the proposed project; as such, construction impacts associated with installation of the sewer line would increase accordingly. In particular, this alternative would expose more residences, mainly along French Camp Road, to noise and air quality associated with construction. Also, installation along French Camp Road and South Manthey Road could potentially cause greater disruption to traffic.

The No Project alternative was identified as the environmentally superior alternative, but it does not meet the project objectives. Both the proposed project and the Alternative Sewer Alignment would have similar environmental impacts, but the Alternative Sewer

Alignment would have impacts on a few issues that would be greater than the proposed project. Therefore, the proposed project is considered the environmentally superior alternative after the No Project alternative.

2.5 SUMMARY OF OTHER CEQA ISSUES

Chapter 20.0, Other CEQA Issues, discusses significant environmental impacts of the project that cannot be avoided or mitigated to a level that would be less than significant. Although the General Plan 2040 EIR identified significant and unavoidable impacts with General Plan development, no significant and unavoidable environmental impacts associated specifically with the project were identified. The General Plan 2040 EIR had determined that development associated with the General Plan 2040 was significant and unavoidable, and a Statement of Overriding Considerations had been adopted acknowledging this issue. The project is consistent with the adopted General Plan 2040 and does not introduce new or more severe impacts.

Chapter 20.0 discusses irreversible environmental commitments, including energy consumption for project construction. The project would involve the irreversible commitment of construction materials to the construction of buildings, parking spaces, and supporting infrastructure. Construction materials would not be used in highly significant or unusual quantities when compared to similar projects and would be obtained from existing commercial sources. No other irreversible environmental commitments were identified with the project.

Chapter 20.0 discusses the potential growth-inducing impacts of the project. The SEIR analyzes the potential effects of the project on land use, population, and housing and concludes that project impacts would be less than significant. The CBOC/CLC that the project would serve would be consistent with the land use designation of the Stockton General Plan 2040 for the site. The project would not induce population growth not already anticipated by the Stockton General Plan 2040, as it would not encourage development inconsistent with the General Plan. The project would not have new or more severe growth-inducing impacts than those analyzed in the General Plan 2040 EIR, which were determined to be less than significant.

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. The project would not obstruct any scenic vistas in the area, nor is it anticipated to cause any obstruction.	LS	None required.	-
Impact AES-2: Scenic Resources. There are no distinctive scenic resources or designated scenic highways in the area. Only limited intrusion on agricultural area would occur.	LS	None required.	-
Impact AES-3: Visual Character and Quality. Temporary visual impacts on rural landscape would occur from construction, but landscape would be restored after construction is completed.	LS	None required.	-
Impact AES-4: Light and Glare. The project would not install any lighting or use materials that produce glare.	NI	None required.	-
5.0 AGRICULTURAL RESOURCES			
Impact AG-1: Conversion of Farmland. The project would occur on land designated in part as Prime Farmland. However, project facilities would be installed underground and within existing public and private roadways, so the project would result in limited conversion of existing Prime Farmland, or any other farmland, to a non-agricultural use.	LS	None required.	-
Impact AG-2: Agricultural Zoning and Williamson Act. The project would only have limited effect on the use of lands zoned for agricultural use or under Williamson Act contracts, except for temporary construction impacts.	LS	None required.	-
Impact AG-3: Indirect Conversion of Agricultural Lands. A portion of the project is in an area designated for urban development. Development of the portion in agricultural land would require landowner consent and approvals from appropriate agencies, along with CEQA review.	LS	None required.	-

Notes: PS= Potentially Significant, LS= Less than Significant, NI= No Impact

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
6.0 AIR QUALITY			
Impact AIR-1: Conflict with Air Quality Plans and Standards. 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 dust control requirements during construction. No operational emissions would occur, so the project would not conflict with applicable air quality plans.	LS	None required.	-
Impact AIR-2: Exposure of Sensitive Receptors to Criteria Pollutants or Toxic Air Contaminants. Rural residences along alignment are unlikely to be exposed to high pollutant concentrations. Limited amounts of diesel PM generated by project construction and operations would likely dissipate before reaching rural residences. Project would not lead to generation of CO emissions that affect health.	LS	None required.	-
Impact AIR-3: Odors and Other Emissions. The project would not generate any odors.	LS	None required.	-
7.0 BIOLOGICAL RESOURCES			
Impact BIO-1: Special-Status Species and Habitats. Project development would involve the potential for incremental impacts on four special-status species: Swainson's hawk, burrowing owl, white-tailed kite, and loggerhead shrike.	PS	BIO-1: The City and/or its contractor shall apply to San Joaquin County for roadway encroachment permit(s), and to the San Joaquin Council of Governments (SJCOG) for coverage under the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan (SJMSCP). Prior to issuance of the encroachment permit, , the project site will be inspected by the SJMSCP biologist, who will recommend any SJMSCP Incidental Take Minimization Measures that should be implemented. The City shall pay the required SJMSCP fee, if any, and be responsible for the implementation of the specified Incidental Take Minimization Measures.	LS
Impact BIO-2: Riparian and Other Sensitive Habitats. No riparian areas or sensitive vegetation communities were identified on the project site.	NI	None required	-

Notes: PS= Potentially Significant, LS= Less than Significant, NI= No Impact

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact BIO-3: State and Federally Protected Wetlands. No wetlands or Waters of the U.S. were identified on the project site.	NI	None required.	-
Impact BIO-4: Migratory Fish and Wildlife Habitats. Trees, shrubs, and grasslands on or near the project site may attract protected migratory birds.	PS	BIO-2: If construction commences during the general avian nesting season (March 1 through July 31), a qualified biologist shall conduct a pre-construction survey for nesting birds protected by the Migratory Bird Treaty Act and/or California Fish and Game Code shall be required. If active nests are found, work in the vicinity of the nest, as determined by the biologist, shall be delayed until the young fledge.	LS
Impact BIO-5: Local Biological Requirements. No local biological resource ordinances or other local requirements are applicable to this project.	LS	None required.	-
Impact BIO-6: Habitat Conservation Plans. Project would participate in the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan	LS	None required.	-
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 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 paleontological resources, 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 archaeological or paleontological 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 and/or paleontologist can examine these materials, initially evaluate	LS

Notes: PS= Potentially Significant, LS= Less than Significant, NI= No Impact

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		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	
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

Notes: PS= Potentially Significant, LS= Less than Significant, NI= No Impact

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
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 City standard specifications 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 need to obtain a Construction General Permit, which would require preparation of a SWPPP to control erosion and sedimentation.	LS	None required.	-
Impact GEO-4: Expansive Soils. Project site soils in general have a low shrink-swell potential. Compliance with local regulations and specifications would minimize impacts.	LS	None required.	-
Impact GEO-5: Paleontological Resources and Unique Geological Features. The project site does not contain unique geological features or any known paleontological resources; however, project construction could unearth paleontological materials of unknown significance.	PS	Mitigation Measure CULT-2.	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 Emissions. Construction GHG emissions would be reduced by mitigation measure described in the Stockton Climate Action Plan. No operational GHG emissions would occur.	PS	GHG-1: Construction equipment and vehicles shall not idle their engines for longer than three (3) minutes.	LS

Notes: PS= Potentially Significant, LS= Less than Significant, NI= No Impact

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact GHG-2: Consistency with Applicable Plans and Policies. The project would not generate operational GHG emissions, so the project would not conflict 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. The project would not use or store hazardous materials except during construction.	LS	None required.	-
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. No other hazardous material releases would occur. 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. The project may encounter substantial concentrations of agricultural chemicals that could be a health risk.	PS	HAZ-1: Prior to the start of construction, a Phase I Environmental Site Assessment shall be conducted to determine if potential contamination may exist within the permanent and temporary easement area of the project alignment. If this assessment indicates the potential presence of contamination, a Phase II Environmental Site Assessment shall be conducted to identify the source and areas of any contamination that could pose a risk to human health. Any such contaminated area identified shall be remediated in accordance with applicable State and local regulations pertaining to the contaminant such that it would no longer present a risk to human health.	LS
Impact HAZ-4: Airport Hazards. Proposed development would be consistent with allowable land uses in the safety zone established for Stockton Metropolitan Airport.	NI	None required.	-
Impact HAZ-5: Interference with Emergency Vehicle Access and Evacuations. Project construction would be required to comply with encroachment permit conditions that would leave roads open. Project operations would not close or restrict use of adjacent roads.	LS	None required.	-
Impact HAZ-6: Wildfire Hazards. Project is in an urbanizing area	NI	None required.	-

Notes: PS= Potentially Significant, LS= Less than Significant, NI= No Impact

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
that has not been designated a fire hazard area by Cal Fire.			
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, but compliance with Construction General Permit would reduce impacts.	LS	None required.	-
Impact HYDRO-2: Groundwater Resources. Project would not directly draw from groundwater nor would it affect recharge. Some dewatering may occur along Wolfe Road segment, but compliance with applicable permit would minimize impacts.	LS	None required.	-
Impact HYDRO-3: Drainage Patterns and Runoff. Project would not alter existing drainage patterns and runoff volumes.	NI	None required.	-
Impact HYDRO-4: Flood, Tsunami, and Seiche Hazards. The project site is located within a 200-year flood zone and may be subject to flooding from dam or levee failure, but the nature of the project would not lead to any damage or alteration of flows. The project would not be subject to 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. No applicable sustainable groundwater management plans are currently in effect.	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 rural residences. The proposed project would not separate any 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.	LS	None required.	-

Notes: PS= Potentially Significant, LS= Less than Significant, NI= No Impact

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 infrastructure may provide opportunities for development, these opportunities would be limited by land use designations.	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. Nearest noise-sensitive land uses are rural residences. Project noise would be limited to construction activities. Mitigation would reduce noise from these activities. No operational noise would occur.	PS	NOISE-1: All equipment used on the construction site shall be fitted with mufflers in accordance with manufacturers' specifications. Mufflers shall be installed on the equipment at all times on the construction site.	LS
Impact NOISE-2: Groundborne Vibrations. Earth-moving equipment may generate some groundborne vibrations, but not at levels perceptible by sensitive receptors.	LS	None required.	-
Impact NOISE-3: Airport and Airstrip Noise. The project site is outside noise contours established for Stockton Metropolitan Airport. No private airstrips are in the vicinity.	NI	None required.	-
15.0 PUBLIC SERVICES AND RECREATION			
Impact PSR-1: Public Services. The project would not generate demand for public services. No new or expanded facilities would be required.	LS	None required.	-
Impact PSR-2: Parks and Recreational Services. The project would not generate demand for parks or recreational facilities. No new or expanded facilities would be required.	NI	None required.	-
16.0 TRANSPORTATION			
Impact TRANS-1: Conflicts with Transportation Plans. The project would not generate any traffic nor any demand for public transit or other alternative modes of transportation.	LS	None required.	-
Impact TRANS-2: Consistency with CEQA Guidelines Section 15064.3(b). The project would not increase VMT; as such, it would be consistent with Section 15064.3(b).	NI	None required.	-

Notes: PS= Potentially Significant, LS= Less than Significant, NI= No Impact

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact TRANS-3: Safety Hazards. Project construction would involve routine but potential traffic hazards, but contractors will be required to provide traffic safety control as warranted. No other safety hazards would be created.	LS	None required.	-
Impact TRANS-4: Emergency Access. Conditions on project construction work within roads would ensure adequate emergency access.	LS	None required.	-
17.0 UTILITIES AND ENERGY			
Impact UTIL-1: Wastewater Services and Facilities. The project would provide sanitary sewer service to proposed CBOC/CLC. City has adequate treatment capacity.	LS	None required.	-
Impact UTIL-2: Water Services and Facilities. The project would provide water service to proposed CBOC/CLC. City has adequate water supplies.	LS	None required.	-
Impact UTIL-3: Stormwater Services and Facilities. The project would not require new or expanded storm drainage facilities.	NI	None required.	-
Impact UTIL-4: Solid Waste. The project would not generate any demand for solid waste services.	NI	None required.	-
Impact UTIL-5: Energy and Telecommunications Facilities. The project would not generate any demand for electrical, natural gas, or telecommunication services.	NI	None required.	-
Impact UTIL-6: Project Energy Consumption. Project construction would not consume energy in a manner that is wasteful, inefficient, or unnecessary. Project operation would consume minimal amounts of energy.	LS	None required.	-

Notes: PS= Potentially Significant, LS= Less than Significant, NI= No Impact

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The proposed project is in unincorporated San Joaquin County adjacent to southwest Stockton (see Figures 1-1 through 1-5). The unincorporated community of French Camp is southeast of the project site, while the Weston Ranch development within the City of Stockton is to the north. The project site is shown on the U.S. Geological Survey's Stockton West topographic map within Sections 1 and D of Township 1 North, Range 6 East, Mt. Diablo Base and Meridian. The latitude of the approximate center of the alignment (intersection of Yettner Road and South Manthey Road) is 37° 53′ 39″ North, and the longitude is 121° 17′ 22″ West.

3.2 PROJECT OBJECTIVES

The objective of the project is to facilitate the provision of improved medical services for veterans by providing potable water and sanitary sewer collection service for the proposed CBOC/CLC. Stockton General Plan Action LU-6.1D requires that all utility connections outside the city limit be for land uses that are consistent with the General Plan. As discussed in Chapter 13.0, Land Use, the CBOC/CLC is consistent with the designations in the Stockton General Plan 2040. Therefore, the project also serves the objective of providing services to an area designated for development.

3.3 PROJECT DETAILS

The proposed project would connect the CBOC/CLC to the potable water and sanitary sewer systems of the City of Stockton by extension of water and sanitary sewer trunk lines from existing facilities in southwest Stockton to the CBOC/CLC site (Figure 3-1). As described in Chapter 1.0, Introduction, the CBOC/CLC project proposes the construction of a four-story structure approximately 158,000 gross square feet that provides medical services, along with a 120-bedroom patient facility consisting of clusters of 10- to 20-bedroom units and a 30,000-square-foot community center. The project is described in more detail below.

3.3.1 Water Trunk Line

The proposed potable water trunk line would begin at the Weston Ranch Reservoir and extend south approximately 290 feet to Yettner Road. The alignment would run east along Yettner Road to South Manthey Road, then south and east along South Manthey Road to the CBOC/CLC project site, all within existing road right-of-way. A second

segment of trunk line would be extended west through agricultural land along the extension of the Yettner Road alignment from the Weston Ranch Reservoir segment to Wolfe Road, where it would connect to an existing City 18-inch diameter water line.

The total length of the water trunk line would be approximately 1.1 miles. The portion of the trunk line at the Weston Ranch Reservoir would be 30 inches in diameter, with the remainder of the line being 16 inches in diameter. The water line would be installed at a minimum cover depth of approximately 5 feet. Typical cross sections of the water line are shown in Figure 3-2.

The segment of the trunk line from Weston Ranch Reservoir to Yettner Road would be located within an acquired easement over private property, a 1.93-acre parcel identified as APN 193-060-50 and referred to as the "Lyons property." This would necessitate city acquisition of a permanent 15-foot easement (1,762 square feet) and an additional 15-foot temporary easement (1,762 square feet) for construction. The City is considering purchasing the entire 1.93-acre Lyons property, which is currently vacant.

The segment of the trunk line between Wolfe Road and the west end of Yettner Road would also traverse private property, referred to as the "Long property," along an existing agricultural road. The installation of this segment would necessitate acquisition of a permanent 30-foot easement (1.46 acres) and temporary 12.5-foot construction easements on either side (total 1.34 acres) through the Long property. This easement would be shared with the proposed sanitary sewer trunk line (see below).

3.3.2 Sanitary Sewer Trunk Line

The proposed sanitary sewer trunk line alignment would begin at the intersection of French Camp Road and Wolfe Road, then run south along Wolfe Road, east along the extension of Yettner Road, along Yettner Road to the intersection with South Manthey Road, and then south along South Manthey Road to an existing intersection with the I-5 frontage road at the CBOC/CLC site, where the extension would end.

The total length of the off-site sanitary sewer trunk line would be approximately 1.4 miles. The portion of the trunk line along Wolfe Road would be a 42-inch main. The portion within the agricultural field would be a 21-inch main. The portion along Yettner Road would be a 15-inch main. The remainder of the line, along South Manthey Road, would be a 12-inch main. The sewer line would be installed at depths ranging from 6 to 18 feet. Typical cross sections of the sanitary sewer trunk line are also available in Figure 3-2.

The segment of the trunk line from Wolfe Road to the west end of Yettner Road would traverse the Long property. This would necessitate acquisition of a permanent easement and temporary construction easements, as described above. The permanent easement would accommodate both the proposed sanitary sewer and water trunk lines, which would be separated by approximately 10 feet.

Construction of the proposed extensions would require excavations to allow for the installation of the lines. Excavated material would be used as fill once the lines are

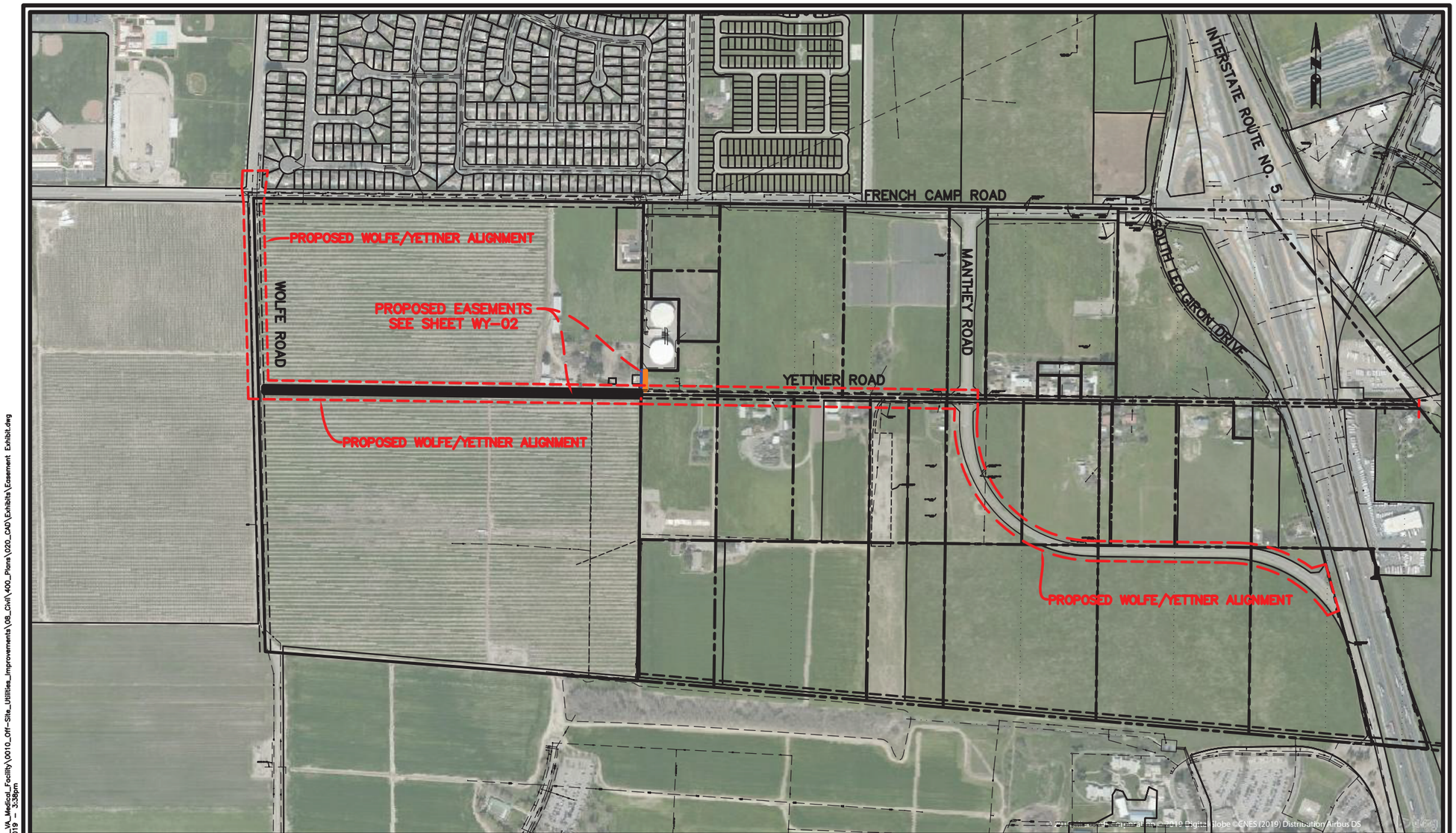
installed. In the portions of the alignment on the roads, both lines would be within the street pavement; therefore, some removal and replacement of the road pavement may be necessary. Construction equipment and materials on the Lyons and Long properties would be confined to the temporary easements and would be removed once construction work is completed. The permanent easement would contain manholes and water valves that would remain after construction work is completed.

3.4 PERMITS AND APPROVALS

Table 3-1 provides a summary of permits and approvals that would be required for the project.

TABLE 3-1
REQUIRED PERMITS AND APPROVALS

Agency	Permit/Approval
City of Stockton, City Council	Certification of Final Supplemental Environmental Impact Report, adoption of CEQA findings Approval of easements and property acquisition Approval of plans and specification, advertise for bids, contractor selection and project construction
City of Stockton, Planning Commission	Recommendations to the City Council if required
City of Stockton, Municipal Utilities Department	Approval of construction and connection plans, project specifications Agreement with VA on CBOC/CLC connections to City's water, sewer, and storm drainage systems
San Joaquin County Department of Public Works	Encroachment permit for construction in County roads
State Water Resources Control Board	Construction General Permit (storm water)



FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Exhibits\Easement Exhibit.dwg
PLOT DATE: Jun 25, 2019 - 3:38pm

SUBMITTAL	
%	Date

NORTH ORIENTATION

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE	APPR.

DESIGN BY	MRC
DRAWN BY	DRC
CHECK BY	MRC
HORIZONTAL DATUM	CCS83, ZONE 3
VERTICAL DATUM	NAVD88

DRAWING SCALE
HORZ: 1" = 250'
ORIGINAL DRAWING SCALE
0 ½" 1"

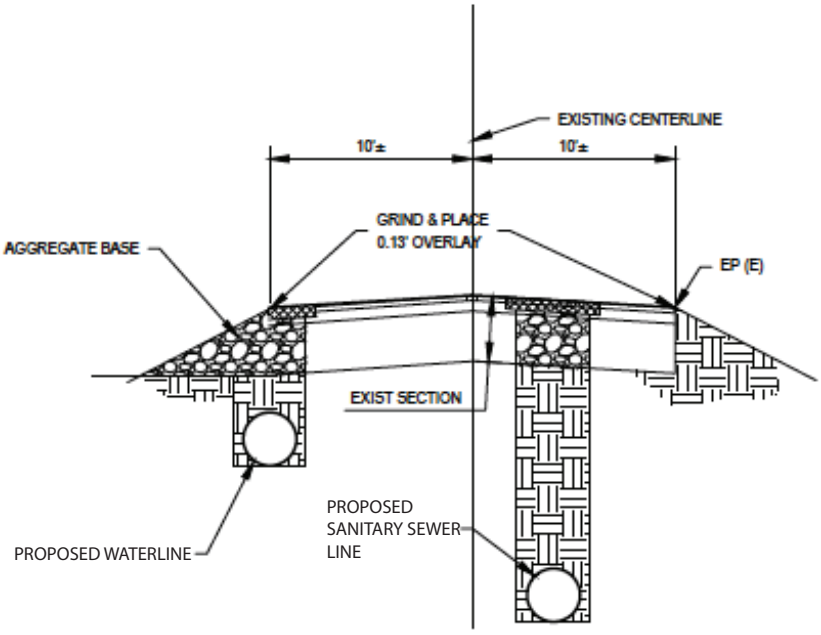
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U.S. DEPARTMENT OF VETERANS AFFAIRS
CBOC & CLC - STOCKTON

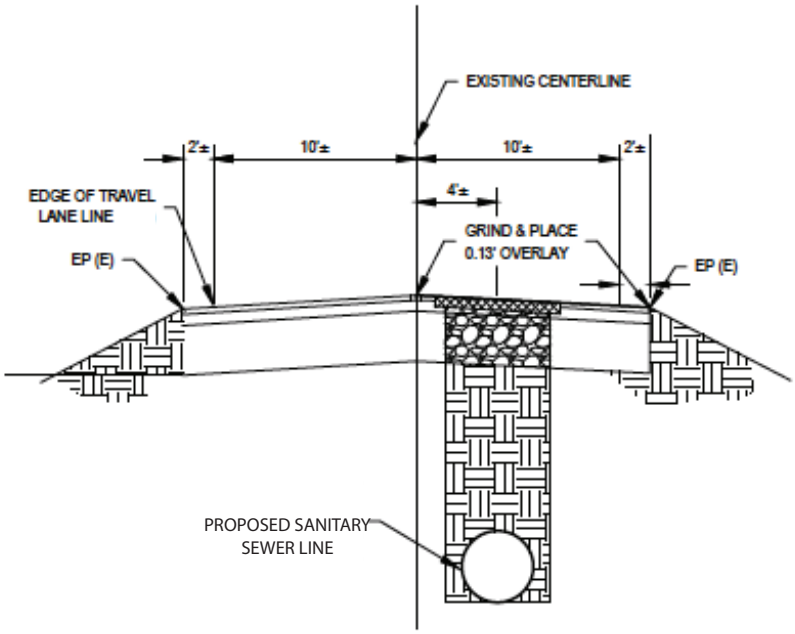
PROPOSED UTILITY EASEMENT EXHIBIT
WOLFE / YETTNER ALIGNMENT

DATE: JANUARY 2018
SHEET IDENTIFICATION: WY - 01
KSN PROJECT FILE NO.: 2173-0300

Figure 3-1
PROPOSED PIPELINE ALIGNMENTS

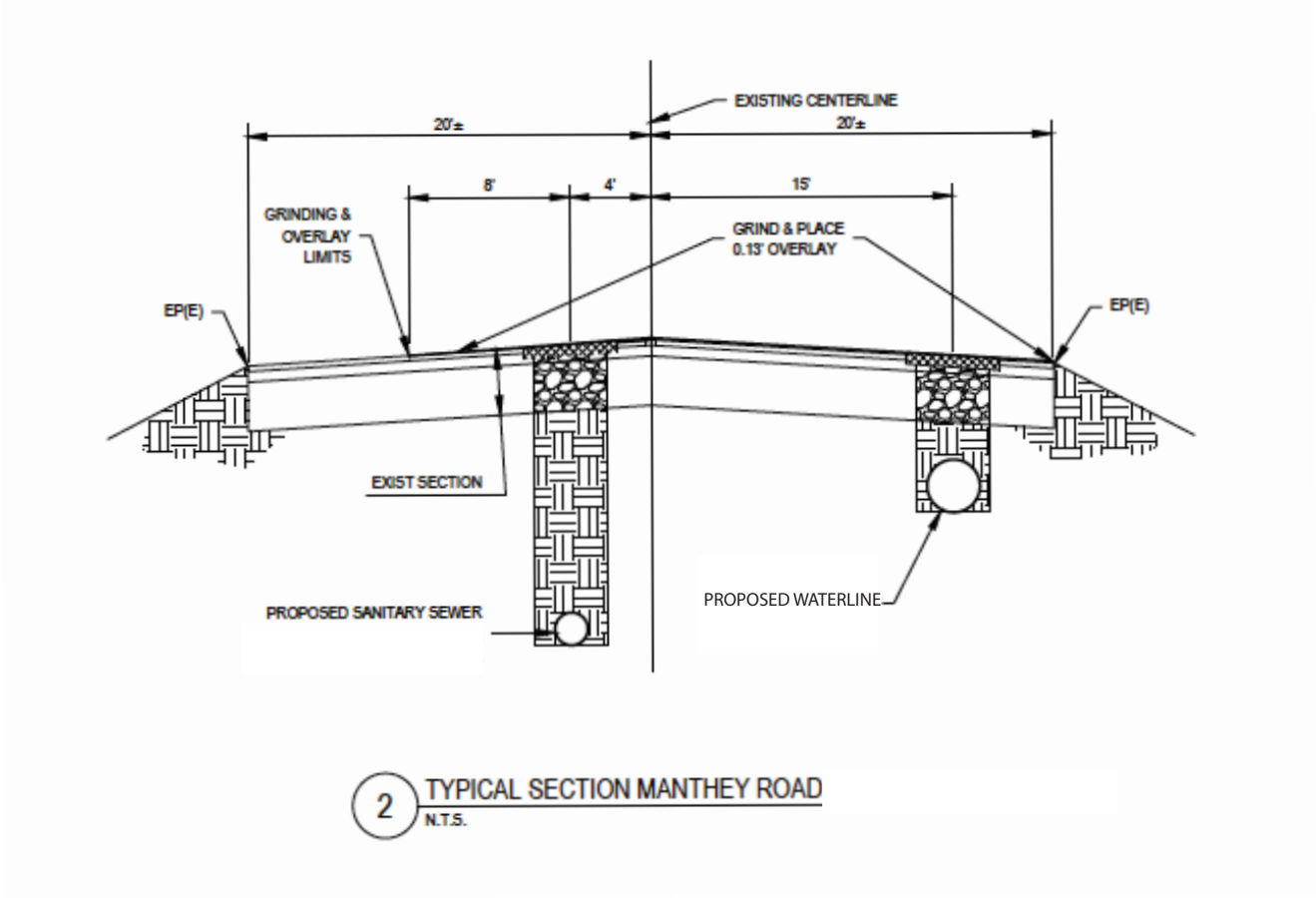


1 TYPICAL SECTION YETTNER RD
N.T.S.



3 TYPICAL SECTION WOLFE ROAD
N.T.S.

SOURCE: Kjeldsen, Sinnock, Neudeck
Civil Engineers and Land Surveyors



SOURCE: Kjeldsen, Sinnock, Neudeck
Civil Engineers and Land Surveyors

4.0 AESTHETICS AND VISUAL RESOURCES

ENVIRONMENTAL SETTING

Aesthetic/Visual Resources in Stockton and at Project Site

The City of Stockton, located near the center of the Central Valley, is characterized by a mixture of residential, commercial, industrial, and civic land uses. Areas within the current city limit are characterized by distinct residential neighborhoods, neighborhood commercial and regional shopping centers, various types of office uses, a mix of heavy and light industrial uses, and a wide range of public and institutional buildings and facilities. The periphery of the city, where the project site is located, is largely characterized by agricultural and rural areas.

The areas surrounding Stockton are a mix of open space, agricultural fields, and urban development. The adopted General Plan 2040 does not designate scenic vistas; however, it identifies open space, agricultural fields, and riparian areas, particularly along the San Joaquin River and the Calaveras River, as significant visual features. Given the relatively flat topography of the city, views within the city core are generally limited to the built environment, but views along the periphery can be more expansive with fewer developed features blocking views of surrounding open space, agricultural fields, and riparian areas.

The proposed project alignment is in a predominantly rural, agricultural area, and agricultural fields and scattered residences are the predominant visual features. The western portion of the proposed alignment traverses an existing orchard on the Long property. At the west end of Yettner Road, two City of Stockton water storage tanks and a cellular communications tower dominate the landscape. Utility poles are found along Wolfe Road, Yettner Road, and a portion of Manthey Road. At the eastern end of the proposed alignment, the Interstate 5 freeway is visible, along with a portion of the community of French Camp east of the freeway.

Light and Glare

The General Plan 2040 EIR notes that light pollution refers to all forms of unwanted light in the night sky, including glare, light trespass, or spillover to adjacent sensitive receptors (e.g., residential development), sky glow, and over-lighting. Views of the night sky are an important part of the natural environment. Excessive light and glare can be visually disruptive to humans and nocturnal animal species. Light pollution in most of the city is restricted primarily to street lighting along major arterial streets, Interstate 5, State Route (SR) 99, and SR 4, and to nighttime illumination of commercial buildings, shopping centers, and industrial buildings. Sources of light and glare in the project vicinity are limited, mainly security lighting at rural residences and the water storage tanks and

intermittent light from vehicles of nighttime motorists traveling on local roadways (City of Stockton 2018b). Street lighting is limited in the area; the nearest streetlights are along French Camp Road.

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 change which would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 *et seq*. A highway may be designated scenic depending 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 eligible for designation as scenic highways or have been so designated. 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 Interstate 5 to the Alameda County Line (15.4 miles). Both are officially designated state scenic highways in southwestern San Joaquin County (Caltrans 2017).

San Joaquin County General Plan

The current San Joaquin County General Plan has a policy requiring protection of the visual character of designated scenic roadways. The County has designated 26 local roadways within the County as local scenic routes. None of these roadways are in the vicinity of the project site.

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 16.36.040, Agriculture Preservation, includes provisions that minimize the potential intrusion of urban development near agricultural uses in order to ensure the preservation and protection of agricultural operations. 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.

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.B directs the City to protect, preserve, and improve riparian corridors and incorporate them in the City's parks, trails, and open space system.
- Policy LU-5.3 directs the City to define discrete and clear city edges that preserve agriculture, open space, and scenic views, and is implemented by
- Action LU-5.3.A directs the use of landscaping and other attractive edging instead of soundwalls and similar utilitarian edges of development at interfaces with rural landscapes.
- Action LU-5.3.B calls for coordination with the County and property owners in unincorporated areas to preserve agricultural land and open space areas that maintains clear boundaries between cities.

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. Public Resources Code Section 21099 states that 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. The project does not meet the criteria of Public Resources Code Section 21099; therefore, this SEIR analyzes the aesthetic impacts of the project.

Impact AES-1: Scenic Vistas

The General Plan 2040 EIR notes that scenic vistas are generally interpreted as long-range views (City of Stockton 2018b). The General Plan 2040 does not designate official scenic vistas; however, open space, agricultural fields, and riparian areas were identified as significant visual features. At the periphery of the city, where there is a significant amount of development that has already been approved on lands that are currently open space or agriculture, future development could adversely affect scenic vistas, including views of open space, agricultural fields, and riparian areas. The project proposes the installation of sanitary sewer and water lines, which would be buried in the ground. The project would not involve any above-ground development; as such, it would not have any potential impact on scenic vistas. The project would have no impact on scenic vistas.

The project may indirectly affect views of scenic vistas by allowing for future development to occur along parcels abutting the project alignment. Chapter 20.0, Other CEQA Issues, discusses the potential "growth-inducing" impacts of the project, which may include development of buildings that intrude upon vistas. The General Plan 2040 includes policies and actions that would protect scenic views. Consistency with these General Plan policies and actions would ensure that future development would result in an impact to scenic vistas that is less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AES-2: Scenic Resources

The General Plan 2040 EIR states that scenic resources that contribute to the city's visual quality are varied and include watercourses, existing open space, agricultural fields, and riparian areas. The Delta of the San Joaquin and Sacramento Rivers, located to the west of the city, also contributes to the visual quality of the area. The project would traverse an agricultural field; however, as noted in the discussion under Impact AES-1, the project would not have any above-ground facilities. The project would not substantially intrude upon this scenic resource.

The General Plan 2040 EIR focused its aesthetic impacts analysis on scenic highways. As noted, there are no existing designated or eligible state scenic roads or highways in the project vicinity, and there are no designated local scenic highways. As such, the project would have no impact on scenic highways.

There are no distinctive scenic resources, such as trees, rock outcroppings, or other distinctive features in the project vicinity. The rural landscape may be considered a scenic resource, particularly the orchards. However, as noted, the sanitary sewer and water lines

would be buried, so they would not intrude upon the rural landscape. Project impacts on scenic resources would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AES-3: Visual Character and Quality

As noted under Impact AES-2, a portion of the project alignment is within agricultural fields, which have been identified as potential scenic resources. However, as noted, the sanitary sewer and water lines would be placed underground and would not have visible above-ground facilities. Additionally, the proposed project alignment is along existing public or farm roads; as such, it would not encroach upon the adjacent rural landscape. Temporary visual impacts on the immediate landscape may occur with construction work, as excavation work would be required. However, as work would occur within existing roads, the excavated areas would be filled and restored to their pre-construction condition.

The City may restrict or prohibit planting on the permanent easement within the Long property, in order to facilitate maintenance of the proposed trunk lines. This could have an adverse impact on the visual agricultural landscape. However, as noted in the Significance Thresholds, this concern is limited to public views. The easement is on private property, and the only public views available of this easement would be a limited portion of it from Wolfe Road. Also, the easement would generally follow an existing agricultural road on the property, so the existing landscape would not be substantially altered. The impact on the public visual landscape near the Long property is considered minimal.

The project has the potential to encourage future urban development that could degrade the visual quality of the area. The General Plan 2040 includes policies and actions that would serve to minimize potential impacts to visual character. Furthermore, potential future urban development under the General Plan 2040 would be subject to the City's design review process in accordance with Chapter 16.120 of the Stockton Municipal Code. Consistency with these General Plan policies and actions and with City regulations would ensure that future development would not adversely affect scenic resources or degrade the visual quality of the city. Project impacts on visual character and quality would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AES-4: Light and Glare

The General Plan 2040 EIR states that nighttime illumination and glare impacts are the effects of a project's exterior lighting upon adjoining uses and areas (City of Stockton 2018b). Light and glare impacts of new development can vary widely from security and

street lighting in new residential neighborhoods to high-intensity lighting of commercial and industrial areas. Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies.

The project does not propose the installation of any new lighting. All project facilities would be placed underground, so no lighting would be necessary, and no element of the project that could produce glare would be exposed to the sun. Because of this, the project would have no impact related to light and glare.

Level of Significance: No impact

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 is in farms as of 2017 (U.S. Department of Agriculture 2019). The gross value of agricultural production in the county was over $2.5 billion in 2017, the most recent year for which data are available. This represented an increase in value of 8.13% from 2016. The top five agricultural products in 2017 were grapes, milk, almonds, walnuts, and cherries (San Joaquin County Agricultural Commissioner's Office 2018).

The project site and surrounding areas historically have been used for agriculture. In recent years, urban development has encroached upon this area, mainly within the Stockton city limits, north of French Camp Road. However, in the western area of the proposed project alignment, walnut orchards and row crops are raised.

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.

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 General Plan 2040 EIR, most of the prime farmland in the Stockton area is located on the northern and southern outskirts (City of Stockton 2018b). The 2016 San Joaquin County Important Farmland Map indicates that land along the proposed project alignment is Prime Farmland and Farmland of Local Importance (California Department of Conservation 2016b).

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 a non-renewal or cancellation. 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). Some of the properties adjacent to the proposed project alignment are under a Williamson Act contract, including the Long property.

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 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 currently 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 lands 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). Under this ordinance, the County requires agricultural mitigation for a General Plan Amendment or a zoning reclassification that changes the designation of any land from an agricultural to a non-agricultural use. Agricultural

mitigation requirements are satisfied by granting a farmland conservation easement or other farmland conservation mechanism. The number of acres of agricultural mitigation land shall be at least equal to the number of acres that will be changed to a non-agricultural use (i.e., a 1:1 ratio). This ordinance applies to lands under County land use jurisdiction.

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 and other San Joaquin County municipalities. The SJMSCP requires the payment of a per-acre fee for loss of wildlife habitat, which in central San Joaquin County is largely integral with agricultural use. 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.

Stockton General Plan 2040

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

- Policy LU-5.3: Define discrete and clear city edges that preserve agriculture, open space, and scenic views.
- Action LU-5.3.C: Maintain the City's agricultural conservation program that requires either dedication of an agricultural conservation easement at a 1:1 ratio or payment of an in-lieu agricultural mitigation fee for the conversion of prime farmland, farmland of statewide importance, or unique farmland, as defined by the State of Farmland Monitoring and Mapping Program.
- 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.

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 San Joaquin County. Therefore, impacts on forestry resources are not analyzed in this EIR.

Also, it should be noted that the definition of Farmland in Appendix G is narrower than the definition of Important Farmland used by the Farmland Mapping and Monitoring Program. For the purposes of this CEQA analysis, the Appendix G definition of Farmland will be used.

Impact AG-1: Conversion of Farmland

The General Plan 2040 EIR notes that the General Plan 2040 designates within its Planning Area approximately 16,160 acres of farmlands of concern under CEQA for non-agricultural uses. The General Plan 2040 includes policies and actions that aim to concentrate growth and protect agricultural lands outside of the city from conversion to non-agricultural use. Nevertheless, the General Plan 2040 EIR concluded that conversion of Farmland was a significant and unavoidable impact. Despite the applicability of agricultural mitigation and habitat conservation requirements, mitigation was not identified that would reduce this impact to a level that would be less than significant (City of Stockton 2018b). A Statement of Overriding Considerations for this issue was adopted by the Stockton City Council in conjunction with adoption of the General Plan 2040. This Statement of Overriding Considerations remains operative.

The project would occur on land designated in part as Prime Farmland under the Farmland Mapping and Monitoring Program. However, most project facilities would be installed underground and within existing public and private roadways. The Long property has been designated Prime Farmland, and the project would acquire 1.46 acres of this land for a permanent easement. Some of this easement would not be available for agricultural use, as manholes and water valves would be installed. These facilities would require clear space of approximately 25 feet in radius. This loss of Prime Farmland would be minimal. In addition, portions of the easement outside the 25-foot radii would be available for replanting. The project would not substantially affect existing agricultural operations on the Long property. Project impacts related to farmland conversion would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AG-2: Agricultural Zoning and Williamson Act

Most of the parcels along the proposed project alignment are currently zoned by San Joaquin County as AG-40 (General Agriculture, 40-acre minimum parcel size). A few of the parcels are also under a Williamson Act contract. The Long property, which would be the most-affected of these parcels, had been under a Williamson Act contract, but a Notice of Non-Renewal of the contract was filed with the County in 2005. A Williamson Act contract expires nine years after filing of the Notice of Non-Renewal, so the Long property no longer is under such a contract.

As noted, the project would be installed underground within existing private and public roads. Temporary impacts may occur with project construction, as some existing orchard trees on the Long property would be removed to accommodate construction work and equipment. The City would compensate the landowners for any tree removals. As noted under Impact AG-1, while 1.46 acres of the Long property would be acquired by the City for a permanent easement, not all the easement would be unavailable for agricultural use. Project impacts related to agricultural zoning or Williamson Act contracts would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AG-3: Indirect Conversion of Agricultural Lands

As noted in the discussion under Impact AG-1, the adopted General Plan 2040 would result in the conversion of prime farmland in the Stockton area to urban uses. The General Plan 2040 EIR concluded that this was a significant and unavoidable impact. Also, as noted above, the project would involve limited direct conversion of existing Prime Farmland to urban use; the project would allow for continued agricultural operations outside of areas where manholes and water valves would be installed.

The existence of urban infrastructure provided by the project could lead to pressures to convert agricultural land, particularly Prime Farmland, to urban uses. Chapter 20.0, Other CEQA Issues, discusses the potential growth-inducing impacts of the project. It is possible that landowners with property adjacent to the proposed water and sanitary sewer lines could decide to develop the currently designated agricultural land in the future and take advantage of the existence of this infrastructure.

However, such action would require a General Plan amendment and rezoning. Such actions would be subject to CEQA review, and measures mitigating impacts on agricultural land would most likely be required, including compliance with the City's mitigation program and with the SJMSCP. Also, such development would most likely require annexation to the City, an action that must be reviewed and approved by the San Joaquin Local Agency Formation Commission (LAFCo). The LAFCo would review the proposed annexation under State guidelines, including those addressing conversion of agricultural lands, and it also would require CEQA review. Also, future connections to these proposed trunk lines would be at locations and in a method approved in advance by

the City in accordance with City standard specifications. It should be noted that adjacent landowners have not indicated any intention to develop their existing agricultural properties at this time.

Other agricultural lands adjoining the project alignment are not designated as Farmland as defined in CEQA Guidelines Appendix G. Indirect conversion of these lands, should it occur, would not be as significant as the conversion of Prime Farmland. The project would not involve any activity that would indirectly convert agricultural land beyond those currently designated for development by the General Plan 2040. Project impacts on indirect conversion of agricultural lands are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

6.0. AIR QUALITY

This chapter analyzes project 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. 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 fog and intermittently stormy weather reduce the amount of sunshine during the winter months. Inversions occur frequently during fall and early winter (SJVAPCD 2015).

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 the following:

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 NOx, 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 and Fine Particulate Matter (PM_{10} and $PM_{2.5}$). Particulates include 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 (CO). 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, especially for elderly people or individuals with respiratory ailments, including fatigue, headache, confusion, and dizziness.

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. 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

A category of pollutants that is of concern is toxic air contaminants (TACs). TACs are non-criteria pollutants that cause or may cause cancer or other serious health effects, such as chronic eye, lung or skin irritation, reproductive effects or birth defects, neurological and reproductive disorders, or 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.

Diesel particulate matter (diesel PM) is designated by the State of California as a TAC. 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 the air quality standards for criteria pollutants, known as the National Ambient Air Quality Standards. There are six criteria pollutants: ozone, carbon monoxide, particulate matter, nitrogen dioxide 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 6-1 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 pollutant 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. The state standards cover other pollutants besides the six criteria pollutants designated by the Clean Air Act; additionally, the state standards are generally more stringent than the corresponding federal standards. 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, which become part of the State Implementation Plan.

Table 6-1 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 both PM_{10} and $PM_{2.5}$. The Air Basin is in attainment of, or unclassified for, carbon monoxide and other applicable standards. The California Clean Air Act requires areas that are designated nonattainment to achieve a 5% annual reduction in emissions until the standards are met.

TABLE 6-1
AIR BASIN ATTAINMENT STATUS
WITH FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

	Designation/Classification	
Pollutant	**Federal Standards[a]**	**State Standards[b]**
Ozone - One hour	No Federal Standard[f]	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme[e]	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] See 40 CFR Part 81

[b] See CCR Title 17 §60200-60201

[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 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

[e] 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).

[f] 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.

Source: SJVAPCD 2018a.

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 have been adopted by the SJVAPCD to meet Clean Air Act standards, including those designed to protect human health. These include the 2013 Plan for the Revoked 1-hour Ozone Standard, the 2007 and 2016 Ozone Plans, the 2007 PM_{10} Maintenance Plan, and the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards, among others. 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.

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

Regulation VIII (Fugitive Dust PM_{10} Prohibitions)

Rules 8011-8081 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)

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

Stockton General Plan 2040

For cities located within the SJVAPCD, State law requires that a general plan include an Air Quality Element, along with the other mandatory elements. The Stockton General Plan 2040 has a Community Health Element that includes a section on Air Quality that contains the information required in an Air Quality Element.

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

- Policy SAF-4.1 directs the City to reduce air impacts from mobile and stationary sources of air pollution.
- Action SAF-4.1C requires the use of electric-powered construction and landscaping equipment as conditions of project approval when appropriate.
- Action SAF-4.1D limits heavy-duty off-road equipment idling time to meet the California Air Resources Board's idling regulations for on-road trucks.

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 that 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 6-2 shows the significance thresholds established by SJVAPCD for projects, as set forth in its Guide for Assessing and Mitigating Air Quality Impacts.

TABLE 6-2
SJVAPCD SIGNIFICANCE THRESHOLDS AND
PROJECT AIR POLLUTANT EMISSIONS

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
SJVAPCD Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Estimated Project Construction Emissions (tons/construction period)	0.07	0.70	0.52	<0.01	0.04	0.03
Above Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

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: Road Construction Emissions Model, SJVAPCD 2015.

The significance thresholds for criteria pollutants established by SJVAPCD 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 are required to implement best available control technology. Furthermore, all permitted stationary 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, which have been developed to meet air quality standards, which themselves are 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. Thus, the SJVAPCD concludes that use of the New Source Review offset thresholds as the thresholds of significance for criteria pollutants is an appropriate and effective means of promoting consistency in significance determinations within the environmental review process, and that these thresholds are applicable to both stationary and non-stationary emissions sources (SJVAPCD 2015).

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 2015).

The project's construction emissions were estimated using the Road Construction Emissions Model, developed by the Sacramento Metropolitan Air Quality Management District. Although the Road Construction Emissions Model was initially developed for road construction projects, it has since been adapted for use on any projects that are linear in character, such as water and sanitary sewer lines. The Road Construction Emissions Model estimates are shown in Appendix B of this report and are summarized in Table 6-2.

Operations of typical projects generate air pollutant emissions. However, the project would be the installation of water and sanitary sewer trunk lines. Flow within these lines would rely on gravity; no pumps or other devices would be used. Because of this, operations associated with the proposed project would not generate any air pollutant emissions, other than from infrequent visits by vehicles for maintenance or repair work that would contribute only minimal emissions.

Impact AIR-1: Air Quality Plans and Standards

Development allowed under the General Plan 2040 would exceed SJVAPCD's regional operational significance thresholds; as a result, the General Plan would not be considered consistent with the applicable air quality management plans. Goals, policies, and actions in the Stockton General Plan 2040 would support a more sustainable development pattern in accommodating future growth, thereby contributing to minimizing long-term emissions of criteria air pollutants. They would do this by promoting infill mixed-use

development, complete streets, and increased capacity for alternative transportation modes and active transit, which would help reduce mobile-source air pollutant emissions. Additional mitigation measures were identified in the General Plan 2040 EIR, but even with the mitigation, impacts would be significant and unavoidable (City of Stockton 2018b). A Statement of Overriding Considerations for this issue was adopted by the Stockton City Council in conjunction with adoption of the General Plan 2040. This Statement of Overriding Considerations remains operative.

As indicated in Table 6-2, project construction air pollutant emissions would be substantially below the significance thresholds adopted by the SJVAPCD. 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, and since no operational emissions would occur, impacts of the proposed project regarding consistency with the applicable air quality plans would be less than significant.

While project emissions would not be significant, the project would still be required to observe applicable SJVAPCD rules and regulations. As noted, SJVAPCD Regulation VIII contains measures to reduce fugitive dust emissions during construction. Dust emission control measures include the following:

- 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.

Dust control provisions are also routinely included in site improvement plans and specifications, along with construction contracts. The site plan includes a construction note stating that dust control shall be provided at all times. Under SJVAPCD Rule 8201, the contractor for the project must provide written notification to the SJVAPCD at least 48 hours prior to commencing any earthmoving activities for non-residential construction sites between one and five acres. The dust emission reduction measures 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: Exposure of Sensitive Receptors to Criteria Pollutants or Toxic Air Contaminants

"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 2015). In the project vicinity, the nearest sensitive receptors are rural residences close to the project alignment.

The General Plan 2040 EIR states that development and operation of new land uses consistent with the land use diagram of the General Plan could generate new sources of criteria air pollutants and TACs from area/stationary sources and mobile sources that could affect sensitive receptors. The focus of this analysis was on localized emissions of CO and on TACs. Potential impacts related to these emissions on sensitive receptors were found either to be less than significant or would be less than significant with mitigation described in the General Plan 2040 EIR (City of Stockton 2018b).

As indicated in Table 6-2, construction emissions would be substantially below the SJVAPCD significance thresholds. 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. 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. Compliance with SJVAPCD Regulation VIII, which must be followed regardless of significance of emissions, would reduce the amount of fugitive dust emissions released into the air, thereby reducing potential exposure of these residences. Also, as noted, the site plans include a note stating that dust control shall be provided at

all times during construction. There would be no emissions from project operations, so such emissions would not have the potential to affect sensitive receptors.

CO in high concentrations can 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. The Guide for Assessing and Mitigating Air Quality Impacts indicates that a project would create no violations of the CO standards if neither of the following criteria are met (SJVAPCD 2015):

- 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).

The project would not generate substantial construction traffic or operational traffic other than infrequent visits by vehicles for inspection, maintenance and repair work. As such, it would not substantially affect LOS at any local intersections, and thus would not contribute CO emissions at a level of concern.

Project construction would likely use construction equipment that would emit diesel PM, which is classified as a TAC. The Road Construction Emissions Model 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 B). Rural residences near the project alignment could intermittently be exposed to these emissions as the location of construction activity and weather conditions change from day to day. Diesel PM emissions, however, would have adverse effects only for people that experience long-term exposure. Diesel PM emissions from the project would cease once construction work is completed, so potential exposure by nearby residences would be limited. In addition, diesel PM emissions would likely dissipate before reaching these rural residences. Project operations would not generate TAC emissions. Overall, impacts related to exposure of sensitive receptors to air pollutants or TACs are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AIR-3: 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. In accordance with this, 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 2015). The General Plan 2040 EIR discusses potential impacts from construction-related odors and odors from development operations. Construction-related odors were considered less than significant, while odors from development were less than significant with mitigation (City of Stockton 2018b).

Proposed project development is not expected to generate any substantial odors or other emissions. As noted above, the nearest sensitive receptors would be nearby residences, and these residences would not be exposed to odors. The project would have no impacts related to odors and other emissions.

Level of Significance: No impact

Mitigation Measures: None required



SOURCE: GAMAQI

Figure 6-1
AIR BASIN MAP

7.0 BIOLOGICAL RESOURCES

ENVIRONMENTAL SETTING

Information for this section was obtained primarily from a biological resource assessment prepared by Moore Biological Consultants. Appendix C contains the assessment, which was prepared by reviewing the California Natural Diversity Database of the California Department of Fish of Wildlife (CDFW) and the critical habitat maps of the U.S. Fish and Wildlife Service (USFWS). Moore Biological Consultants also conducted field surveys on July 8 and August 19, 2019 to document vegetation communities, potentially jurisdictional Waters of the U.S. and/or wetlands, and potentially suitable habitat for or presence of special-status species.

Existing Conditions

The project site is located just south of Stockton in San Joaquin County. The site is essentially flat and at elevations of approximately 10 to 15 feet above mean sea level. The site is a long, narrow strip, extending generally northwest to southeast through agricultural lands. Surrounding land uses in this part of San Joaquin County are primarily agricultural, with scattered residences and rural communities. The site is in an area of leveled fields that are primarily farmed in annual and orchard crops, interspersed with ranchette-style homes and fallow fields. The parcels along the roads in the eastern part of the site are primarily fallow fields, and the western part of the site is located in a relatively young walnut orchard. The surrounding areas extending farther out from the project site are more developed, with some residential subdivisions further north of the project site and a hospital further south. Interstate 5 is adjacent to the east edge of Manthey Road in the east part of the site.

Vegetation

The pipeline alignment will be placed along the road shoulder along portions of South Wolfe Road, Yettner Road, and South Manthey Road; a portion will also extend through the middle of a walnut orchard. The road shoulders, which are subject to periodic disturbance, are sparsely vegetated with highly disturbed ruderal grasses and weeds. The fallow fields adjacent to the road shoulders support similar vegetation, consisting almost entirely of non-native grasses and weeds.

Oats, soft chess brome, ripgut brome, foxtail barley, and perennial ryegrass are some of the most common grasses in the ruderal grassland vegetation found within and adjacent to the project site. Other grassland species are intermixed with the grasses, such as yellow star-thistle, black mustard, Italian thistle, morning glory, common sunflower, prickly lettuce, horseweed, and filaree.

The only trees in the project site are the planted walnuts in the orchard. There are several large trees in close proximity to the project site, most of which are associated with residences. Dominant tree species include valley oak, black walnut, ornamental pine, and a variety of other ornamentals. No blue elderberry shrubs were observed within or adjacent to the project site.

Wildlife

A variety of bird species were observed in the site. Turkey vulture, Swainson's hawk, American kestrel, American crow, mourning dove, killdeer, Brewer's blackbird, and house finch are representative bird species observed in and near the site. All of these are species commonly found in agricultural areas in the greater project vicinity. There are several individual trees and a few clusters of trees adjacent to or near the project site that are suitable for nesting raptors, including Swainson's hawks. Given the presence of trees and shrubs in and near the site, it is likely one or more pairs of raptors and a variety of songbirds nests in and/or near the site during most years. It is possible that ground-nesting songbirds such as killdeer and red-winged blackbird nest in the grassland habitats in the site.

A variety of mammals are likely to occur in the project site. However, no mammals were observed in the site during the field surveys. Although most of the project site is along heavily trafficked roads, California ground squirrel, raccoon, coyote, black-tailed hare, striped skunk, and Virginia opossum are expected to occur in the greater project vicinity and may occur in the site. A number of species of small rodents, including mice and voles, also likely occur.

Based on habitat types present, only a few amphibian and reptile species are expected to use habitats in the site. Although none were observed, common species such as western fence lizard, Pacific chorus frog, gopher snake, common king snake, and common garter snake are expected to occur at the site.

Waters of the U.S. and Wetlands

Waters of the U.S., including wetlands, are broadly defined in Part 328.3(a) of Title 33 of the Code of Federal Regulations to 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. 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.

Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the U.S. Army Corps of Engineers (ACOE) *Wetlands Delineation Manual* and Regional Supplement (ACOE, 1987; 2008). Jurisdictional wetlands are usually adjacent to or hydrologically associated with Waters of the U.S.

Isolated wetlands are outside federal jurisdiction but may still be regulated by state agencies including CDFW and the Regional Water Quality Control Board.

No potentially jurisdictional Waters of the U.S. or wetlands were observed within the footprint of the proposed project. The pipelines will be installed in either graveled road shoulders, in disturbed upland ruderal grassland vegetation adjacent to the roads, or in a walnut orchard. No areas meeting the technical and regulatory criteria of jurisdictional Waters of the U.S. or wetlands were observed in the site.

Special-Status Species

Special-status species includes plant and/or wildlife species that are in one or more of the following categories:

- Legally protected under the federal Endangered Species Act, the California Endangered Species Act, or other regulations.
- Designated rare, threatened, or endangered and candidate species for listing by the U.S. Fish and Wildlife Service (USFWS).
- Considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly regarding protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat.
- Considered rare or endangered under the conditions of CEQA Guidelines Section 15380, such as 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, and species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on List 3 in the California Native Plant Society Inventory.

A total of 15 special-status plant species were identified as potentially occurring in the greater project vicinity, along with 18 wildlife species. Of the 18 wildlife species, eight were birds, one was a mammal, two were amphibians/reptiles, three were fish, and four were invertebrates. Table 7-1 lists these special-status species, along with their habitat requirements and likelihood of occurrence.

TABLE 7-1
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						
Large-flowered fiddleneck	*Amsinckia grandiflora*	None	None	1B	Cismontane woodland, valley and foothill grassland; generally found in elevations between 1,000 and 2,000 feet	None: the elevation of the project site is well below the well-known range of this species.
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.

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
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.
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: it is unlikely this species would nest in close proximity to the road shoulder. The grasslands in the site are dense and weedy, providing provide poor quality habitat for burrowing owl.

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
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.	High: large trees near the site are suitable for nesting Swainson's hawks and several Swainson's hawks were observed perching in trees and flying near the site. An active nest was documented in a tree just northeast of the intersection of Yettner Road and South Manthey Road.
Tricolored blackbird	*Agelaius tricolor*	None	CE	N/A	Requires open water and protected nesting substrate, usually cattails and riparian scrub with surrounding foraging habitat.	Unlikely: there is no emergent wetland vegetation or other vegetation 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.	Low: the project site provides marginally suitable habitat. The grasslands adjacent to the project site provide foraging habitat, and trees near the site 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 provide marginally suitable foraging habitat, and trees and shrubs in and near the site are suitable for nesting.
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 aquatic habitat for this species.
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.

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	None	SC	N/A	Brackish and freshwater marshes; usually nests in expansive patches of cattails or tules, often along borders of lakes and ponds.	Unlikely: the project site does not provide suitable habitat.
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 site 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: 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
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 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 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 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 (16 U.S.C. Section 1531 *et seq.*) 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 Endangered Species Act, depending on the species. Section 9

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.

California Endangered Species Act

The California Endangered Species Act (California Fish and Game Code Section 2050 *et seq.*) establishes State policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. It 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 Endangered Species Act satisfies the California Endangered Species Act if the CDFW determines that the federal incidental take authorization is consistent with 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 Section 2081(b).

Clean Water Act

The federal Clean Water Act is the primary federal law regulating water quality. Implementing the Clean Water Act is the responsibility of the U.S. Environmental Protection Agency (EPA), but the EPA depends on other agencies, such as individual state governments and the U.S. Army Corps of Engineers (Corps), to assist in implementation. The objective of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Sections 401 and 404 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.

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. The ordinary high-water mark 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. For tidal waters, the limit of federal jurisdiction is high tide. 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 may issue 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 Endangered Species Act 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 obtain a Water Quality Certification or waiver that confirms the project complies with State water quality standards, or a no-action determination, before the permit is valid. State water quality is regulated and administered by the State Water Resources Control Board (SWRCB) through the appropriate RWQCB. The project site is within the jurisdiction of the Central Valley RWQCB. Prior to issuing a Section 401 certification, a project must demonstrate compliance with CEQA.

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 land development in the County. The purpose of the SJMSCP is to accommodate the growing population of San Joaquin County while minimizing costs to project proponents and society at large. The plan provides compensation for the conversion of open space to non-open space uses that affect plant, fish, and wildlife species covered by the plan. The SJMSCP protects 97 wildlife species and 52 vegetative communities, many of which are listed or proposed for listing under the California and Federal Endangered Species Act as threatened or endangered. 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 CNPS lists. The San Joaquin Council of Governments (SJCOG) implements the SJMSCP on a project-by-project basis. In implementing the SJMSCP, the SJCOG conducts a biological survey of the proposed development site, determines which special-status species may be impacted, if any, and makes a written determination of required SJMSCP fees based on the mapped fee zone.

The SJMSCP permits three compensation methods when impacting or removing open space or biologically significant lands. A project applicant may preserve existing sensitive lands, create new comparable habitat on the project site, or pay the SJMSCP fees that would be used to secure preserve lands outside the project site. With appropriate preservation, creation or payment of fees, impacts to open space lands and to the species that use these lands are considered less than significant. 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. The SJMSCP has classified the project site as Category B, Other Open Space, Pay Zone A. This category applies to orchard areas, which the project site formerly was.

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

The compliance process outlined in the SJMSCP has been adopted by federal and state agencies with jurisdiction or trusteeship over biological resources. The SJMSCP has been adopted locally by San Joaquin County, the City of Stockton, and the other incorporated cities in San Joaquin County. The SJCOG and San Joaquin County approach the SJMSCP as a comprehensive plan to mitigate for the loss of open space and biological resource lands, and to provide for the long-term management of plant, fish and wildlife species. These and the other participating agencies consider a project that complies with the plan to result in impacts on biological resources that are less than significant. However, projects may also comply independently with the various statutes and regulations that apply to biological resources. Also, a project may choose to not participate in the SJMSCP process; however, it still would be required to mitigate its biological resource impacts to levels that are less than significant if feasible.

Stockton General Plan 2040

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

- Policy LU-5.2 directs the City to protect natural resource areas, fish and wildlife habitat, scenic areas, open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development.

- Action LU-5.2.A directs the City to continue to comply with the terms of the SJMSCP to protect critical habitat areas that support endangered, threatened, and special-status species.

- Action LU-5.2B requires biological assessments for projects on or within 100 feet of sites that have the potential to contain special-status species or critical or sensitive habitats. If sensitive biological resources are present, development shall avoid impacting the resource, and if avoidance is not feasible, impacts shall be minimized through project design or compensation identified in consultation with a qualified biologist.

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

As noted, the biological assessment identified the potential presence of 15 special-status plant species in the project vicinity. These special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, seasonal wetlands, riparian scrub, chenopod scrub, and areas with unusual soils. None of these vegetation communities occur in the site. The ruderal grasslands in the site are highly disturbed and do not provide suitable habitat for any of the special-status plants; the orchard also does not provide suitable habitat for special-status plants. Due to lack of suitable habitat, no special-status plant species are expected to occur in the site.

The potential for intensive use of habitats within the project site by the special-status wildlife species identified in Table 7-1 is generally low. The project site and surrounding areas may have provided habitat for the special-status wildlife species at some time in the past. However, farming, development, and construction and maintenance of roads and utilities, have substantially modified natural habitats within the greater project vicinity. The site does not provide suitable aquatic habitat for any type of fish, giant garter snake,

California tiger salamander, or California red-legged frog. There is no emergent wetland habitat in the site for nesting tricolored blackbird, yellow-headed blackbird, or song sparrow. The site lacks riparian habitat vegetation to support riparian brush rabbit or nesting least Bell's vireo. There are no blue elderberry shrubs in the site, precluding the potential occurrence of valley elderberry longhorn beetle. There are no vernal pools or seasonal wetlands in the site for vernal pool branchiopods (i.e., fairy and tadpole shrimp).

Of the wildlife species, Swainson's hawk, burrowing owl, white-tailed kite, and loggerhead shrike are the only species with potential to occur in the project site on more than a transitory or very occasional basis. All of these species are covered by the SJMSCP, which prescribes Incidental Take Minimization Measures for each of these species. Mitigation described below would require the project to participate in the SJMSCP. Implementation of this measure 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 City and/or its contractor shall apply to San Joaquin County for roadway encroachment permit(s), and to the San Joaquin Council of Governments (SJCOG) for coverage under the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan (SJMSCP). Prior to issuance of the encroachment permit, , the project site will be inspected by the SJMSCP biologist, who will recommend any SJMSCP Incidental Take Minimization Measures that should be implemented. The City shall pay the required SJMSCP fee, if any, and be responsible for the implementation of the specified Incidental Take Minimization Measures.

Significance After Mitigation: Less than significant

Impact BIO-2: Riparian and Other Sensitive Habitats

The biological assessment did not identify any sensitive natural communities on the project site. There are no riparian areas or special vegetation communities such as vernal pools, seasonal wetlands, marshes, or ponds. No specialized habitats for special-status species, such as elderberry shrubs, were identified 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, the biological assessment did not identify any wetlands or Waters of the United States in or adjacent to the project site. Project construction would not affect any

wetlands or Waters of the United States; therefore, the project would have no impact on these biological resources.

Level of Significance: No impact

Mitigation Measures: None required

Impact BIO-4: Fish and Wildlife Migration

There are no streams either on or adjacent to the project site, so no fish movements utilizing such streams would be disturbed. The project site does not represent a migration corridor or portion of a corridor for wildlife; the project would have no impact on wildlife migration.

Trees, shrubs, and grasslands in and near the site could be used by birds protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code, such as white-tailed kite, loggerhead shrike, and red-winged blackbird. Participation in the SJMSCP, required by Mitigation Measure BIO-1, would reduce impacts on these species. However, other nesting migratory birds not covered by the SJMSCP could be adversely affected by project construction. Mitigation described below would avoid impacts on migratory birds and their nests, if any are found, reducing impacts to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

BIO-2: If construction commences during the general avian nesting season (March 1 through July 31), a qualifies biologist shall conduct a pre-construction survey for nesting birds protected by the Migratory Bird Treaty Act and/or California Fish and Game Code shall be required. If active nests are found, work in the vicinity of the nest, as determined by the biologist, shall be delayed until the young fledge.

Significance After Mitigation: Less than significant

Impact BIO-5: Local Biological Requirements

No local biological resource ordinances or other local requirements are applicable to this project. The City of Stockton has a Heritage Tree Ordinance that protects specific oak trees; however, this only applies to the City, and the biological assessment did not indicate the presence of oak trees in the site. San Joaquin County has no biological ordinances that are applicable to the project. Project impacts would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact BIO-6: Habitat Conservation Plans

The City of Stockton, as a SJMSCP participant, has used the plan to inform the development of the adopted General Plan. In addition, General Plan Land Use Action LU-5.2.A directs the City to continue to coordinate with SJCOG and comply with the terms of the SJMSCP (City of Stockton 2018). Mitigation Measure BIO-1 would require the project to participate in the SJMSCP, therefore, no conflict with SJMSCP would occur. No other habitat conservation plans apply to the project site. The project would have no impact related to habitat conservation plans.

Level of Significance: No impact

Mitigation Measures: None required

8.0 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL SETTING

Background information for this chapter comes primarily from a cultural resources technical memorandum prepared by Solano Archaeological Services for the project. The memorandum is available in Appendix D of this SEIR. Research for the memorandum 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 a field survey conducted on July 2, 2019.

Also, Solano Archaeological Services made contact with the Northern Valley Yokuts, a Native American tribe for who the project site is within its traditionally and culturally affiliated geographic area. Under the recently enacted AB 52, a CEQA lead agency is required to consult with Native American tribes on projects that could potentially affect resources of value to the tribes, if the tribes request consultation. AB 52 is discussed in more detail later in this chapter.

Prehistoric Setting

The project area is located in the territory of the Northern Valley Yokuts, who occupied the land on either side of the San Joaquin River from the Sacramento-San Joaquin Delta to south of present-day Mendota. The Diablo range probably marked the Yokuts' western boundary; the eastern edge would have lain along the Sierra Nevada foothills. 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. Within the villages, structures included sweathouses, ceremonial chambers, and oval single-family dwellings made of tule. The material culture included a wide range of implements. Acorn mortars were packed into bedrock outcrops or could be made from oak to be more portable; pestles were frequently irregular or somewhat crude and were often left in place at bedrock outcrops. Smaller mortars may have been used for tobacco or medicine. Snares, bows and spears were used in hunting, sometimes as part of organized animal drives or after being lured in with decoys. Fish were speared, netted or poisoned then gathered. Tule boats were used on rivers and lakes. Basketry took a wide variety of forms, as did cradle types. Clay cooking balls were used to replace scarce stone in the upper San Joaquin Valley.

Euro-American contact with the Northern Valley Yokuts began with infrequent excursions by Spanish explorers traveling through the Sacramento and San Joaquin Valleys in the late 1700s to early 1800s. Many Yokuts were lured or captured by missionaries and taken to Mission San Jose or Santa Clara. The malaria epidemic of 1833 decimated the indigenous population, killing thousands of the tribesmen. The influx of Europeans during the Gold Rush further reduced the population because of disease and violent relations with the miners. Though there was no gold in the Yokuts territory, miners passing through on their way to the diggings caused a certain amount of upheaval.

As a result of inquiry during the SAS study, the NAHC recommended that the Northern Valley Yokuts be contacted about the potential presence of tribal cultural resources. Solano Archaeological Services contacted the Yokuts representative, Katherine Perez, as part of its cultural resource research. The result of this consultation is discussed below.

Historic Setting

Spanish explorers made infrequent excursions into the Sacramento and 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 easternmost terminus of the project site is on the border of one such grant, Charles M. Weber's *El Campo De Los Franceses*. This land grant of 48,000 acres was originally obtained in 1843 by Guillermo Gulnac, who was a business partner of Weber. Weber was given a half-interest in the land grant and eventually acquired the entire grant. Weber convinced several other settlers to locate to this area by offering them land.

In 1868, the Central Pacific Railroad Company announced their intentions to build a rail yard in Lathrop, near Weber's rancho. Chinese labor was brought in to do the work, and a settlement grew up around the rail yard. In the 1870s, the Central Pacific Railroad constructed its line through the San Joaquin Valley to reach southern California. This revolutionized the transportation network, 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, with the expansion of large-scale irrigation in the early 1900s came the production of a variety of fruits and vegetables, vineyards, alfalfa, and cotton, among other crops.

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 to Highways 1 and 101 along the western 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.

Weber founded the City of Stockton in 1850, and the City incorporated that same year. While Weber drafted subdivision maps of the City of Stockton as early as 1849, greater

portions of the City developed during the 1860s and 1870s. During the latter part of the 19th century, the manufacture of agricultural tools and equipment became a major industry in Stockton. Several new inventions from the region revolutionized farming techniques, including the Stockton Gang Plow and the Marvin Combined Harvester (or combine). Benjamin Holt founded the Stockton Wheel Company which eventually became the Holt Manufacturing Company in 1883. The Holt Company thrived as it supported the regional agricultural industry and excelled with its innovative farm machinery. Following the introduction of rail service to the area, Stockton continued to expand. By the conclusion of the 19th century, the City witnessed increased commercial activity as a hub of transportation and agriculture on the Delta.

The community of French Camp started out as the southernmost of the California outposts of the Hudson's Bay Company. The Company's southern fur brigades were sent out from Fort Vancouver (now Vancouver, Washington), and French Camp was founded by Michel Laframboise in 1832. The camp's name was continued following the creation of Weber's *Campo de los Franceses.* French Camp was also known as Castoria, from the Latin word for beaver, reflecting its central role in the early California fur trade. French Camp was strategically sited at the southern end of the southernmost slough of the Delta, which became known as French Camp Slough, maximizing the use of the waterway for ease of transportation. A trail led southeast from French Camp into the foothills of the Sierra Nevada. It was subsequently used as an alternate route for Mariposa Road, part of the Stockton-Los Angeles Road, especially favored during the rainy season because of its exceptional drainage. The route was eventually paved and exists today as French Camp Road.

Existing Cultural Resources

As noted, Solano Archaeological Services evaluated the project site for the presence of cultural resources. Based on the records search and the field survey, two potential cultural resources were identified in the project vicinity.

- The South Wolfe Road segment consists of a historic-era road segment identified on the 1913 Stockton, California USGS 7.5'-topographic quadrangle map. The 1931 topographic quadrangle map depicts the road, but it was unnamed at the time. The name Wolfe Road first appears on the 1954 Stockton West 7.5'-topographic quadrangle map. No historic-era artifacts were found associated with the site, and no information on the road's namesake was found.

- The Yettner Road segment consists of a historic-era, 1,744-foot road segment also identified on the 1913 Stockton, California USGS 7.5'-topographic quadrangle map. The 1931 topographic quadrangle map shows this road extended another 2,170 feet west to an intersection with Wolfe Road. On the 1954 *Stockton West* 7.5' quadrangle map, the name of this recorded segment was McDougald Road. Sometime between 1969 and 1970, the name of the road was changed to Yettner Road, which it has remained to the present day.

No other historic-era artifacts were noted, and no prehistoric sites, features, or artifacts were encountered during the field survey. According to the Central California Information center, no formally recorded prehistoric or historic-era cultural resources are known to be present within or adjacent to the project area alignment.

California AB 52 requires that CEQA lead agencies provide notice of proposed projects to tribes that have requested it. AB 52 responsibilities are described in more detail below. On August 5, 2019, the City sent formal AB 52 notification letters to the following tribes by US Mail:

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

As of September 10, 2019, no tribes have responded to the City's AB 52 notice. During the Solano Archaeological study of the project, a representative of the Northern Valley Yokuts tribe indicated an interest in the project as a result of a documented Native American burial in the general project vicinity. The Wilton Rancheria submitted a request for consultation to the VA in conjunction with its processing of the CBOC/CLC project under NEPA and Section 106 of the National Historic Preservation Act.

No potential tribal cultural resources were identified on or in the immediate vicinity of the project site as a result of cultural resource investigation during the preparation of the SEIR. The following cultural resource impact analysis and recommended mitigation measures address potential inadvertent discoveries of burials or other tribal cultural resources. Additional protection for such resources will be incorporated into the Final EIR of the project as dictated by tribal consultation activities.

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.

The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources, is not included in a local register of historical resources, or not identified in a historical resources survey, 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 focuses on 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 need to be consulted on a project. The project must be within the geographic area that is traditionally and culturally affiliated with the tribes requesting notice.

Under AB 52, the CEQA lead agency must provide written notification inviting tribes who have requested notice to consult on a 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 either (1) when the parties agree to mitigate or avoid a significant effect on a tribal cultural resource, or (2) 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.

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 – 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. If archaeological resources are discovered during any construction, construction activities shall cease, and the Community Development 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. If 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).

Stockton General Plan 2040

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

- Policy LU-5.2 directs the City to protect natural resource areas, fish and wildlife habitat, scenic areas, open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development.
- Action LU-5.2.D requires the following tasks by a qualified archaeologist or paleontologist prior to project approval:
    * Conduct a record search at the Central California Information Center located at California State University Stanislaus, the University of California Museum of Paleontology at Berkeley, and other appropriate historical or archaeological repositories.
    * Conduct field surveys where appropriate.

    * Prepare technical reports, where appropriate, meeting California Office of Historic Preservation or other appropriate standards.

    * Where development cannot avoid an archaeological or paleontological deposit, prepare a treatment plan in accordance with appropriate standards, such as the Secretary of the Interior's Standards for Treatment of Archaeological Sites.

- Action LU-5.2E directs the City to continue to consult with Native American representatives, including through early coordination, to identify locations of importance to Native Americans, including archaeological sites and traditional cultural properties.

- Action LU-5.2G directs the City to comply with appropriate State and federal standards to evaluate and mitigate impacts to cultural resources, including tribal, historic, archaeological, and paleontological 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:

- 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

The General Plan 2040 EIR notes that the types of cultural resources that meet the definition of historical resources under California Public Resources Code Section 21084.19 generally consist of districts, sites, buildings, structures, and objects that are significant for their traditional, cultural, and/or historical associations. Historic architectural resources, including buildings, structures, and objects, could be affected by development allowed under the General Plan. Compliance with applicable General Plan policies and actions, along with federal and State laws and the Stockton Municipal Code, would reduce potential impacts to historical architectural resources to a level that is less than significant (City of Stockton 2018).

As noted, the cultural resource studies for the project site revealed two potential historical resources – a segment of South Wolfe Road and a segment of Yettner Road. Although they may have been and continue to be important local transportation routes, archival and field research do not suggest that either the Wolfe Road or Yettner Road segments are directly associated with any specific historical event or with any persons important in California history. These types of local roads are ubiquitous in the area and throughout California, and no information has been uncovered suggesting that they are the oldest or best examples of their kind or that they were designed or built by a recognized master. The Solano Archaeological Services memorandum indicates that the current level of research appears to have exhausted the data potential of these two resources, and no important scientific or historic information is likely to be uncovered as a result of further study.

Based on this, the cultural resource analysis indicated that neither historical resource was determined to be eligible for listing in the California Register of Historical Resources and therefore have no significant historical value. Since these resources are not considered to have significant historical value, any project impacts on these resources would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact CULT-2: Archaeological and Tribal Cultural Resources

The General Plan 2040 EIR notes that archaeological deposits that meet the definition of unique archaeological resources under Public Resources Code Section 21083.2(g) could be damaged or destroyed by ground disturbing activities associated with development allowed under the General Plan. However, compliance with General Plan Action LU-5.2D, along with federal and state laws and the Stockton Municipal Code, would provide for the protection of archaeological deposits potentially subject to disturbance in conjunction with urban development. These requirements would reduce potential impacts to a level that is less than significant (City of Stockton 2018b).

Archival research conducted through the Central California Information Center indicates that no previously documented prehistoric or historic-era cultural resources are known to

be present within or immediately adjacent to the project area. Additionally, a review by the NAHC of its Sacred Lands file indicated that no recorded sacred lands were known to exist within or in the vicinity of the project site. However, Katherine Perez of the Northern Valley Yokuts stated that the area is generally sensitive for containing unrecorded Native American cultural resources.

The Solano Archaeological Service memorandum recommended actions to take should presently undocumented buried archaeological deposits be encountered during project construction. These and other requirements related to cultural resource protection during construction are 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 the Stockton Municipal Code, as well as specify actions should potential tribal cultural resources be encountered. Implementation of these mitigation measures would reduce potential impacts on archaeological resources to a level that would be less than significant. Impacts on, and mitigation for, any human remains that are encountered are discussed under Impact CULT-3 below.

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 paleontological resources, 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 archaeological or paleontological 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 and/or 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, 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

The General Plan 2040 EIR notes that human remains associated with archaeological sites or within previously unidentified historical cemeteries could be impacted by ground-disturbing activities associated with development allowed under the General Plan. However, compliance with General Plan Action LU-5.2D, along with federal and state laws and the Stockton Municipal Code, would reduce impacts on discovered human remains to a level that is less than significant (City of Stockton 2018).

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. Potential effects on Native American human remains would also involve the potential for significant impacts on tribal cultural resources. These impacts are discussed in more detail in Chapter 19.0, 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, the descendant 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.

There is additional concern about Native American burials, particularly if grave goods are associated with a burial. Mitigation presented 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), 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 City and 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

Stockton and the project site are located the San Joaquin Valley of central California immediately east of the Sacramento-San Joaquin River Delta. The west-central part of the Central Valley geomorphic province is about 400 miles long and averages 50 miles in width. It has been filled with a nearly 6-mile-thick sequence of marine and non-marine sediments dating from late Jurassic time to the Holocene (roughly 150 million years before present to the present day). In general, the uppermost sedimentary strata represent the alluvial, flood plain, and delta plain deposits of two major rivers, the Sacramento River and the San Joaquin River.

The sedimentary deposits of the Central Valley were derived from the Coast Ranges to the west and the Sierra Nevada mountains to the east. Granitic and metamorphic rocks outcrop along the eastern and southeastern flanks of the Valley; sedimentary rocks outcrop along most of the western, southwestern, southern, and southeastern flanks of the Valley; and volcanic rocks outcrop along the northeastern flanks of the Valley. The geomorphic setting includes dissected uplands, alluvial plains and fans, river flood plains and channels, and lake bottoms (City of Stockton 2018b). The Geologic Map of the San Francisco-San Jose Quadrangle (Wagner et al. 1991) designates the underlying geology of the project site as the Modesto Formation, consisting of Quaternary sediments.

Geological Conditions

Seismicity

The General Plan 2040 EIR states that there are no active or potentially active faults located in the Stockton vicinity. The Stockton Fault is a south-dipping reverse fault that trends east-west across the Stockton area. This fault is not exposed at the surface and is not considered "recently active" or "active" in geological terms. The nearest active fault is the Greenville Fault, located approximately 22 miles west-southwest of Stockton; the Greenville Fault is considered capable of a maximum moment earthquake magnitude of 6.0 (City of Stockton 2018b). Portions of the Concord-Green Valley and Hayward fault zones, located 35 and 50 miles west of Stockton, and the Calaveras fault zone, located 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 northwest-southwest-trending fault zones, as well as the roughly parallel San Andreas Fault (San Joaquin County 2016b).

The severity of seismic ground shaking depends on many variables, such as earthquake magnitude, hypocenter 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 that are not designed to resist the forces generated by earthquakes. Underground utility lines are also susceptible where they lack adequate flexibility to accommodate 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 in any given year. Stockton's significant setback from the mapped active earthquake faults in the region 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, seismically-induced 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 underlying soil 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 widespread 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 beds of fine material in the aquifer may be compressed to the point that they can no longer expand to their original thickness after groundwater recharge. This can result in permanent land subsidence at the ground surface.

In the Delta, groundwater levels remain relatively high and must be managed by drainage systems to permit agricultural use to continue. However, exposure of the highly organic soils of the Delta to the surface has resulted in substantial oxidation of these materials, also resulting in subsidence. Subsidence is not anticipated outside of the Delta area.

Soils and Soil Conditions

A customized soil survey identified four soil types underlying the proposed project alignment (SCS 1992, NRCS 2019):

- Veritas fine sandy loam, which underlies the majority of the project alignment, is a moderately well-drained, nearly level soil that is deep to a hardpan. Permeability of the soil is moderately rapid. Runoff is slow, and the water erosion hazard is slight. The wind erosion hazard is moderate.

- Honcut sandy loam, which underlies much of the western portion of the project alignment, is a very deep, well-drained, nearly level soil. Permeability of the soil is moderately rapid. Runoff is slow, and the water erosion hazard is slight. The wind erosion hazard is moderate.

- Tinnin loamy coarse sand, found at the center of the project alignment, is a very deep, well-drained, nearly level soil. Permeability of the soil is rapid. Runoff is slow, and the water erosion hazard is slight. The wind erosion hazard is severe.

- Manteca fine sandy loam, at the eastern terminus of the project alignment, is a moderately well-drained, nearly level soil that is deep to a hardpan. Permeability of the soil is moderate. Runoff is slow, and the water erosion hazard is slight. The wind erosion hazard is moderate.

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. All soils within the project alignment have a low shrink-swell potential except for Veritas fine sandy loam, which has a moderate shrink-swell potential to 19 inches below ground surface, beyond which its potential is low.

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. Paleontological resources have been encountered in San Joaquin County. As part of preparation of the General Plan 2040 EIR, a search of the database of the Museum of Paleontology at the University of California Berkeley was completed. San Joaquin County contains over 800 documented fossil localities. Only a handful are within the Stockton area, and those are identified as relatively recent. However, the General Plan 2040 EIR noted that there are geologic formations that could contain previously unidentified fossils. There could also be fossils of potential scientific significance in other geological formations that are not recorded in the database (City of Stockton 2018b). There are no fossil records from the immediate project vicinity.

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-grade aggregate deposits also have been identified elsewhere within San Joaquin County, but none of these resources are located on or near the project site (DMG 1988).

In accordance with the Surface Mining and Reclamation Act, Mineral Resource Zones have been designated in the County (see Regulatory Framework below). 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.

Oil and natural gas deposits have been identified throughout the Central Valley, although most of the deposits in the Stockton area are of natural gas. The project site does not contain any known oil or natural gas fields. The nearest active field is the French Camp natural gas field less than one mile north 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 located with an area mapped by the State Geologist as a "Zone of Required Investigation," including Alquist-Priolo Earthquake Fault Zones and Seismic Hazards Mapping Act zones. These zones are 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.

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 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. Under the modified permit, construction activities are 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.

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act of 2002 codifies the generally accepted practice of limited vertebrate fossil collection and limited collection of other rare and scientifically significant fossils by qualified researchers. Researchers must obtain a permit from the appropriate State or federal agency and agree to donate any materials recovered to recognized public institutions, where they will remain accessible to the public and to other researchers.

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 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

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 Best Management Practices (BMPs).

Stockton General Plan 2040

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

- Action LU-5.2G directs the City to comply with appropriate State and federal standards to evaluate and mitigate impacts to cultural resources, including tribal, historic, archaeological, and paleontological resources.

- Action SAF-2.2C requires new critical facilities, including hospitals, emergency operations centers, communications facilities, fire stations, and police stations, to be located, designed, and constructed to avoid or mitigate potential risks and ensure functional operation during flood events, seismic and geological events, fires, and explosions.

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 the project proposes the extension of a sanitary sewer trunk line and proposes no new uses requiring on-site wastewater disposal, the issue of soils adequately supporting the use of septic tanks or alternative wastewater disposal systems is not relevant or analyzed in this SEIR.

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 General Plan 2040 EIR states that the Stockton area could experience significant ground shaking during a major earthquake in the San Francisco Bay area to the west. Such seismic ground shaking would almost certainly be less intense than in the Bay Area, due to the distances involved. In general, careful control of new development together with adherence to California Building Code building design and construction requirements will substantially mitigate the adverse effects of strong seismic ground shaking. Accordingly, the likelihood of substantial adverse effects due to strong seismic shaking is considered low (City of Stockton 2018b).

The project site, along with the rest of the City, is subject to seismic shaking from active faults outside San Joaquin County. The design and construction of proposed water and sanitary sewer lines would be in accordance with City standard specifications, which are designed to avoid damage to the facility during anticipated seismic events. Compliance

with these standard specifications would reduce the likelihood of damage by 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

Compliance with existing State and local laws and regulations would ensure that the impacts associated with rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides would be less than significant. Also, the majority of the Stockton area does not appear to be located atop unstable geologic materials that are prone to subsidence, lateral spreading, or collapse (City of Stockton 2018b).

The project site and its surroundings are flat and not prone to landslide hazards. As previously noted, subsidence is not considered a potential hazard outside the Delta region, nor are there identified areas where liquefaction could occur in the project vicinity. The soils underlying the project site have not been identified as inherently unstable or prone to failure. Engineering design of the project in accordance with state and local design standards would 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

The General Plan 2040 EIR notes that substantial soil erosion or loss of topsoil during construction can undermine structures and minor slopes. This could be a concern of nearly all construction that might arise from new development authorized by the General Plan. Compliance with existing regulatory requirements, such as implementation of erosion control measures specified in the California Building Code, Chapter 15.48 of the City of Stockton Municipal Code, and the City's grading permit process, would mitigate the potential impacts of soil erosion and loss of topsoil to the maximum extent practicable. Thus, impacts associated with substantial erosion and loss of topsoil during development would be less than significant (City of Stockton 2018b).

Soils within the project alignment have a low potential for 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 to waters of the state. In particular, the Tinnin soil found at the center of the proposed project alignment is susceptible to wind erosion.

Compliance with SJVAPCD Regulation VIII, which is discussed in Chapter 6.0, Air Quality, would reduce potential wind erosion impacts of the project. Water erosion would

be addressed by the City of Stockton's storm water quality programs that are applicable to potential erosion from construction activities. These include a requirement that projects disturbing one acre or more of soil obtain a Construction General Permit. The project would need to obtain a Construction General Permit and comply with its provisions, including the preparation of a SWPPP. Compliance with the requirements of the Construction General Permit, as well as compliance with applicable provisions of the Stockton Municipal Code, would reduce potential soil erosion impacts related to construction to a level that is less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact GEO-4: Expansive Soils

As noted, soils on the project site have a low shrink-swell potential, except for the upper 19-inch portion of the Veritas soil, which has a moderate shrink-swell potential. The General Plan 2040 EIR states that compliance with existing State and local laws and regulations, such as the California Building Code and the City's Municipal Code, and the City's grading and building permit process, would ensure that the impacts associated with development on expansive soil are minimized to the maximum extent practicable (City of Stockton 2018b). Projects such as the proposed project are engineered to address potential expansive soils through pipeline material, trench design, selection of bedding material, backfill specifications, and other applicable specifications. The project would be subject to these processes and specifications, thereby minimizing expansive soil impacts. Project impacts related to expansive soils would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact GEO-5: Paleontological Resources and Unique Geological Features

The General Plan 2040 EIR states that few fossil localities have been identified within the Stockton area, but there are geologic formations that could contain previously unidentified fossils. There could also be fossils of potential scientific significance in other geological formations that are not recorded in the database. It is possible that ground disturbing construction associated with development allowed under the General Plan could damage paleontological resources. However, compliance with General Plan Action LU-5.2D, along with federal and state laws and the Stockton Municipal Code, would provide for the protection of archaeological deposits in the EIR Study Area, reducing potential impacts to a level that is less than significant (City of Stockton 2018b).

As noted above, there is little evidence of paleontological resources in the Stockton area. Nevertheless, it is conceivable that excavation associated with project development could unearth paleontological materials. Mitigation Measure CULT-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 CULT-2 would reduce potential paleontological effects to a level that is less than significant.

Level of Significance: Potentially significant

Mitigation Measures: Implementation of Mitigation Measure CULT-2.

Significance After Mitigation: Less than significant

Impact GEO-6: Access to Mineral Resources

As noted above, the project site is within MRZ-1. There are no identified mineral or petroleum 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 site and vicinity are largely developed or planned for future urban development and are not designed or reserved for mineral or energy resource development. The French Camp natural gas field is in the general vicinity of the project site; however, the project would have no effect on the availability of or access to this resource. The project would have no impact on mineral resources.

Level of Significance: No impact

Mitigation Measures: None required

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. Although each GHG has heat-trapping properties, they vary in the amount of heat they can trap.

Measurements of GHG emissions are commonly expressed in CO_2 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 carbon dioxide equivalent (CO2e) – 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 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). As of January 1, 2019, GHG concentration in the atmosphere was approximately 410 ppm (NOAA 2019).

The State of California's Climate Action Team, in its 2010 Biennial Report, discussed the potential impacts of climate change on California's environment. These potential impacts include (Climate Action Team 2010):

- With some variation, the general trend would be for less precipitation throughout California to the end of the 21st century. Higher temperatures would increase evaporative water loss, and thus produce overall drier conditions.

- The snowpack in the Sierra Nevada, a major source of California's water, would melt earlier. The snowpack would produce less overall runoff, and there would be an increasing trend in floods during the winter months.

- Sea levels would rise, subjecting many coastal areas to inundation, as well as areas near bodies of water affected by tides.

- Some crops (e.g., cherries, cotton, maize, wheat, sunflower) would experience a significant decrease in yields. Other crops (e.g., almonds, tomatoes, rice, alfalfa) would experience no change in yields or even an increase.

- The number and intensity of wildfires is expected to increase, thereby increasing risk to lives and property and contributing to decreased air quality.

- Timber production is expected to decline on a statewide basis, but it may increase in some locations and for some tree species.

- While water deliveries to urban users would generally be maintained, water for agricultural uses and environmental flows may be reduced. Reservoir carryover storage (the amount of water in reservoirs at the end of the dry season) would decline. In response, groundwater pumping in the Sacramento Valley would increase.

- Increases in mean temperature and increased frequency, length and intensity of heat waves would occur, which would negatively affect public health.

- Increases in temperature, combined with the uneven distribution of new residential development across the state, will generate increased electricity demand for cooling, particularly in the Central Valley. However, hydroelectric power generation is expected to decline due to changes in hydrology.

- Air pollution in coming decades is expected to worsen, with an increased potential for high ozone and high particulate matter days. This would also adversely affect public health.

In 2014, the Bureau of Reclamation released a Climate Impact Assessment for the Sacramento and San Joaquin Basins. Among the potential impacts identified in the assessment are a projected earlier seasonal runoff that would lead to a decrease in end-of-September reservoir storage of 2%, and projected lower reservoir levels that would reduce the surface area of reservoirs available for recreation by 17% (U.S. Bureau of Reclamation 2014).

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. The actual withdrawal would occur in November 2020.

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.

In 2013, the EPA proposed standards to cut carbon emissions from new power plants, which were adopted in 2015. Also, 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 does not intend to implement 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 from 2005 to the present, when various executive orders and State legislation established the current framework for dealing with climate change. Several of these 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 greenhouse gas 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 government, 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 cap-and-trade program is set to expire after 2020. The State Legislature is considering an extension of the program 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 a result of legislation enacted in July 2017, 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 prepared any plans to achieve the goal set by the Executive Order.

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 related to its previously 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. Put another way, the CAP sets an emission reduction target of 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.

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 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):

- Policy CH-5.1 directs the City to accommodate a changing climate through adaptation, mitigation, and resiliency planning and projects.

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:

- 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 SEIR 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 greenhouse gas 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.

Impact GHG-1: Project GHG Emissions

Development allowed under the General Plan 2040 would contribute to global climate change through direct and indirect emissions of GHGs from land uses. Based upon a screening threshold used in the General Plan 2040 EIR, the GHG emission impacts of planned development were considered significant. Implementation of applicable General Plan 2040 policies and actions, combined with a mitigation measure requiring an update of the CAP and its measures, would reduce GHG emissions to the extent feasible. However, due to the magnitude of growth associated with the General Plan 2040, it is anticipated that an increase in GHG emissions would remain substantial and would not contribute to net achievement of the State's long-term climate stabilization goals. Therefore, GHG impacts of planned development were considered significant and unavoidable (City of Stockton 2018b). A Statement of Overriding Considerations for this issue was adopted by the Stockton City Council in conjunction with adoption of the General Plan 2040. This Statement of Overriding Considerations remains operative.

The Road Construction Emissions Model used in the air quality analysis in Chapter 6.0 was also used to estimate the total GHG construction emissions associated with the proposed project (see Appendix B of this SEIR). Based on these results, project construction GHG emissions for the estimated construction period (three months) would be approximately 84 tons CO_2e. Construction emissions would occur only during construction work and would cease once work is completed.

Implementation of SJVAPCD Regulation VIII and other rules described in Chapter 6.0, Air Quality, is expected to reduce incrementally the amount of GHGs generated by project construction. In addition, the mitigation measure described below would further reduce GHG emissions by limiting idling time for commercial vehicles, including delivery and construction vehicles. With implementation of mitigation and regulations, project impacts related to construction GHG emissions would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

GHG-1: Construction equipment and vehicles shall not idle their engines for longer than three (3) minutes.

Significance After Mitigation: Less than significant

Impact GHG-2: Consistency with Applicable Plans and Policies

The project would not generate operational GHG emissions, other than by vehicles visiting the site for inspection, maintenance or repair work. As such, the project would be consistent with the goals of the CAP, which are to reduce GHG emissions. Since the Stockton CAP goals are intended to be consistent with both the State's and SJVAPCD's plans, this reduction would also be consistent with the goals of these plans. Project impacts on consistency with GHG emission reduction plans would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

11.0 HAZARDSAND 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 related to TAC emissions; Chapter 9.0, Geology, addresses geologic and soil hazards; and Chapter 12.0, Hydrology, addresses potential flooding hazards.

Hazardous Materials

California Government Code Section 65962.5 requires the California Environmental Protection Agency to compile, maintain, and update specified lists of hazardous material release sites. CEQA requires the lead agency to consult the lists compiled pursuant to Government Code Section 65962.5 to determine whether a project and any alternatives are identified on specific lists of hazardous material release sites that are commonly referred to as the "Cortese List." Because the statute was enacted more than 20 years ago, some of the provisions refer to outdated agency activities and, in some cases, the information required in the Cortese List no longer exists. Those requesting a copy of the Cortese List are now referred directly to the appropriate information resources contained on internet websites hosted by the boards or departments referenced in the statute (City of Stockton 2018b).

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 near the project site (SWRCB 2019, DTSC 2019). These results are available in Appendix E of this SEIR.

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 (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, approximately 2.25 miles east of the project site. Stockton Airport offers scheduled passenger air service, along with general aviation and air cargo services. The project site is within the land use compatibility planning area for the airport (see below).

Wildfire Hazards

The severity of wildfire hazards is based on fuel classification, topography, and critical fire weather frequency. 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 areas 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 entire Stockton area is considered a Local Responsibility Area; there are no State Responsibility Areas in the vicinity. As shown on Figure 4.8-1 of the General Plan 2040 EIR, there are no High, Very High, or Extreme Fire Hazard Severity Zones in the Stockton area. Approximately 945 acres of land are classified within a Moderate Fire Hazard Severity Zone, mostly beyond the Stockton city limits (City of Stockton 2018b). The project site is not within any Fire Hazard Severity Zone.

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 "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 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 material sites under the Comprehensive Environmental Response Compensation and Liability Act, commonly referred to as Superfund. The purpose of Superfund is to provide authorities the ability to respond to uncontrolled releases of materials from inactive hazardous waste sites that endanger public health and

the environment. The Superfund Amendments and Reauthorization Act expanded EPA's response authority, strengthened enforcement activities at Superfund sites, and broadened the application of the law to include federal facilities. In addition, new provisions were added dealing with emergency planning and a community's 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.

Within the California Environmental Protection Agency, the DTSC has primary authority to enforce hazardous materials regulations for the generation, transport and disposal of hazardous substances under the authority of the Hazardous Waste Control Law, with delegation of enforcement to local jurisdictions that enter into agreements with the agency. Regulations implementing the Hazardous Waste and Control Law list 791 hazardous chemicals and 20 or 30 more common substances that may be hazardous; establish criteria for identifying, packaging and labeling hazardous substances; prescribe management of hazardous substances; establish permit requirements for hazardous substances treatment, storage, disposal and transportation; and identify hazardous substances that cannot be deposited in landfills.

Under both RCRA and the Hazardous Waste Control Law, the generator of a hazardous waste 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.

The County Environmental Health Department provides management and record keeping related to hazardous materials sites through the Hazardous Materials Program. It 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 to the Department 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. The County Environmental Health Department also administers the California Accidental Release Prevention, Aboveground Petroleum Storage Act, Hazardous Waste Generator, Hazardous Waste Onsite Treatment, and Underground Storage Tank programs.

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 of Stockton Airport, which is the area covered by the ALUCP. 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 project site is within Zone 7b, 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: new dumps and landfills subject to applicable law and implementing advisories, outdoor stadiums, and hazards to flight (Coffman Associates 2016).

San Joaquin County Emergency Operations Plan

San Joaquin County recently adopted an update to the San Joaquin County Emergency Operations Plan. 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. Within an area designated as the RD 17 Zone, Interstate 5 and French Camp Road are the nearest roads to the project site designated as evacuation routes (San Joaquin County OES 2019b).

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.

Chapter 16.28 - Overlay Zoning District Land Use and Development Standards

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 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.

Stockton General Plan 2040

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

- Action TR-1.3.A directs the City to ensure that all future development is consistent with the ALUCP, except in cases where the City Council concludes that project would protect public health, safety, and welfare by minimizing the public's exposure to excessive noise and safety hazards.
- Policy SAF-2.2 directs the City to prepare sufficiently for major events to enable quick and effective response.
- Action SAF-2.2.A requires new development to provide adequate access for emergency vehicles and evacuation routes.

- Action SAF-2.2.C requires new critical facilities, including hospitals, emergency operations centers, communications facilities, fire stations, and police stations, to be located, designed, and constructed to avoid or mitigate potential risks and ensure functional operation during flood events, seismic and geological events, fires, and explosions.

- Policy SAF-2.6 directs the City to minimize the risk to city residents and property associated with the transport, distribution, use, and storage of hazardous materials.

It should be noted that the CBOC/CLC EA was updated in part because the project currently proposes to import approximately 180,000 cubic yards of fill to raise the ground level of portions of the project site to address floodplain requirements and concerns of the CBOC/CLC project. This action would elevate the finished first floor of the CBOC/CLC facilities to a minimum of 21 feet, which would reduce potentially adverse impacts if a flood protection levee failed (Department of Veterans Affairs 2019). Impacts associated with this change are not related to the proposed project.

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

Construction and operation of new development allowed by the General Plan would involve the routine use and handling of hazardous materials (e.g., diesel gasoline and fertilizers), and could involve the use of petroleum-based fuels for maintenance and construction equipment, which would be transported within the city. In support of its goal to protect residents and businesses from human-caused hazards, the General Plan includes Policy SAF-2.6, described above, and its implementing actions, which all help to reduce the risks associated with the transport, use, and disposal of hazardous materials. Existing regulations related to the transport, use, and disposal of hazardous materials would also apply. With implementation of these measures, potential impacts were considered less than significant (City of Stockton 2018b).

The project involves the installation of sanitary sewer and water trunk lines. Construction activities on the project site may involve the use of hazardous materials such as fuels and solvents. Construction and maintenance vehicles would transport and use these materials in ordinary quantities. 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. After construction is completed, the trunk lines would not require the use of hazardous materials in their operation; thus, no hazardous materials would need to be transported or stored. Project impacts related to the transportation and storage of hazardous materials would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HAZ-2: Hazardous Material Releases

The General Plan 2040 EIR notes increased development within Stockton could increase the frequency of accidents involving the release of hazardous materials (City of Stockton 2018b). As discussed under Impact HAZ-1, Policy SAF-2.6 and its implementing actions minimize the risk to city residents and property associated with the transport, distribution, use, and storage of hazardous materials.

As noted, construction activities on the project site may involve the use of hazardous materials such as fuels and solvents, which would create a potential for hazardous material spills. 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.

As noted, project operations would not require the use or storage of hazardous materials. Therefore, the project would not lead to a release or spill of hazardous materials that may affect nearby residences or businesses, including those that are part of a "disadvantaged community" (see Chapter 13.0, Land Use, for a description of a disadvantaged community). Also, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials that would affect an existing or proposed school. 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 the GeoTracker and EnviroStor databases did not find hazardous material records on the project site. The site has been used mainly for agriculture, so no hazardous materials associated with industrial activities are expected.

Agricultural activities on or near the proposed project alignment may have left residues of agricultural chemicals in the soils. Based on data from former agricultural properties, the DTSC states that only pesticide class of concern are organochlorine pesticides, such as DDT, dieldrin, and toxaphene, among others. Such pesticides are biopersistent and bioaccumulate in the environment. Most other classes of pesticides have relatively short half-lives and have not been found in agricultural fields. Arsenic in arsenical herbicides is another substance of concern (DTSC 2008).

Project work would extend into areas currently or previously used for agriculture, particularly the Long property, where concentrations of agricultural chemicals that may have been used are not known. Because of this, the risk of exposure of construction workers to agricultural chemicals cannot be determined, and it is therefore considered potentially significant. Mitigation described below would require a Phase I Environmental Site Assessment to determine if a more intensive Phase II Environmental Site Assessment should be conducted for potential agricultural contamination at a level that may pose a risk to human health. Should such agricultural chemical contamination be determined to exist, then remediation of the contamination shall occur prior to the start of construction. With implementation of this mitigation, project impacts related to hazardous material sites would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

HAZ-1: Prior to the start of construction, a Phase I Environmental Site Assessment shall be conducted to determine if potential contamination may exist within the permanent and temporary easement area of the project alignment. If this assessment indicates the potential presence of contamination, a Phase II Environmental Site Assessment shall be conducted to identify the source and areas of any contamination that

could pose a risk to human health. Any such contaminated area identified shall be remediated in accordance with applicable State and local regulations pertaining to the contaminant such that it would no longer present a risk to human health.

Significance After Mitigation: Less than significant

Impact HAZ-4: Airport Hazards

As noted, the project site is within Safety Zone 7b established by the Stockton Metropolitan Airport ALUCP. Proposed development would be consistent with the allowed land uses in Zone 7b of the ALUCP. The project would pose no short-term or long-term hazard to flight; construction equipment would not involve any encroachment on aviation airspace, and proposed project facilities would be installed underground. No residences or businesses would be constructed by the project, so there would be no new concentrations of people in the area. The project would have no impacts related to airport hazards.

Level of Significance: No impact

Mitigation Measures: None required

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

Project construction work that would occur along Wolfe, Yettner, and South Manthey roads, and encroachment could potentially interfere with emergency vehicle access and evacuations, if necessary. However, no construction work would occur on Interstate 5, French Camp Road or other evacuation routes, so project construction is not expected to substantially obstruct emergency vehicles or evacuation activity that may be required.

The CBOC/CLC EA discussed impacts of utility construction along existing roadways. It concluded that expected traffic impacts would be temporary and focused where the utility work is being done. Also, the utility work would occur on different roadways at varying phases, so specific roadways would not be impacted for the duration of the utility construction period (Department of Veterans Affairs 2019). Most of the project would be constructed within the right-of-way of public roads. These roads are within the jurisdiction of San Joaquin County, which would have to issue an encroachment permit to allow work along these roads. The encroachment permit will contain conditions as required to reduce impacts on traffic flow, including emergency vehicles and evacuations. 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 with observance of the provisions of the encroachment permit.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HAZ-6: Wildfire Hazards

The project alignment currently is used for agricultural activities or roads and is not subject to substantial wildfire hazards. 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 facilities would be buried, so they would not be affected by any wildfires that may occur in the area. These underground facilities would include no wildfire ignition sources, involve any accumulation of fuels or contribute to any known cause of wildfires. The project would have no impact related to wildfires.

Level of Significance: No impact

Mitigation Measures: None required

12.0 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL SETTING

Surface Waters and Water Quality

The Stockton area is in the San Joaquin Basin, which spans about 15,825 square miles, including the northern half of the San Joaquin Valley, the central Sierra Nevada, and some of the eastern part of the Coast Ranges. The main river in the San Joaquin Basin, the San Joaquin River, flows east-west near the southern boundary of the San Joaquin Basin, then continues northwest until it flows into the Sacramento River just north of the cities of Antioch and Pittsburg in Contra Costa County (City of Stockton 2018b). The project site is approximately 1.3 miles east of the San Joaquin River at its closest point.

The project site is adjacent to the eastern 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). Wolfe Road forms part of the legally defined boundary of the Delta.

Several streams and sloughs flow westward through the Stockton area to the San Joaquin River. These include the Calaveras River, Mosher Slough, and Littlejohns Creek. French Camp Slough, with its forks and branches, also flows into the San Joaquin River from the east. The South Fork of French Camp Slough is approximately 0.3 miles east of the project site at its closest point. No surface streams flow on or near the project site. There are no other surface waters in the vicinity of the site.

Drainage in the Stockton area is via storm drains, canals, and ditches. The City maintains a system of storm drains that convey runoff to pump stations, which discharge runoff into rivers, creeks, and sloughs, all of which flow westward to the San Joaquin River and San Joaquin Delta. Most of the storm drains have capacity for a 100-year storm. Canals and ditches generally discharge directly to rivers, creeks, and sloughs (City of Stockton 2018b). Chapter 17.0, Utilities, discusses the City's drainage system in more detail. The project alignment has no City drainage facilities.

Overall, surface water quality is generally better in the eastern part of the Stockton region, and lower near the San Joaquin Delta in the western part of the region (City of Stockton 2018b). The RWQCB has prepared a list under Clean Water Act Section 303(d) that identifies surface waters in the Stockton area that are considered "impaired" in water quality, along with the pollutants responsible for the impairment (see Regulatory Framework below). Both the San Joaquin River and French Camp Slough are on the

Section 303(d) list. Pollutants identified with these streams include pesticides, dissolved oxygen, mercury, and "general toxicity" (RWQCB 2014).

Groundwater and Groundwater Quality

The project site is within the Eastern San Joaquin County 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 Eastern San Joaquin Subbasin is recharged by water from sources including streams, percolation of rainfall and irrigation water, inflow from other groundwater basins, and intentional recharge in recharge 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). The most recent groundwater report available indicates groundwater levels in the vicinity of the project site are approximately 30 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 18.0, Utilities). Groundwater has been and remains an important source of irrigation water supply for agricultural lands in San Joaquin County. Historically, groundwater elevations have declined about 40 to 60 feet, averaging approximately 1.7 feet per year. As a result, a regional cone of depression has formed in eastern San Joaquin County, creating a gradient that allows saline water underlying the Delta region to migrate northeast within the southern portions of the Stockton area. The demand for water in San Joaquin County appears to have peaked in the 1990s and is projected to continue to decline as more efficient urban and irrigation practices are adopted. Long-term groundwater elevations suggest water level recovery in some areas (City of Stockton 2018b).

Flooding

The Federal Emergency Management Agency (FEMA) prepares Flood Insurance Rate Maps that indicate potential flooding hazard area, mainly those subject to a 100-year flood. The Flood Insurance Rate Map for the project site indicates the site is within an area designated Zone X (Figure 12-1). Zone X denotes areas with a reduced flood risk due to the existence of levees that protect the designated areas from flooding. (FEMA 2009).

Legislation enacted in 2007 called collectively the "SB 5 bills" (see Regulatory Framework below) requires urban and urbanizing areas in the Central Valley to have 200-year flood protection no later than 2025. A particular focus is protection of areas subject to a potential 200-year flood of three feet or more in depth. Based on information in the Stockton General Plan, the project site is within an area subject to a 200-year flooding of more than three feet in depth (Figure 12-2).

Dam failures are incidents that could cause flooding in the Stockton area, especially since the city is downstream from major water storage and flood control reservoirs in the Sierra Nevada and foothills. The project site is within an area identified as potentially subject to flooding as a result of dam failure (San Joaquin County OES 2019b).

Most of Stockton is protected from flooding by levees. However, there is still a risk of flooding of areas protected by levees due to geotechnical instability of the levees, one bank of the levee being higher than the other, water flowing around the upstream end of a levee, and encroachments such as culverts and roadway crossings (City of Stockton 2018b). The project site is within the boundaries of Reclamation District 17, which is responsible for levees constructed mainly along the San Joaquin River and French Camp Slough. As indicated above, the project site is within an area of reduced flood risk due to levees; Reclamation District 17 is involved in a long-term program to improve levee stability and provide increased protection from 100-year and 200-year flooding. As discussed in Chapter 11.0, Hazards, the CBOC/CLC project proposes to import fill to elevate the facilities such that risk from a levee breach is reduced.

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.

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 stormwater discharges into the waters of the United States. California has an approved State NPDES program. The EPA has delegated authority for water permitting to the SWRCB, which in turn delegates this authority to the RWQCBs.

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 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 a Flood Insurance Rate Map, FEMA conducts engineering studies referred to as Flood Insurance Studies. The most recent Flood Insurance Study and Flood Insurance Rate 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 that are shown on the FEMA Flood Insurance Rate Maps for cities and counties.

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, cooperation with the Corps and the San Joaquin Area Flood Control Agency for updating, and method consistency with the RWQCB and proposed BMPs. 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).

National Pollutant Discharge Elimination System

As noted, the SWRCB has the responsibility under the federal Clean Water Act through the NPDES permit program for the regulation of storm water quality. SWRCB has adopted general permits for construction activity and industrial and commercial use. The Construction General Permit covers all construction activities that disturb at least one acre of soil.

As described in Chapter 9.0, Geology and Soils, construction that causes one acre of ground disturbance or more is required to obtain a Construction General Permit. Additional storm water regulation is established in the NPDES area-wide municipal separate storm sewer system (MS4) permit system administered by the SWRCB. The City of Stockton has adopted and currently implements its MS4 program in accordance with Central Valley Regional Water Quality Control Board Order No. R5-2016-0040-2. Conditions of this permit are described later in this section.

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 of local Groundwater Sustainability Agencies that must assess conditions in their local water basins and adopt locally-based management plans. Local groundwater sustainability agencies are to be formed by June 30, 2017. Several agencies in the Eastern San Joaquin Subbasin have become GSAs, 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 must be adopted by January 31, 2020, while other groundwater basins must adopt plans by January 31, 2022. The Eastern San Joaquin Subbasin has been designated a critically overdrafted basin and therefore must adopt a groundwater sustainability plan by January 31, 2020.

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 frequency 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.

In addition to setting 200-year flood protection requirements for urban areas, the SB 5 Bills also established new and more comprehensive State flood protection policies and a public investment strategy for flood protection improvements. Generally led by the Department of Water Resources, the flood protection effort involves a range of local, state and federal agencies.

Regional and Local

City of Stockton MS4 Permit

As noted above, additional storm water regulation is established in the NPDES MS4 permit system administered by the SWRCB. The MS4 permit requires affected jurisdictions, including the City of Stockton, 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. The program requirements are enforced primarily through the City's Storm Water NPDES permit, issued by the RWQCB, Central Valley Region (Order No. R5-2016-0040-2).

Post-construction BMP requirements are contained in City ordinances that require compliance with the City's adopted Storm Water Quality Control Criteria Plan. 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.

Eastern San Joaquin County Groundwater Basin 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.

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.* Chapter 15.44, Flood Damage Prevention, includes provisions that serve to minimize public and private losses due to flood conditions. In addition, Chapter 15.48 of the Stockton Municipal Code regulates grading and erosion control 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 SAF-2.2C requires new critical facilities, including hospitals, emergency operations centers, communications facilities, fire stations, and police stations, to be located, designed, and constructed to avoid or mitigate potential risks and ensure functional operation during flood events, seismic and geological events, fires, and explosions.
- Policy SAF-2.3 directs the City to protect the community from potential flood events.
- Policy SAF-2.4 directs the City to minimize risks to the community from flooding through appropriate siting and protection of structures and occupants.
- Policy SAF-3.2 directs the City to protect the availability of clean potable water from groundwater sources.

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:

- 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

The General Plan 2040 EIR states that clearing, grading, excavation, and construction activities associated with development allowed under the General Plan could impact water quality through soil erosion and increased silt and debris discharges to surface waters. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Construction projects of one acre or more would be required to comply with the Construction General Permit, Stockton Municipal Code Chapters 13.16 and Chapter 15.48. As a result of these controls, construction-related impacts on surface waters and their quality would be less than significant (City of Stockton 2018b).

As noted, there are no surface waters on or adjacent to the proposed project alignment, so the project would not directly affect surface waters. Construction associated with proposed project development could have a potentially significant impact on surface water quality. As discussed in Chapter 9.0, Geology and Soils, construction activities would loosen soils, making them susceptible to water erosion. Eroded soils could be transported eventually to surface waters, thereby increasing their sedimentation and reducing their quality. As described in Chapter 9.0, Geology, the project would need to prepare and implement a SWPPP as a condition of its Construction General Permit, which would reduce erosion and limit potential sediment loading in local streams. Project impacts related to surface waters and their quality would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HYDRO-2: Groundwater Resources and Quality

The project is the installation of sanitary sewer and water trunk lines. By themselves, operation of these facilities would not require any new source of water, including groundwater. However, the water line is intended to provide City water service to the proposed CBOC/CLC. The City's water supply relies in part on groundwater. The General Plan 2040 EIR states that groundwater supplies are forecast to increase from about 13,368 acre-feet per year in 2015 to 29,840 acre-feet per year in 2040. However,

groundwater as a proportion of total water supplies used in the Stockton area is forecast to decrease from about 28 percent of total supplies to about 24 percent over the same period. Because of previous and ongoing water supply planning efforts in the region, combined with overall water conservation and efficiency requirements directed in the General Plan 2040, future development would avoid substantially impacting groundwater supplies (City of Stockton 2018b).

While groundwater is no longer the primary source of water for the entire City, it is the main source for the southern portion of the City's service area. The proposed CBOC/CLC would generate additional water demands, but as discussed in Chapter 18.0, Utilities, the City's water system can accommodate this development from its existing supplies. The project would not require additional groundwater resources.

The project would not introduce any new impervious surfaces as proposed trunk line facilities would be placed underground. 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 are an estimated 30 feet below ground surface. However, the project engineer has indicated that work on the Wolfe Road segment of the project may require dewatering. Dewatering typically requires a permit from the County Environmental Health Department with conditions attached that are designed to maintain water quality. As such, project construction is unlikely to have adverse groundwater quality impacts. Project impacts on groundwater resources would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HYDRO-3: Drainage Patterns and Runoff

The General Plan 2040 EIR notes that future development would not have significant impacts on existing drainage patterns such that increased erosion or flooding would occur. However, future development could create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Mitigation described in the EIR would require completion of the citywide storm drainage master plan, which would eventually lead to a plan that would provide adequate drainage facilities for future development. Implementation of this mitigation measure would reduce impacts related to runoff to a level that would be less than significant (City of Stockton 2018b).

As stated, the project would install facilities underground and would not introduce any new impervious surfaces. The existing ground surface or pavement would be restored upon completion of the project. Because of this, the project would not alter existing drainage patterns in the area, and it would not increase runoff. The project would have no impact on drainage and runoff.

Level of Significance: No impact

Mitigation Measures: None required

Impact HYDRO-4: Flood, Tsunami, and Seiche Hazards

As noted, the project site is within an area designated by FEMA as one with reduced flood risk due to protection of levees. It is not within a 100-year floodplain; 100-year flood plains are considered an area of significant flood risk. However, the project site would be potentially subject to 200-year flooding greater than three feet in depth. The project site could also be potentially subject to potential inundation from failure of dams in the foothill areas and from local levees.

The project consists of water and sanitary sewer lines that would be installed underground and engineered to account for flooding potential. Therefore, project facilities would not be significantly affected by flooding. In turn, the project would not impede or redirect any flood flows. The project also would not directly place any residences or employment centers in the area, so people and structures would not be subject to a flood risk as a result of the project.

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

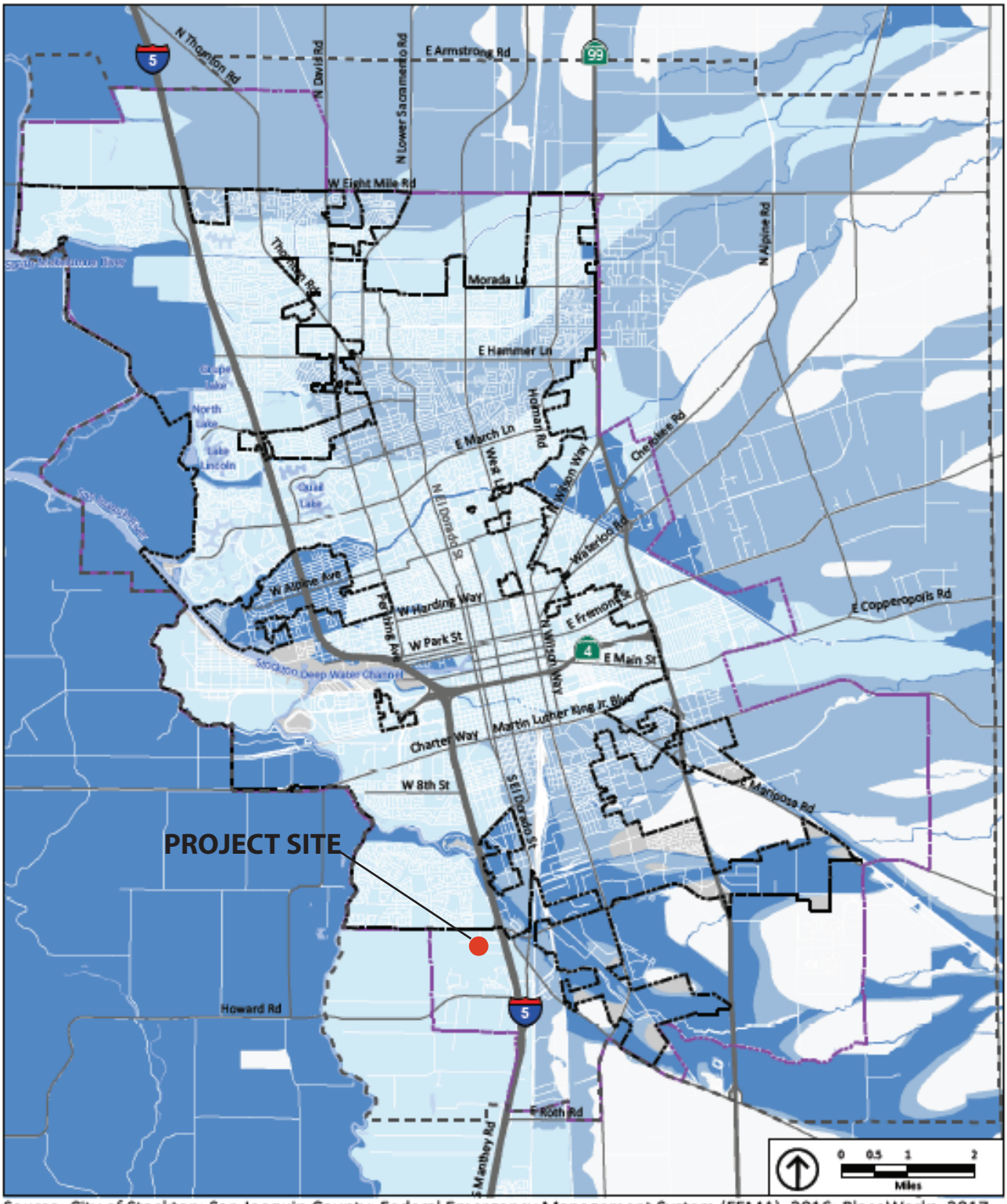
Impact HYDRO-5: Consistency with Water Quality and Groundwater Management Plans

As noted in the discussion under Impact HYDRO-1, the project would be required to prepare a SWPPP. Implementation of the SWPPP would limit potential water erosion and resulting carryout to local streams. This would be consistent with the goals and objectives of local water quality plans implemented by the City, including the Storm Water Management Program and the Storm Water Quality Control Criteria Plan.

As noted, no groundwater sustainability plan has yet been established for the Eastern San Joaquin Subbasin; such a plan must be adopted by January 31, 2020. As discussed under Impact HYDRO-2, the project would have no substantial impact on groundwater resources; therefore, the project would have no impact on meeting the objectives of any adopted groundwater sustainability plan. 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

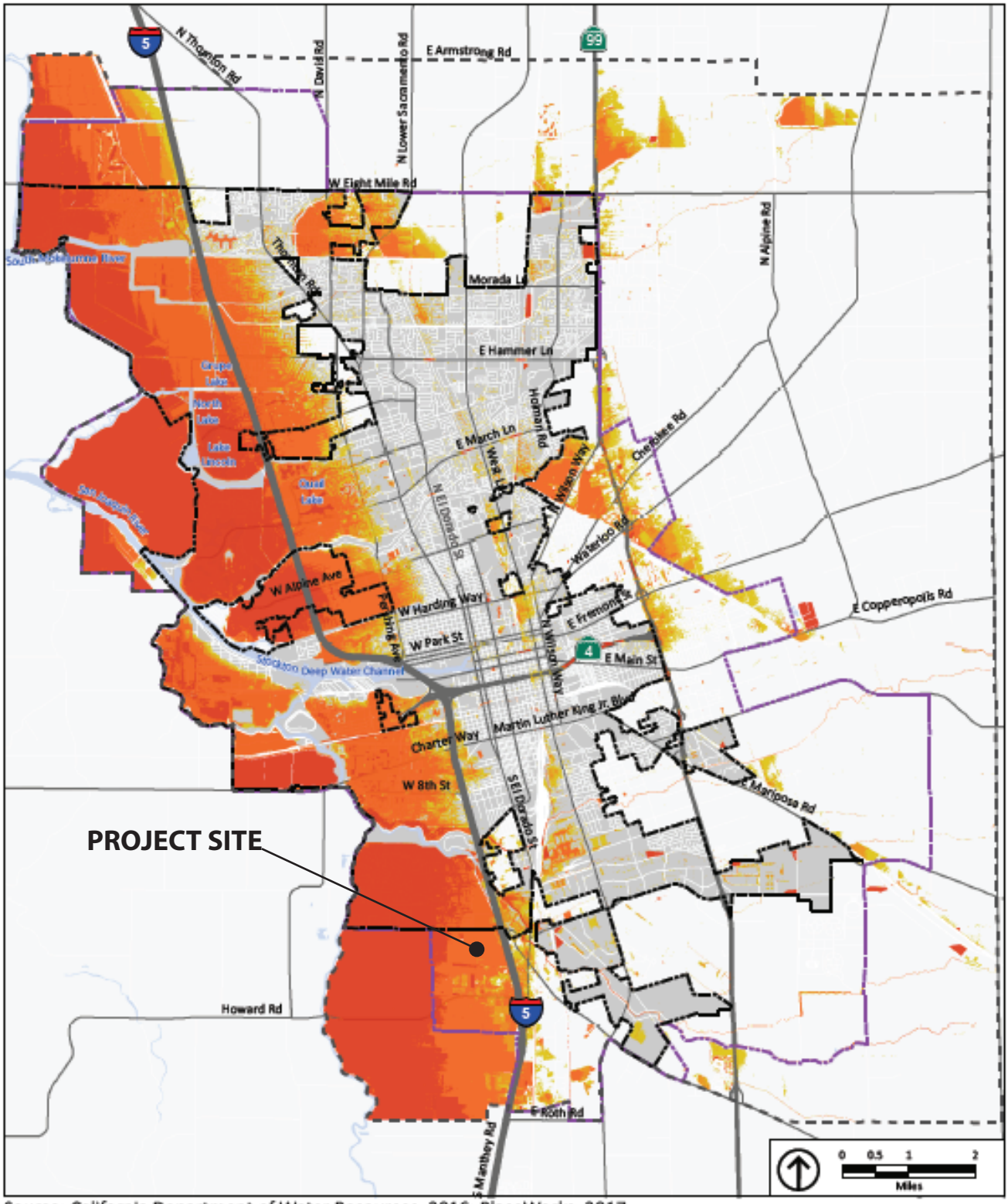


Source: City of Stockton; San Joaquin County; Federal Emergency Management System (FEMA), 2016; PlaceWorks, 2017.

Flood Zones
- 100-Year Flood Zone
- 500-Year Flood Zone
- Protected by a Levee

- City Limit
- Sphere of Influence/ EIR Study Area
- General Plan Planning Area

Figure 12-1
100-YEAR FLOOD PLAIN MAP



Source: California Department of Water Resources, 2016; PlaceWorks, 2017.

200-Year Storm Flood Depth

- 3 - 4 feet
- 4 - 5 feet
- 5 - 10 feet
- > 10 feet

- City Limit
- Sphere of Influence/ EIR Study Area
- General Plan Planning Area

Figure 12-2
200-YEAR FLOOD PLAIN

13.0 LAND USE, POPULATION, AND HOUSING

ENVIRONMENTAL SETTING

Existing Land Uses

The project site is located in unincorporated San Joaquin County, south of the Weston Ranch development in southwest Stockton. The project site itself consist of mainly agricultural land with scattered rural residences, as described in Chapter 5.0, Agricultural Resources. There is limited infrastructure development in the project area, mainly County roads such as Wolfe Road, Yettner Road and Manthey Road, as well as two water storage tanks operated by the City north of the west end of Yettner Road. Interstate 5 is near the eastern terminus of the proposed project alignment. An 18-inch City potable water trunk line has been extended south along Wolfe Road to and beyond the proposed point of connection with the project.

The Weston Ranch development, located north of French Camp Road and west of Interstate 5, is a predominantly residential development with schools, parks and commercial land uses. South of the project site is San Joaquin General Hospital, a public hospital owned and operated by San Joaquin County. Other County facilities, such as County adult and youth correctional facilities are located south of the project site. Across Interstate 5 to the southeast is the unincorporated community of French Camp, with a mix of predominantly residential and commercial land uses surrounded by remnant agricultural uses.

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 2012, 2019). Table 13-1 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 January 1, 2000	Population January 1, 2019	Percent Change, 2000-2019
Stockton	243,771	316,410	+29.8%
San Joaquin County	563,598	770,385	+36.7%
State of California	33,873,086	39,927,315	+17.9%

Source: California Department of Finance 2012, 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 during the prior decade, at 1.1% per year in San Joaquin County, and 0.9% within the city of Stockton - slightly higher than the statewide 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 total population growth in the County, both incorporated and unincorporated areas, to about 945,300 by 2035. This equates to an average annual population growth rate of 1.5 percent, which is approximately 25 percent more than the State's projected annual average growth rate of 1.2 percent between 2012 and 2035 (San Joaquin County 2016a).

Housing

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. The total housing units in unincorporated San Joaquin County were estimated at 51,389, of which 42,557 (82.8%) were single-family detached units (California Department of Finance 2019). Based on a review of a Google Earth photo, there are six housing units near the proposed project alignment, all single-family detached residences.

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 burden and vulnerability than one with a lower score.

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 land use map, the map depicting the transportation network required to serve future development, and the goals, policies, and actions described in the General Plan (City of Stockton 2018a).

The project site is outside the City limits, but it is within the Planning Area of the Stockton General Plan. The Stockton General Plan designates the project site for Administrative Professional development in the eastern portion of the proposed project alignment and for Open Space/Agriculture in the western portion (Figure 13-1). Professional Administrative land uses include business, medical, and professional offices; residential uses; 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 for the Administrative Professional designation outside downtown Stockton is 0.5.

The Open Space/Agriculture designation allows for agriculture, parks, single-family residential units, farm worker housing, wetlands, wildlife reserves, and other similar and compatible uses and structures related to the primary use of the property for preservation of natural resources or agriculture. The maximum residential density is one dwelling unit per parcel, and the minimum parcel size is 40 acres, so only one dwelling unit per 40 acres is permitted within this designation. Lands under this designation are intended to remain unincorporated and under the jurisdiction of San Joaquin County. As discussed in Chapter 20.0, Other CEQA Issues, the General Plan would control the geographical extent of growth through the Open Space and Agriculture designation (City of Stockton 2018a).

The following Stockton General Plan 2040 policies and implementing actions are relevant to this project:

- Policy LU-6.1: Carefully plan for future development and proactively mitigate potential impacts.
- Action LU-6.1D: Require that all utility connections outside the city limit be for land uses that are consistent with the General Plan.
- Action LU-6.2B: 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.

Along with the General Plan 2040, the Stockton City Council adopted supplements to the master plans for water, wastewater, and storm drainage systems. Chapter 17.0, Utilities and Energy, discusses these plans in more detail.

San Joaquin County General Plan

San Joaquin County adopted an update to its General Plan in 2016. Like the Stockton General Plan, 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 in its eastern portion and as General Agriculture in its western portion. 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. In this case, the Agricultural-Urban Reserve designation corresponds to the area designated Professional Administrative in the Stockton General Plan. The General Agriculture designation provides for large-scale agricultural production and associated processing, sales, and support uses. Typical building types include low-intensity structures associated with farming and agricultural processing and sales (San Joaquin County 2016a).

San Joaquin County Development Code

The San Joaquin County Development Code (San Joaquin County Code Title 9) is designed to implement the County General Plan. 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. Land along the project alignment is zoned by the County AG, Agriculture-General (Figure 13-2). 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. More specifically, the zone for land along the project alignment is AG-40, within which the minimum parcel size is 40 acres.

Environmental Justice

The Stockton General Plan includes a figure depicting disadvantaged communities in the Planning Area, which is reproduced in Figure 13-3 of this EIR. The project site is within an area designated as having among the higher scores as determined by CalEnviroScreen, though not among the highest.

Stockton Metropolitan Airport Land Use Compatibility Plan

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. The project site is within Compatibility Zone 7b; as such, the project is subject to review by the Airport Land Use Commission.

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 General Plan 2040 EIR states that the General Plan 2040 would result in a significant impact if they would lead to new development or physical features that would divide existing neighborhoods (City of Stockton 2018b). However, the area surrounding the project site is predominantly agricultural fields with scattered rural residences. The pattern of development, or lack thereof, in the area does not constitute a community that could be divided by the project. In any case, the proposed project would not divide any established community as it consists of water and sanitary sewer trunk lines that would be installed underground. These facilities would serve to support future development of the areas surrounding the project site in accordance with the Stockton General Plan. The project 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

As indicated in the Regulatory Framework section above, plans and ordinances that are applicable to the project include the Stockton and San Joaquin County General Plans, the County zoning ordinance, and the Stockton Metropolitan Airport ALUCP. The project would be the installation of sanitary sewer and water trunk lines that would be placed underground.

The Stockton Planning Commission determined that the VA offsites utilities project, as a project listed in the City's Capital Improvement Program for Fiscal Year 2019-2024, is consistent with the 2040 General Plan. The Stockton City Council approved the Capital Improvement Program on June 18, 2018 via Resolution 2019-06-18-1502 considering the Planning Commission's finding of consistency with the General Plan.

As discussed elsewhere in this EIR, the project is not expected to result in significant impacts on environmental resources such as biological communities, agricultural lands, and local water quality, among other resources. This indicates that the project would not conflict with any local plans and ordinances with measures designed to protect the local environment. It also indicates that the project has no significant impact on an area considered a disadvantaged community, an issue of concern in the Stockton General Plan 2040.

As described in Chapter 11.0, Hazards, the project site is within Compatibility Zone 7b of the ALUCP (Coffman Associates 2016). Development proposed on the project site would not conflict with the prohibited land uses in, and development standards for, these zones. 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 Unplanned Population Growth

The General Plan 2040 EIR states that population and employment growth would occur as a consequence of development under the General Plan 2040. This is an impact considered significant and unavoidable with no feasible mitigation (City of Stockton 2018b). A Statement of Overriding Considerations for this issue was adopted by the Stockton City Council in conjunction with adoption of the General Plan 2040. This Statement of Overriding Considerations remains operative.

The project would connect the proposed CBOC/CLC project to City water and sanitary sewer services. It would not construct new residences or commercial/industrial buildings that would encourage population growth.

The project could potentially encourage development in the area with the installation of water and sanitary sewer lines. However, as noted, both the Stockton General Plan 2040 and the County General Plan designates the western portion of the project area for agriculture, so no future development is planned in the area. The eastern portion of the project site is designated for Administrative Professional development, and some of this area would be used for the CBOC/CLC. Future development of the project site would be consistent with the Stockton and San Joaquin County General Plans, which have incorporated population projections based on planned development under these plans. 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

There are no housing units or people residing therein in the area of the project alignment. No displacement of housing or people would occur as a result of the project. The project would have no impact on this issue.

Level of Significance: No impact

Mitigation Measures: None required

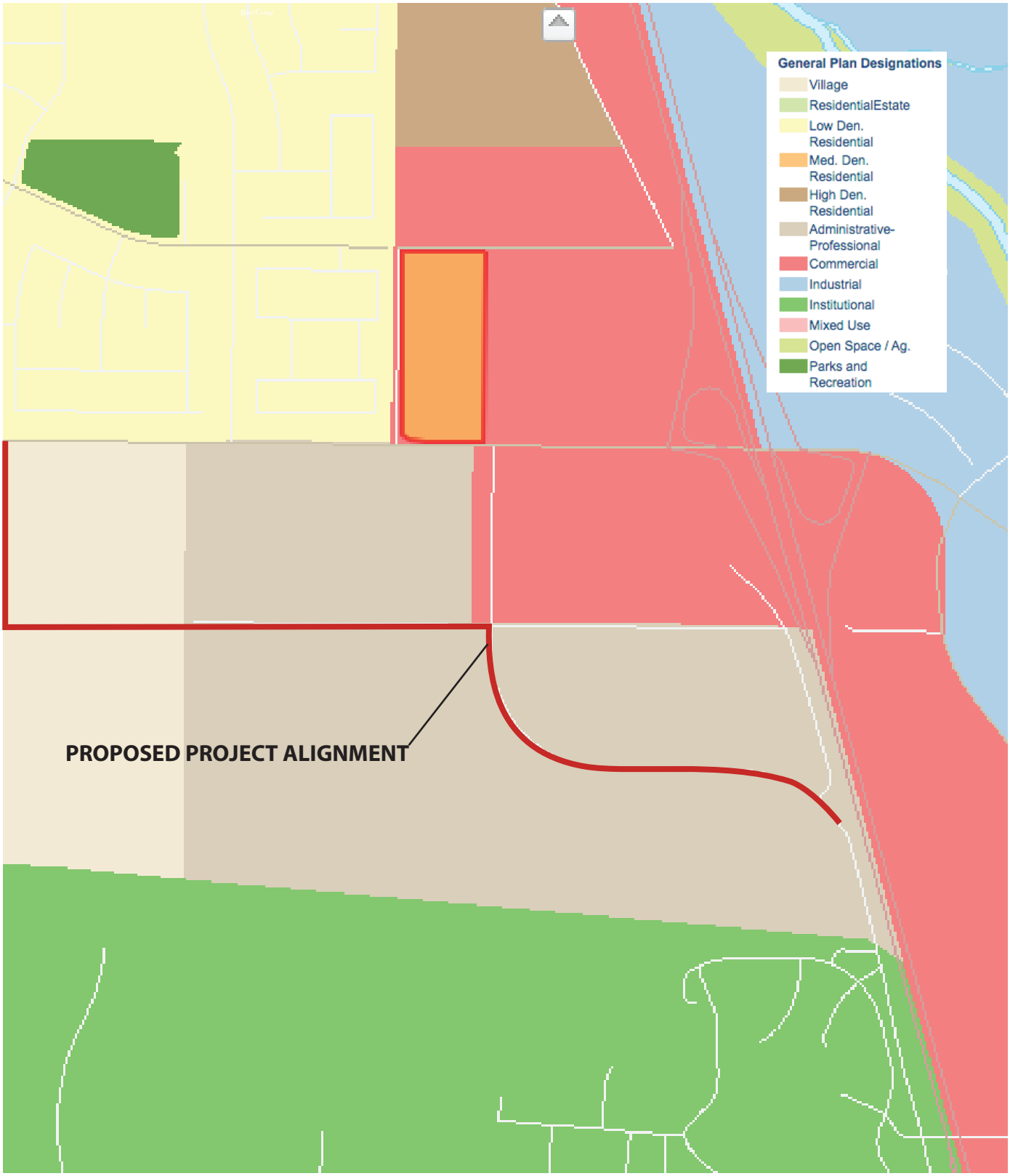


Figure 13-1
STOCKTON GENERAL PLAN

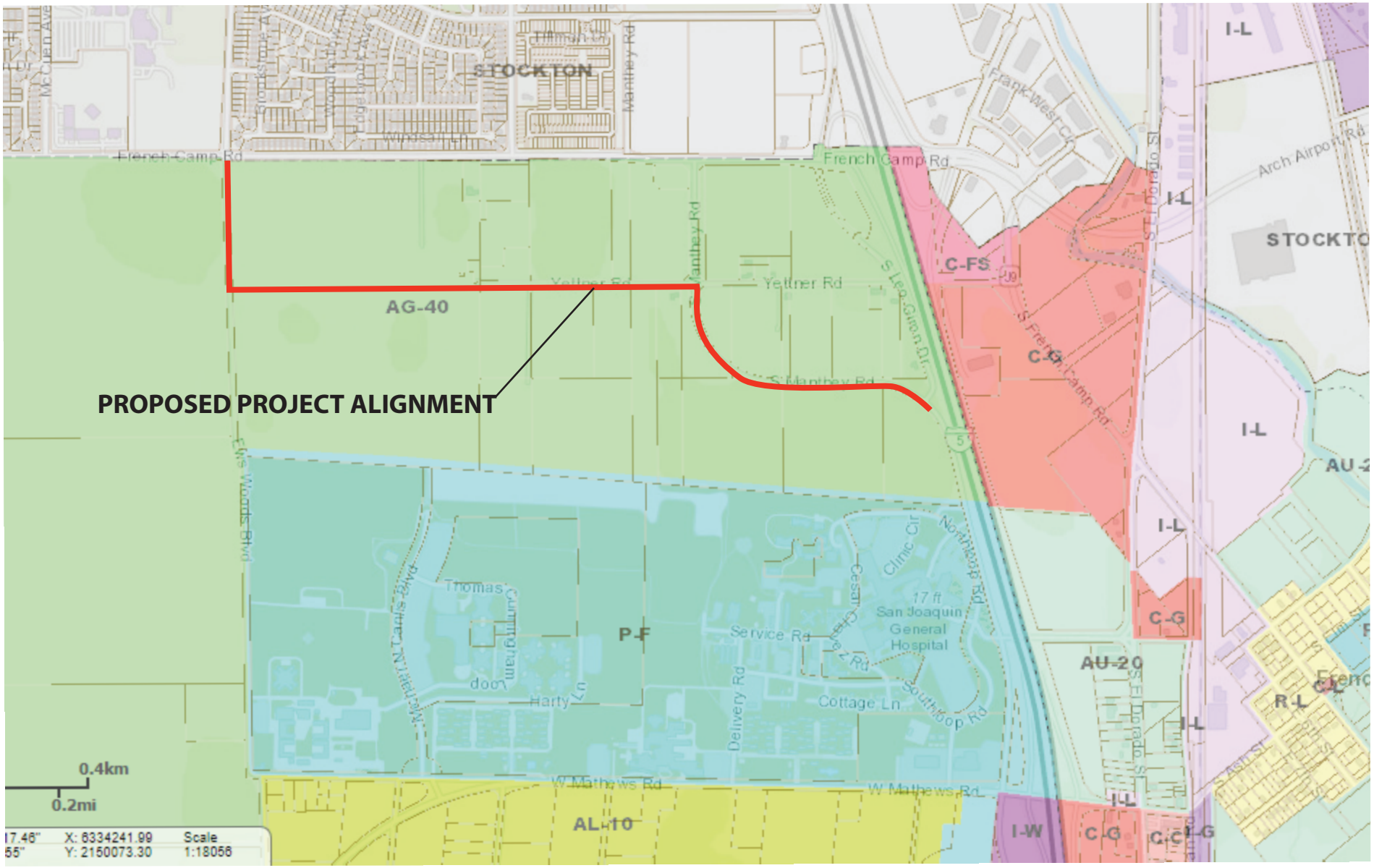
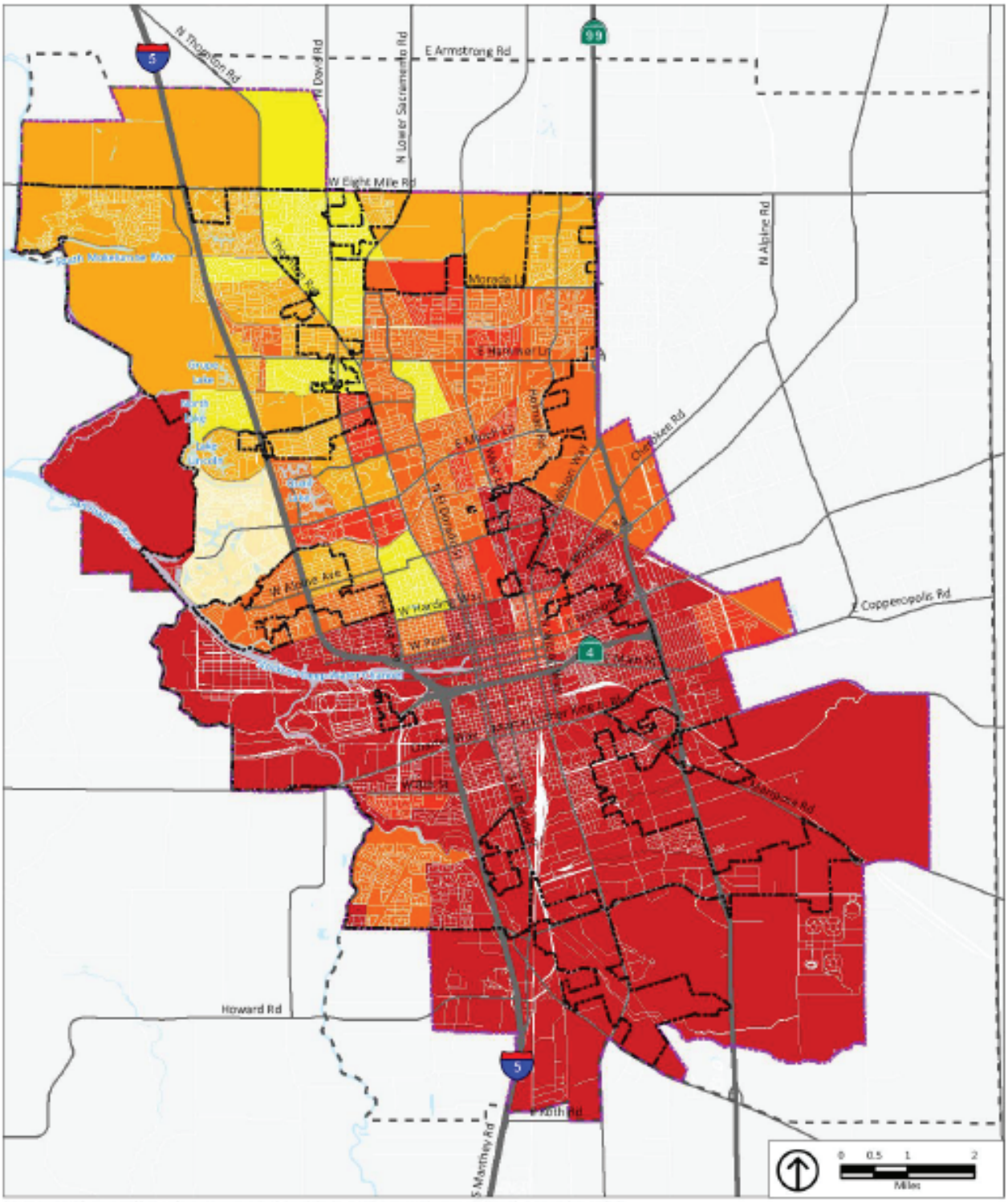


Figure 13-2
COUNTY ZONING MAP



Source: California Office of Environmental Health Hazard Assessment, 2018; PlaceWorks, 2018.

Percent of Disadvantaged Communities

- 91-100% (highest scores)
- 81-90%
- 71-80%
- 61-70%
- 51-60%
- 41-50%
- 31-40%
- 21-30%
- 11-20%
- 0-10% (lowest scores)

- General Plan Planning Area
- City Limit
- Sphere of Influence

Figure 13-3
DISADVANTAGED COMMUNITIES

14.0 NOISE

ENVIRONMENTAL SETTING

Noise Background

Noise is "unwanted sound," or sound that is annoying and/or harmful due to its loudness, pitch, or duration. Adverse effects of noise include annoyance, sleep and speech interference, and hearing loss. Noise analysis criteria are related to both annoyance and environmental health. There are two types of noise impacts: exposure of existing sensitive receptors to noise levels in excess of adopted standards, and placement of new sensitive receptors in areas where they would be exposed to noise levels in excess of the standards. Exposure of existing receptors to significant noise can result from construction activities near existing residences, traffic increases, or other changes in noise sources.

To provide a manageable way to measure sound, the decibel (dB) scale was devised. The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. Within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by the A-weighting network. There is a strong correlation between A-weighted decibels (dBA) and the way the human ear perceives noise.

Community noise is commonly described in terms of the "ambient" noise level, defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the 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 during the hours between 10:00 p.m. and 7:00 a.m. to account for the greater sensitivity of people to noise during that period. The CNEL is the same as the L_{dn}, with an additional +5-dB weighting applied to noise during the hours between 7:00 p.m. and 10:00 p.m.

Noise levels in developed areas are primarily a function of human, and especially mechanical, activity, and the intensity, duration and frequency of that activity. Noise levels also vary by distance from a noise source. The noise level at a given distance from a source can be estimated using the Inverse Square Law of Noise Propagation. Essentially, this law states that noise decreases by 6 dBA with every doubling of distance from a source (Harris 1991). Thus, the noise level 50 feet from a source decreases by 6 dBA at 100 feet, and by 6 dBA again at 200 feet.

Existing Noise Conditions

Mobile sources of noise, especially cars and trucks, are the most common and significant sources of noise in the Stockton area. Transportation noise from I-5, State Routes 4 and 99, and other major roadways is audible in many locations throughout the city. Additional sources of transportation noise include aircraft at the Stockton Metropolitan Airport, freight train movements and industrial uses at the Port of Stockton. Stationary sources such as commercial and industrial operations also contribute to the community noise environment within the city (City of Stockton 2018b).

In the vicinity of the project site, the main source of noise is traffic on I-5 and French Camp Road. The noise level on the segment of I-5 between French Camp Road and Mathews Road is 83.2 dBA CNEL at 50 feet from the freeway centerline. On the segment of French Camp Road between McDougald and E.W.S. Wood Roads, the noise level is 66.9 dBA CNEL at 50 feet from centerline (City of Stockton 2018b).

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, buses on rough roads, and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment. The effects of groundborne vibration include felt 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.

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." Other sensitive uses such as schools, libraries, churches, hospitals and the like are "normally acceptable" up to 70 dBA. Commercial, industrial and recreational

uses are substantially less sensitive. 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 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. Some cities and counties have adopted standards for such sources, while others have not.

San Joaquin County Noise and Vibration Standards

The San Joaquin County Code (Section 9-1025.9) establishes noise standards for transportation and stationary noise sources. The code also specifies exemptions and prohibited activities. Section 9-1025.9(c) states that noise sources exempt from the County noise standards include those associated with construction, provided such activities do not take place before 6:00 a.m. and after 9:00 p.m. on any day. Also exempt are noise sources associated with work performed by private or public utilities in the maintenance or modification of their facilities. As the project would occur on land within the County's jurisdiction, the County's noise standards would apply.

Section 9-1025.5 of the County Code establishes standards related to vibration. It states that no use shall cause any perceptible displacement at any lot line abutting any zone except a General Industrial zone, for which there are separate standards. An exception to these standards is made for operations involved in the construction or demolition of structures or infrastructure.

Stockton Metropolitan Airport Land Use Compatibility Plan

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 establishes CNEL noise contours around Stockton Metropolitan Airport, 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.

Stockton General Plan 2040

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

- Policy SAF-2.5 directs the City to protect the community from health hazards and annoyance associated with excessive noise levels.

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.

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 demolition balls) or continuous/frequent intermittent sources (e.g., impact and vibratory pile drivers, vibratory compaction equipment). Table 14-1 presents thresholds for impacts related to groundborne vibration, based on the Caltrans methodology.

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

The General Plan 2040 EIR states that development may result in new or expanded stationary and mobile sources of noise that have the potential to disturb adjacent sensitive receptors. Also, development could place new sensitive land uses in the vicinity of existing noise sources. The General Plan 2040 contains goals, policies, and actions that would serve to prevent or mitigate substantial permanent increases to ambient noise levels from long-term operations of new development and transportation-related sources. In combination with Stockton Municipal Code requirements, these actions would ensure that new development would not result in substantial permanent increases in overall community noise within Stockton (City of Stockton 2018b). An exception was traffic noise levels along specifically identified roadway segments, for which the General Plan 2040 EIR determined impacts to be significant and unavoidable. The project site is not on or near these roadway segments.

Land uses sensitive to noise are like those sensitive to air pollutant emissions (see Chapter 6.0, Air Quality). In the project vicinity, the nearest sensitive receptors are rural residences along Yettner Road and Manthey Road. The CBOC/CLC EA identified three noise-sensitive land uses associated with that project: Weston Ranch High School, the Mary Graham Children's Shelter south of the CBOC/CLC site, and residences in the area (Department of Veterans Affairs 2019).

TABLE 14-1
GROUNDBORNE VIBRATION THRESHOLDS

Guidelines for:	Maximum Peak Particle Velocity (inches/second)	
	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.

Project operations would not result in an increase in ambient noise levels over existing conditions, as the underground lines would not generate noise. However, project construction would involve temporary increases in ambient noise levels, due to the use of construction equipment and vehicle traffic to and from the construction site. Although project construction noise would cease once construction work is completed, this work would be generally near existing rural residences. Project construction noise is not expected to significantly affect the high school and the shelter, as these facilities would be distant from construction work.

As noted, the County Code limits the hours of construction activities, which would generally avoid noise impacts during the noise-sensitive night hours and reduce the number of hours residences would experience noise. The County's construction hour limitations, together with the mitigation described below requiring the use of mufflers, would reduce the volume of construction noise to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

NOISE-1: All equipment used on the construction site shall be fitted with mufflers in accordance with manufacturers' specifications. Mufflers shall be installed on the equipment at all times on the construction site.

Significance After Mitigation: Less than significant

Impact NOISE-2: Groundborne Vibration

The General Plan 2040 EIR discussed short-term construction-related vibration and vibration from roadways, railways, and light industrial/commercial operations. Vibration from facilities and operations were determined to be less than significant. Vibration from construction equipment were considered potentially significant, but existing requirements related to vibration would reduce impacts to a level that would be less than significant (City of Stockton 2018b).

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).

Using the methodology prescribed by Caltrans, and assuming that a vibratory roller would be used, the ground vibration produced by a large bulldozer would produce a peak particle velocity of 0.098 in/sec at the nearest residence to the alignment. The predicted peak particle velocity is substantially below the thresholds established for potential damage for both older and new residential buildings. The projected vibration would be above the "Barely Perceptible" threshold but below the "Distinctly Perceptible" threshold, and it is expected that residents would be exposed to minimal vibration. On average, approximately 200 to 300 feet per day of trunk line would be installed, so exposure of residents to vibrations from construction activities would be limited. Project impacts related to groundborne vibrations would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact NOISE-3: Airport and Airstrip Noise

As described in Chapter 11.0, Hazards, the nearest public airport is Stockton Metropolitan Airport, approximately 2.25 miles to the east. As shown on Figure 14-1, the outermost noise contour (60 dB CNEL), as delineated in the Stockton Metropolitan Airport ALUCP, does not extend to the project site. There are no private airstrips in the vicinity, so there would be no noise affecting the project site from airstrips. Moreover, the project would not involve any new noise-sensitive population on the project site. The project would have no impact related to airport and airstrip noise.

Level of Significance: No impact

Mitigation Measures: None required

15.0 PUBLIC SERVICES AND RECREATION

ENVIRONMENTAL SETTING

Fire Protection

The project site is within the boundaries of the French Camp – McKinley Fire Protection District. The Fire District was formed in 1946 and services 16 square miles within unincorporated San Joaquin County. The Fire District's one station, located at 310 French Camp Road, is equipped with four apparatus that can carry 800 to 1,200 gallons of water. The Fire District provides fire protection, water rescue, suppression and prevention, hazardous materials service, and basic emergency medical service. As of 2011, the Fire District staffed 16 employees, of which seven were line staff and nine were reserve personnel. In 2008, the Fire District responded to 1,071 calls; of these, 791 were for emergency medical service, 260 were for fire and hazardous materials services, and 20 were for non-emergency calls (City of Stockton 2018b).

All public fire protection agencies in San Joaquin County 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 exhausted (San Joaquin County 2016b). The nearest fire stations to the project site that are not part of the Fire District are Stockton Fire Department Station 5 at 3499 Manthey Road and the Montezuma Fire Protection District station at Stockton Metropolitan Airport.

Police Protection

Law enforcement services for the project site are provided by the San Joaquin County Sheriff's Department, which serves unincorporated San Joaquin County. The Sheriff's Department is organized into six divisions: Custody, Coroner's Office, Investigation Patrol, Professional Standards, Unified Court Services, and Lathrop Police Services. These divisions provide patrol, investigation, death classification, law enforcement, apprehension, and community programs within the county. Other special programs include Explosive Ordinance Detail, Boating Safety Unit, SWAT, Narcotics Unit, Agricultural Crimes Unit, Child Abuse and Sexual Assault Unit, and K-9 Unit. The Sheriff's Department facility is located at 7000 Michael Canlis Boulevard in French Camp, south of the project site. This location houses all of the Sheriff's Department divisions, including the Coroner's Office (City of Stockton 2018b).

Schools

The project site is within the boundaries of the Manteca Unified School District. The School District operates 31 schools: 20 kindergarten to eighth grade, five high schools, and six specialty schools. The total capacity at all School District schools is approximately 5,153 students; enrollment in recent years has been below capacity (City of Stockton 2018b). The nearest school to the project site is Weston Ranch High School, at the northwest corner of French Camp Road and Wolfe Road.

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 Dos Reis Regional Park in Lathrop (San Joaquin County 2016b).

The City of Stockton provides park and recreational services, 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 Long Park in the Weston Ranch development.

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 Weston Ranch Branch Library in Stockton.

Public health care in San Joaquin County is available through the San Joaquin General Hospital, located at 500 West Hospital Road in French Camp, south 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 EMS 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).

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

REGULATORY FRAMEWORK

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.

As noted in the General Plan 2040 EIR, as new development occurs, it is likely that new or expanded facilities for public services would be needed to support the associated population growth. The estimated timing or location of such required facilities or the exact nature of these facilities are not known, so future project-specific environmental impacts that would occur from their construction and operation cannot be determined at this time. However, such impacts would be specifically associated with physical development projects and would therefore require permitting and review in accordance with CEQA, which would ensure that any environmental impacts are disclosed and mitigated to the extent possible (City of Stockton 2018b).

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: Public Services

The project is the installation of sewer and water lines to serve the proposed CBOC/CLC. No other development, including housing or commercial/industrial development, is proposed. Because of this, the project would not generate additional demands on fire protection, police protection, school, library, public hospital, or courthouse. Consequently, no new or expanded facilities for these services would need to be constructed. As noted in Chapter 13.0, Land Use, the project is not expected to encourage development in the area that could lead to an additional demand on public services.

As noted in Chapter 11.0, Hazards, project construction is not expected to interfere with emergency vehicle traffic. The project would not interfere with emergency service. Response. Project impacts on public services would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact PSR-2: Parks and Recreational Services

As noted in the discussion under Impact PSR-1, the project would not place additional demands on any public services. This would include parks and recreational facilities. Because of this, the project would not generate a demand for new or expanded parks or recreational facilities or services. The project would have no impact on parks and recreational facilities.

Level of Significance: No impact

Mitigation Measures: None required

16.0 TRANSPORTATION

ENVIRONMENTAL SETTING

Streets and Roads

The project would be mostly built along County roads: Wolfe Road, Yettner Road, and South Manthey Road are existing two-lane roads that primarily provide access to adjacent land uses. French Camp Road, north of the project site, intersects both Wolfe Road and Manthey Road. This road, classified as an arterial in the Stockton General Plan, provides access to the Weston Ranch development and areas south of Stockton. To the south, Manthey Road intersects with Mathews Road, an arterial that provides access to the community of French Camp and to County facilities south of Stockton, including San Joaquin General Hospital. Interstate 5, an interregional freeway connecting California, Oregon, and Washington, is located east of the project site. Interstate 5 is accessible through interchanges at French Camp Road and Mathews Road.

Background traffic conditions for the proposed off-site improvements project include both existing traffic and projected future traffic conditions with the addition of the CBOC/CLC. These background conditions were described in a traffic impact analysis for the CBOC/CLC project prepared by W-Trans in 2019. The W-Trans study analyzed traffic conditions at six intersections and along four roadway segments in the vicinity of the project site. Figure 16-1 shows the intersections that were studied.

Using a Level of Service (LOS) methodology, and the City of Stockton Transportation Impact Analysis Guidelines, the W-Trans study found that the six intersections operate at a LOS acceptable by City standards, except for the Mathews Road/I-5 North Ramps northbound approach during the evening peak hour. Existing LOS conditions along the four roadway study segments operate at an acceptable LOS.

With the addition of the CBOC/CLC project, the W-Trans study indicated that LOS at the three Mathews Road intersections be at least for part of the day. All the roadway segments evaluated in the W-Trans analysis would operate at acceptable LOS with addition of CBOC/CLC traffic.

This information described background conditions against which the potential traffic impacts of the off-site improvements project will be compared in the Environmental Impacts and Mitigation Measures section below. The project involves the installation of sanitary sewer and water lines that would support the development of the CBOC/CLC, but it is not a traffic generator and, as noted below, would have only a temporary effect on existing or projected future traffic conditions.

Public Transportation

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. The 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. It also offers Metro Hopper, nine flexible fixed-route bus lines that can deviate from their route up to three-quarters 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).

SJRTD Route 510 provides weekday service between downtown Stockton, San Joaquin General Hospital, and San Joaquin County Honor Farm. Weekend service is provided by Route 710 between downtown Stockton, Weston Ranch, and San Joaquin General Hospital. Regular deviated fixed-route service is provided between Tracy, Lathrop, San Joaquin General Hospital, and Stockton by Hopper 90. Hopper 797 provides weekend deviated fixed-route service between Stockton, Manteca, Lathrop, and Tracy, including San Joaquin General Hospital. Hopper 97 does not regularly stop near the project site, but as it travels on Interstate 5, the CBOC/CLC site is within three-quarters of a mile of its route (W-Trans 2019).

Bicycle and Pedestrian Systems

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. In the project vicinity, Class II bike lanes exist on Mathews Road, extending about 1,000 feet west of Manthey Road. Cyclists on French Camp Road are allowed to use the 12-foot wide sidewalk between the I-5 South Ramps and Sperry Road (W-Trans 2019). There are no other designated bikeways in the project vicinity.

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting and benches. Due to the relatively rural nature of the area, few sidewalks, crosswalks, and other pedestrian facilities are provided, and there are no such facilities along the proposed project alignment.

Other Transportation Facilities

The Union Pacific Railroad maintains two parallel tracks traveling north to south approximately one-half mile east of the eastern terminus of the proposed project alignment. The tracks serve freight traffic and provide no passenger service.

As noted in Chapter 11.0, Hazards, Stockton Metropolitan Airport is a public airport approximately 2.25 miles to the east. 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.

REGULATORY FRAMEWORK

California Department of Transportation

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 at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects. The nearest Caltrans facility to the project site is Interstate 5, along with the on- and off-ramps at the Interstate 5/French Camp Road interchange.

For all of its facilities, Caltrans maintains a minimum LOS at the transition between LOS C and LOS D. Where an existing facility is operating at less than the LOS C/D threshold, the existing measure of effectiveness should be maintained (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 mitigation of traffic environmental impacts 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. Section 15064.3(b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric, which are presented later in this chapter. 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. The City currently does not have traffic impact standards based on VMT.

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. The Regional Transportation Plan serves as the region's long-range transportation plan and provides guidance for decisions about transportation spending priorities. The Sustainable Communities Strategy, required by SB 375, demonstrates an approach to how land use development and transportation can work together to meet GHG emission reduction targets for cars and light trucks. For the SJCOG region, the target is a 10% per capita reduction in GHG emissions by 2035 (SJCOG 2018).

Regional Congestion Management Plan

The SJCOG adopted the latest version of its Regional Congestion Management Plan in 2016. The Regional Congestion Management Plan 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 this plan. The SJCOG plan 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 nearest Regional Congestion Management Plan network facilities to the project site are Interstate 5 and the northbound and southbound ramps at the French Camp Road interchange (SJCOG 2016).

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. As the proposed project is the installation of infrastructure, this plan is not applicable to the project.

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. As the proposed project is the installation of infrastructure, this plan is not applicable to the project.

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 (STAA) 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 Intertstate 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. Interstate 5 is the nearest designated STAA route to the project site (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 Regional Congestion Management Plan 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. As the proposed project is the installation of infrastructure, this plan is not applicable to the project.

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 proposed project is the installation of infrastructure, 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 in the project vicinity, and none are planned.

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. However, the Stockton General Plan 2040 considers LOS E to be acceptable on some roadway segments, including French Camp Road between Manthey Road and Interstate 5, and Interstate 5 north of French Camp Road.

The Guidelines 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 5 seconds.

As noted above, the State has adopted VMT over LOS as the preferred metric for evaluating transportation impacts. Currently, the City bases its transportation plans and impact analyses on LOS and has not yet adopted standards for evaluating transportation impacts based on VMT. Because of this, the LOS metric is still used in this analysis to evaluate project impacts; however, project VMT impacts will be discussed as appropriate.

San Joaquin County Transportation Guidelines

Although City of Stockton guidelines were used to analyze traffic impacts of the CBOC/CLC project, the proposed project is within the jurisdiction of San Joaquin County. The County has developed LOS standards for its roads and intersections. Roadways and intersections that are part of the Regional Congestion Management Plan network shall operate at LOS D or better with limited exceptions. LOS for State highways shall be maintained in cooperation with Caltrans. The County LOS standards for intersections is LOS D or better on Minor Arterials and roadways of higher classification and LOS C or better on all other County roadways and intersections not part of the Regional Congestion Management Plan network.

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 vicinity of the project site, and none are planned along the project alignment (City of Stockton 2017).

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.

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.

Impact TRANS-1: Conflicts with Transportation Plans

The General Plan 2040 EIR states that the General Plan 2040, in combination with regional growth, could result in significant impacts on specified roadway segments. Mitigation would reduce these impacts, but they would remain significant and unavoidable. Because of this, traffic generated by development consistent with the General Plan 2040 would conflict with the objectives of the Regional Congestion Management Plan, a conflict

considered significant and unavoidable (City of Stockton 2018b). As noted, none of these specified roadway segments are in the project vicinity.

The project is the installation of water and sanitary sewer lines to support the proposed CBOC/CLC. This utility project would not generate traffic; as such, it would not add traffic to local roadways or intersections. Therefore, the project by itself would not conflict with transportation plans related to motor vehicles, including the Regional Congestion Management Plan.

As discussed in the Environmental Setting section, the proposed utility improvement project is intended to support the VA's proposed development of the CBOC/CLC, but the project itself would not involve any substantial long-term contributions to traffic in the vicinity. As discussed above, the W-Trans study identified the potential traffic impacts of the CBOC/CLC project as well as street improvements that would be needed to address these effects. The off-site utilities project would not contribute to the identified adverse traffic impacts of the CBOC/CLC project.

The W-Trans study recommended traffic improvements needed to reduce traffic impacts of the CBOC/CLC project to a level that would be less than significant, such as signalization of all three Mathews Road intersections, a left-turn lane at the southeast driveway, a right-turn lane at the north driveway, and restriping of the left-turn lane at the French Camp Road/Manthey Road intersection (W-Trans 2019). These improvements would be the responsibility of the CBOC/CLC project. The proposed project would not involve significant traffic impacts and would therefore have no nexus to the recommended improvements.

The General Plan 2040 EIR concluded that implementation of the General Plan 2040 would support and would not conflict with plans, programs, and policies regarding bicycle or pedestrian facilities, or decrease the performance and safety of such facilities (City of Stockton 2018b). It is expected that sidewalks would be installed along the road frontage at the CBOC/CLC site, and the project would not interfere with this installation. No bicycle facilities are planned along the proposed project alignment, but the project would not interfere with installation of bicycle facilities in the future.

As discussed in Chapter 13.0, Land Use, the project would not lead to an increase in population, which would place a demand on public transit services and other non-motor vehicle facilities. Given this and the lack of existing non-motor vehicle facilities, the project would have no impact related to non-motor vehicle transportation plans. Overall, project impacts related to transportation plans would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-2: Consistency with CEQA Guidelines Section 15064.3(b)

The General Plan 2040 EIR acknowledges that SB 743 will eventually require impacts to transportation network performance to be viewed through a filter that promotes the

reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. SB 743 identified possible alternative metrics, including VMT and VMT per capita, which can help identify how land development and infrastructure projects affect GHG emissions, but do not provide information about how the transportation network performs or functions with respect to efficiency or user experience. There are no currently adopted guidelines, standards, or definitions of impact under the new SB 743 metrics; as such, the General Plan 2040 EIR provides an informational discussion of VMT that is not part of the CEQA findings of significance discussion (City of Stockton 2018b).

The General Plan 2040 EIR stated that implementation of the proposed General Plan, in combination with regional growth, would result in increased vehicle traffic, along with which would affect the operation of regional roadways and freeway segments. As discussed above, the proposed General Plan would result in significant LOS impacts to specific roadway and freeway segments – impacts determined to be significant and unavoidable. A Statement of Overriding Considerations for this issue was adopted by the Stockton City Council in conjunction with adoption of the General Plan 2040. This Statement of Overriding Considerations remains operative. While the General Plan 2040 EIR did not analyze VMT impacts, VMT would increase as a consequence of General Plan 2040 implementation.

As noted, CEQA Guidelines Section 15064.3(b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric. Criteria applicable to land use projects include the following:

- VMT exceeding an applicable threshold of significance may indicate a significant impact. The City currently has no thresholds of significance related to VMT.

- 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 the project by itself would not generate traffic, it is not expected to increase VMT in the project area.

Given the latter condition, the project would have no impact on VMT and therefore no impact related to CEQA Guidelines Section 15064.3(b).

Level of Significance: No impact

Mitigation Measures: None required

Impact TRANS-3: Safety Hazards

As noted in the General Plan 2040 EIR, because the General Plan 2040 is a program-level planning effort, it does not directly address project-level design features or building

specifications. However, the General Plan 2040 contains policies and actions that would reduce hazards to the public from a design feature or incompatible uses (City of Stockton 2018b).

As the project would involve underground installation of water and sanitary sewer lines, it would not lead to a potential road hazard. Project construction would involve movement of construction equipment onto and from the site and in-road construction to install the sanitary sewer and water lines. These activities would involve routine but potential traffic hazards. Contractors will be required to provide traffic safety controls as warranted to avoid potential hazards. Project impacts related to road safety would be less than significant.

Level of Significance: Less than significant

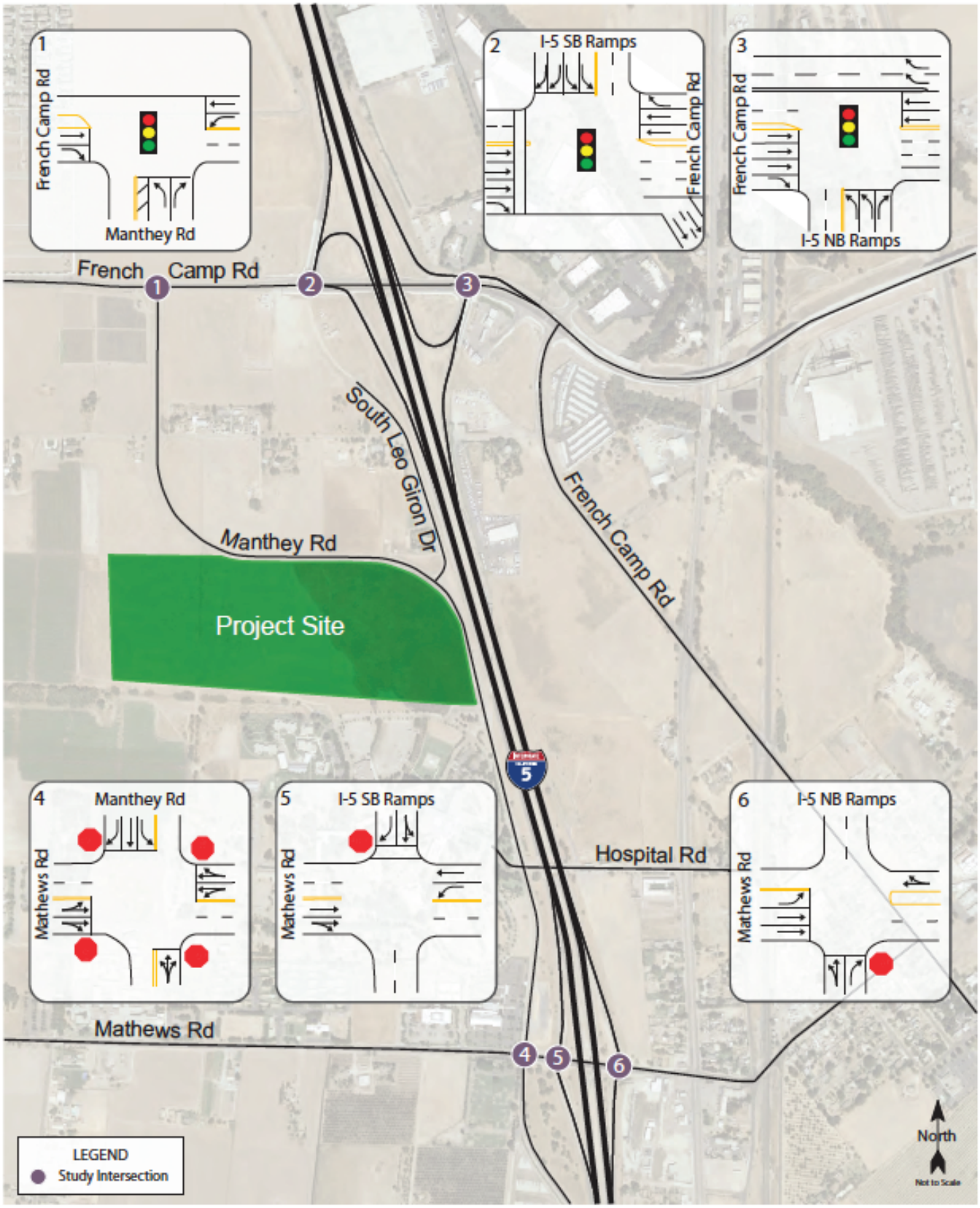
Mitigation Measures: None required

Impact TRANS-4: Emergency Access

As described in Chapter 11.0, Hazards, the project would involve some construction work on public roads, which could hinder emergency vehicle traffic. However, conditions attached to a required encroachment permit from San Joaquin County would avoid significant delays to emergency vehicles. After construction work is completed, the project would not obstruct or restrict emergency access in the area. Project impacts on emergency access would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required



SOURCE: VA CBOC/CLC Environmental Assessment, W-Trans

Figure 16-1
VA TRAFFIC STUDY INTERSECTIONS

17.0 UTILITIES AND ENERGY

ENVIRONMENTAL SETTING

This chapter evaluates the potential environmental impacts of the proposed project on utility systems. As discussed in Chapter 1.0, Introduction, the purpose of the project is to provide City water and sewer services to the proposed CBOC/CLC. The CBOC/CLC project site currently has no water or sewer utility infrastructure, although electrical lines are on utility poles along South Manthey Road on the eastern boundary of this site.

Wastewater/Sewer Systems

Individual collection systems such as septic tanks typically serve rural residences in the unincorporated County.

Sanitary sewer services to urban development areas within the City limits to the north of the project area are provided by the City. The City of Stockton's sanitary sewer system includes approximately 914 miles of gravity sewers and force mains (pressure pipelines), ranging from less than 6 inches to 72 inches in diameter, and 27 sewer pump stations. Wastewater in the system generally flows from the north, east, and south to the Stockton Regional Wastewater Control Facility on Navy Drive, where it is treated and discharged to the San Joaquin River. The Regional Wastewater Control Facility consists of a main treatment plant with a capacity of 48 million gallons per day (mgd), and a tertiary treatment plant with 55 mgd capacity. The tertiary treatment plant includes approximately 630 acres of oxidation ponds, an engineered wetland, disinfection facilities, and a river outfall discharge system. Average dry-weather flows to the Regional Wastewater Control Facility were about 27 mgd in 2017 (City of Stockton 2018b). The proposed project would connect to this system at the intersection of French Camp Road and Wolfe Road.

The City of Stockton's 2035 Wastewater Master Plan was adopted in 2008. The Wastewater Master Plan estimates future wastewater generation based on projected development and describes future actions required to meet the projected generation. As noted in Chapter 1.0, Introduction, the City Council adopted a supplement to the Wastewater Master Plan concurrently with adoption of the Stockton General Plan 2040. The supplement updates information in the 2008 Plan and revises the projected wastewater generation based on development as indicated in the Stockton General Plan 2040.

Water Systems

Individual groundwater wells typically provide drinking water for rural residences in the unincorporated County.

Irrigation water is provided to agricultural fields in the area by the Stockton East Water District (SEWD). The SEWD provides surface water for irrigation to agricultural fields throughout its service area, which includes the City of Stockton and lands to the east. SEWD also supplies drinking water to the City of Stockton. The drinking water is treated at a SEWD-managed plant on Main Street approximately two miles east of SR 99. Water lines for irrigation have been installed in the project area. One of these lines, approximately 12-15 inches in diameter, crosses the proposed project segment between Wolfe Road and Yettner Road.

The proposed project alignment is within the service area of the City of Stockton Municipal Utilities Department (COSMUD). The COSMUD water distribution system is separated into a northern and southern system; the project site is within the southern system of COSMUD, which generally serves the portion of Stockton near the airport and the community of French Camp. Two water storage tanks that are part of the City's water system, referred to as the Weston Ranch Reservoir, are near the proposed project alignment north of Yettner Road. Each tank has a storage capacity of three million gallons. A water line 18 inches in diameter is located along the east side of Wolfe Road. However, COSMUD water service is not provided south of French Camp Road at this time.

COSMUD water supplies consist of purchased water, surface water, and groundwater. COSMUD purchases treated water from the Stockton East Water District, consisting of water from New Hogan Dam, New Melones Dam, and groundwater. COSMUD also has a 40-year contract to purchase 6,500 acre-feet per year of Mokelumne River water from the Woodbridge Irrigation District. COSMUD pumps groundwater from the East San Joaquin Subbasin of the San Joaquin Valley Groundwater Basin. The City estimates the sustainable groundwater yield to be approximately 50,000 acre-feet per year. COSMUD also obtains surface water from the San Joaquin Delta via the Delta Water Supply Project (DWSP) at the intake facility on the San Joaquin River. The DWSP includes a water treatment plant with 30 mgd capacity. The DWSP is expected to be expanded to 90 mgd capacity by 2035, with annual production of about 44.6 mgd (City of Stockton 2018b).

The City of Stockton's Water Master Plan was adopted in 2008. The Water Master Plan projects demand for water provided by the COSMUD system and evaluates the infrastructure required to meet the projected demand. As noted in Chapter 1.0, Introduction, the City Council adopted a supplement to the Water Master Plan concurrently with adoption of the Stockton General Plan 2040. The supplement updates information in the 2008 Plan and revises the projected demand for services.

Storm Drainage

Storm water in the unincorporated County typically either is collected by ditches and channels or is allowed to percolate into the ground.

The City's storm drainage system includes 620 miles of 4-inch to 96-inch storm drains. Multiple pump stations and lift stations are used to pump drainage into receiving waters. Major receiving waters include the San Joaquin River and Walker/French Camp Slough,

among other channels. Chapter 12.0, Hydrology, discusses regulations applicable to the collection of storm water drainage. No City storm drainage facilities are in the area.

The CBOC/CLC project proposes on-site retention of drainage. No facilities would be constructed that would connect the CBOC/CLC site to the City's storm drainage system. The proposed project would not change this condition.

The City of Stockton adopted a Stormwater Master Plan in 2008. The Stormwater Master Plan assesses detention storage and pumping requirements, along with the costs of recommended future actions. As noted in Chapter 1.0, Introduction, the City Council adopted a supplement to the Stormwater Master Plan concurrently with adoption of the Stockton General Plan 2040. The supplement updates information in the previous plan and evaluates changes in service needs.

Solid Waste

The proposed project is within the jurisdiction of San Joaquin County. Solid waste collection services in the County are provided by Sunset Disposal. The County'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 (CalRecycle 2017).

The City's exclusive franchise haulers, Republic Services and Waste Management, Inc., provide solid waste collection in Stockton, including source-separated curbside recycling, to both residential and commercial uses. In 2017, the City of Stockton generated approximately 348,714 tons of solid waste (CalRecycle 2019). The City's solid waste is transported and disposed of primarily at the three County landfills.

Communications Systems

AT&T provides telephone services to the Stockton area. 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 as necessary.

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 contain 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 49th among all states and the District of Columbia. 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 (GWh) (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 vehicle miles traveled (VMT) daily was 17,868,785 miles in 2015, which led to the consumption of approximately 511 million gallons of gasoline and diesel fuel in 2015 (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. PG&E electrical facilities in the project vicinity include overhead 12-kV electrical distribution lines along Manthey Road along the eastern boundary of the proposed VA CBOC-CLC. Centralized natural gas service is available in Stockton from PG&E, the only provider of such

service. As with the communications systems, state-regulated energy franchise utilities are obligated to extend services to new development sites as necessary.

REGULATORY FRAMEWORK

Solid Waste Regulations

The California Integrated Waste Management Act (AB 939), State legislation 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.

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 Efficiency Regulations

California has implemented numerous energy efficiency and conservation programs that have resulted in substantial energy savings. The State 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 City of Stockton has adopted the 2013 version of the California Energy Code as part of its building codes.

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, by the end of 2045, eligible renewable energy

resources and zero-carbon resources will supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all State agencies.

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-6.1B: Monitor the rate of growth to ensure that it does not overburden the City's infrastructure and services and does not exceed the amounts analyzed in the General Plan EIR.
- Action LU-6.1D: Require that all utility connections outside the city limit be for land uses that are consistent with the General Plan.
- 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.
- Action LU-6.3.B: Ensure that public facilities, infrastructure, and related land area and other elements are designed and right-of-way is acquired to meet 2040 planned development requirements to avoid the need for future upsizing or expansion, unless planned as phased construction.

The project is consistent with Stockton General Plan 2040 policies related to installation of utilities outside City limits, as the project would connect to a land use that is consistent with Stockton General Plan 2040 designations.

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:

- 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, the Environmental Checklist in CEQA Guidelines Appendix G was updated to include questions regarding energy consumption and conservation. The updated checklist indicates that 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.

Impact UTIL-1: Wastewater Services and Facilities

The General Plan 2040 EIR states that implementation of the proposed project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. Also, the COSMUD has sufficient wastewater treatment capacity to serve General Plan development as well as existing developments in its service area (City of Stockton 2018b).

The proposed project would extend a trunk line from the City's sanitary sewer system to a proposed CBOC/CLC (see Figure 3-1). The new sanitary sewer line would be coordinated with and receive approval from the COSMUD, as required for any connection to the City's utilities. Given the early coordination with the City of Stockton regarding the VA providing service to the project site, no significant impacts are expected.

The CBOC/CLC EA estimated that total water usage, including irrigation, would be approximately 160,344 gallons per day, or 0.16 mgd (U.S. Department of Veterans Affairs 2019). Assuming that the total water used would be equivalent to the wastewater generated, and it likely would be less, the City's Regional Wastewater Control Facility has adequate capacity to accommodate the CBOC/CLC's wastewater, so no expanded capacity would be required.

The project proposes the installation of a sewer line in an area that currently has no sewer lines and has limited existing development. This SEIR has evaluated the potential environmental impacts of this installation and has identified mitigation measures for

potentially significant impacts. The SEIR has not identified any significant impacts associated with the proposed project that cannot be avoided or minimized with mitigation. Project impacts on the City's sanitary sewer system would be less than significant.

As described in Chapter 3.0, Project Description, the project proposes the installation of a 42-inch diameter sanitary sewer main along Wolfe Road. The main would have excess capacity for its proposed use, which is to serve the CBOC/CLC. The size of the Wolfe Road main is consistent with the City's 2035 Wastewater Master Plan and the supplement adopted in 2018, which anticipate infrastructure requirements based upon development proposed in the Stockton General Plan 2040. A concern about this main, along with the other project mains, is the potential to induce development in the area. However, as discussed in Chapter 20.0, Other CEQA Issues, and as described in the Stockton General Plan 2040 EIR, the growth-inducing impacts of the project are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-2: Water Services and Facilities

The General Plan 2040 EIR states that implementation of the proposed project would not require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. Also, the COSMUD has sufficient water supplies available to serve the proposed project without new or expanded entitlements (City of Stockton 2018b).

As with sanitary sewer, the proposed project would extend a trunk line from the City's water system to the CBOC/CLC. As with the sewer line, the new water line would be coordinated with and receive approval from the COSMUD, as required for any connection to the City's utilities.

As noted in the discussion under Impact UTIL-1, the CBOC/CLC EA estimated that total water usage, including irrigation, would be approximately 160,344 gallons per day, or 0.16 mgd. The 2015 Urban Water Management Plan states thatthe City of Stockton Water Service Area had a capacity of water entering the distribution system of 26,319 acre-feet in 2015 (Brown and Caldwell, 2016). The annual gross water usage in 2015 was 24,843 acre-feet. The total daily demand of 160,334 gallons per day equates to approximately 180 acre-feet per year. Given that the Stockton Water Service Area has an additional capacity of 1,476 acre-feet per year, it is estimated that COSMUD has enough water to accommodate the project (U.S. Department of Veterans Affairs 2019).

The project proposes the installation of a water line in an area that currently has no water lines and has limited development. This SEIR has evaluated the potential environmental impacts of this installation and has identified mitigation measures for potentially significant impacts. The SEIR has not identified any significant impacts associated with

the proposed project that cannot be avoided or minimized with mitigation. 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

The General Plan 2040 EIR states that implementation of the proposed project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects (City of Stockton 2018b).

The project is the installation of water and sewer lines within private and public roadways. The project would not add impervious surfaces that would generate additional runoff that would need to be accommodated by a storm drainage system. Existing conditions regarding storm drainage along the project alignment would not change; therefore, no new storm drainage facilities would need to be constructed. The project would have no impacts related to storm drainage facilities.

Level of Significance: No impact

Mitigation Measures: None required

Impact UTIL-4: Solid Waste

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 is the installation of water and sewer lines, which would not generate any demand for solid waste services. The project would have no impacts related to solid waste.

Level of Significance: No impact

Mitigation Measures: None required

Impact UTIL-5: Energy and Telecommunications Facilities

As noted above, existing electrical, natural gas, and telephone lines are available near the project site. However, the project is the installation of water and sewer lines, which would not generate any demand for these services. The project would have no impacts related to energy and telecommunications facilities.

Level of Significance: No impact

Mitigation Measures: None required

Impact UTIL-6: Project Energy Consumption

Project construction would consume energy in the installation of sanitary sewer and water lines. Because of the relatively flat topography of the site, the project would not require any extraordinary grading requirements or other construction activities. Implementation of the mitigation measure described in Chapter 10.0, Greenhouse Gas Emissions, would reduce idling times, resulting in reductions in energy expenditures associated with construction. Project construction is not expected to involve substantially inefficient, wasteful, or unnecessary consumption of energy.

Project operations would not consume energy in an amount that is different from similar facilities in the City's water and sanitary sewer systems. The project would rely on gravity flow and would not require pumps, which are the main energy consumer for similar projects. Overall, impacts of the project on energy consumption would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

18.0 CUMULATIVE IMPACTS

18.1 INTRODUCTION

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 "cumulatively considerable" contribution to a significant cumulative effect, 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. Projects that do involve cumulatively considerable contributions may involve significant cumulative impacts. A project's contribution may be considered less than 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 cumulatively 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 SEIR, the projection approach is used, based upon the General Plan 2040 EIR.

The following cumulative impact analysis determines for each environmental discipline:

- The geographic context for the analysis,
- Whether there exists the potential for a significant cumulative impact in that environmental discipline,

- Whether the project would make a cumulatively considerable contribution to a significant cumulative impact, or make significant an impact that was otherwise less than significant, and

- Whether and how a significant cumulative impact or a considerable contribution 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 described in the General Plan 2040 EIR (City of Stockton 2018b). It considered the environmental effects of buildout of all lands designated in the Stockton General Plan 2040 for urban development, including development of the project site and other undeveloped lands in the southwestern Stockton area. 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 SEIR. Since the General Plan 2040 EIR addresses the impacts of development under the Stockton General Plan 2040, environmental impacts identified in the General Plan 2040 EIR are in essence cumulative impacts.

The project would serve a proposed development, the CBOC/CLC, that is consistent with the existing City of Stockton General Plan land use designation of the development site. As a result, the project would contribute to the potential cumulative impacts associated with urban development in the City of Stockton, consistent with the General Plan 2040 EIR analysis. However, 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; in some cases, the project would not contribute to any potential cumulative impacts.

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. For the purposes of this

SEIR, the geographic context for cumulative analysis is defined as the "project vicinity," defined more precisely as the area adjacent to the project alignment.

The General Plan 2040 EIR concluded that aesthetic and visual resource impacts of planned development would be less than significant. The proposed project would be buried underground; thus, it would not change the visual landscape of the project vicinity except temporarily during project construction. The project would not result in a 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. For the purposes of this SEIR, the geographic context for cumulative analysis of agricultural resources is defined as San Joaquin County.

The loss of agricultural land associated with lands designated for urban development was identified as a significant and unavoidable cumulative impact in the General Plan 2040 EIR. The project alignment would be adjacent to or cross farmland designated as Prime Farmland. As described in Chapter 5.0, Agricultural Resources, approximately 1.46 of Prime Farmland would be acquired for a permanent easement. However, actual loss of Prime Farmland would be minimal, and easement acquisition would not substantially affect existing agricultural operations. Once the project is completed, the project would not interfere with the use of agricultural land. The project would not make a considerable contribution to cumulatively significant effects on agricultural land in San Joaquin County.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

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 at the regional level, defined as the San Joaquin Valley Air Basin, and at the local level, defined as the project vicinity.

The General Plan 2040 EIR states that, by its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development. Future attainment of federal and State ambient air quality standards is a function of successful implementation of the SJVAPCD's attainment plans. Consequently, the application of significance thresholds for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a

cumulatively significant impact on air quality. Pursuant to the SJVAPCD's guidance, if project-specific emissions would be less than the thresholds of significance for criteria pollutants, the project would not be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the SJVAPCD is in nonattainment under applicable federal or State ambient air quality standards.

Chapter 6.0 quantifies and describes the criteria air pollutant contributions of the proposed project to the Air Basin airshed. The contributions, which include ozone precursors and inhalable 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.

As discussed in Chapter 6.0, Air Quality, project construction emissions would not exceed the SJVAPCD significance thresholds that are applied to evaluate regional impacts of project-specific emissions of air pollutants. Also, the project would not generate any operational emissions. Based on this information, 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 diesel PM, which is a TAC. These emissions would be associated with project construction and would cease when construction work is completed. Project operation would involve no operational diesel PM emissions. As such, the project would not result in a considerable contribution to cumulative TAC 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 habitat areas for individual sensitive species, watersheds, or bioregions. The proposed project site is in an area that has been subjected to intensive agricultural use and is not biologically diverse or sensitive. For the purposes of this SEIR, the geographic context for cumulative biological resource analysis is defined as the project vicinity.

The Stockton General Plan 2040 EIR did not identify any significant biological resource impacts, mainly because all projects would be required to participate in the SJMSCP by the respective permitting agencies (City of Stockton 2018b). The proposed project likewise would be required to participate in the SJMSCP, the process for which would be triggered by the encroachment permit, as discussed in Chapter 7.0, Biological Resources. This would reduce any potential contribution to cumulative biological impacts of the projects 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 small percentages of a given area – those areas that have been intensively surveyed. For the purposes of this SEIR, the geographic context for cumulative analysis of cultural resources is defined as the project vicinity.

The General Plan 2040 EIR concluded that cultural resource impacts would be less than significant. No known important archaeological or historically significant resources are located on the project site. For the project site, mitigation measures described in Chapter 8.0, Cultural Resources, and similar measures applied to Stockton area development generally, would ensure accidental discovery of cultural resources will be treated such that impacts would be 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, another area of consideration is the geographic area that is traditionally and culturally affiliated with the tribes that may include a project site. 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 small percentages of a given area – those areas that have been intensively surveyed. For the purposes of this SEIR, the geographic context for cumulative analysis of tribal cultural resources is defined as the City of Stockton.

As noted in Chapter 8.0, no responses to City notices for AB 52 consultation have yet been received for this project. As noted, no known important archaeological or historically significant resources are located within the project vicinity, and mitigation measures would reduce potential impacts on tribal cultural resources to a level that would be less than significant. No formal responses were received from tribes contacted for AB 52 consultation, although two tribes expressed interest in the project outside the AB 52 process. As stated in Chapter 8.0, additional protection for tribal cultural resources will be incorporated into the Final EIR of the project as dictated by tribal consultation activities. The project would not 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 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. Except for soil erosion, these are potential issues that could impact the project or its occupants, and these issues are not inherently accumulative. Soil impacts associated with the project can be mitigated to a level that would be less than significant.

The General Plan 2040 EIR concluded that geology and soils impacts 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.

For the purposes of this SEIR, the geographic context for cumulative mineral resource analysis is defined as San Joaquin County. As discussed in Chapter 9.0, Geology, 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. Therefore, there is no cumulative impact discussion in this chapter, as the analysis in Chapter 10.0, Greenhouse Gas Emissions, addresses the potential cumulative impacts of the project. The analysis concluded that the project would have no significant GHG impacts.

18.3.8 Hazards and Hazardous Materials

Potential cumulative impacts associated with hazards and hazardous materials 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. For the purposes of this SEIR, the geographic context for cumulative analysis of hazards and hazardous materials is defined as the project vicinity.

The General Plan 2040 EIR concluded that hazards and hazardous material impacts would be less than significant. There are no recorded sites of known contamination in the project vicinity. The project would use no hazardous materials other than those related to project construction, and the use of such materials would cease once construction work is

completed. The project would not make a considerable contribution to any cumulative hazard impacts.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.9 Hydrology and Water Quality

Cumulative groundwater hydrologic impacts are logically analyzed at an aquifer level. The project site is located within the Eastern San Joaquin Valley Subbasin, which is the geographic context for cumulative groundwater analysis. For surface waters, the geographical context for cumulative analysis is the project vicinity, as there are no surface waters in the area.

The General Plan 2040 EIR concluded that hydrology and water quality impacts would be less than significant with preparation of a citywide storm drainage master plan, which would lead to development of a current stormwater capital improvement plan. The proposed project would involve potential water quality impacts, mainly sediment discharges from soil disturbance associated with construction. However, as discussed in Chapter 12.0, Hydrology, provisions of the Construction General Permit would reduce potential sedimentation and other contamination of surface waters. As a result, the project would not involve a considerable contribution to any significant cumulative surface hydrology or water quality effects.

The General Plan 2040 EIR did not identify any significant impacts on groundwater. Project operations would involve no demands on any water, including groundwater, and project construction would not add impervious surfaces that would reduce percolation. The project would not involve a considerable contribution to any significant cumulative groundwater or water quality effects.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.3.10 Land Use, Population, and Housing

The potential for cumulative land use impacts is 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, depending on project size. The project site is under County jurisdiction but is within an area that has a mix of City and County jurisdictions. For the purposes of this SEIR, the geographic context for cumulative land use analysis is defined as the project vicinity.

The project proposes the installation of sanitary sewer and water trunk lines to service the proposed CBOC/CLC. The CBOC/CLC is an acceptable land use under the Stockton General Plan 2040 designation of the site as Professional Administrative. The Stockton

General Plan 2040 EIR analyzed the impacts of the proposed General Plan designations for the Stockton planning area and determined that there were no significant impacts. The project would be consistent with the proposed development under the Stockton General Plan 2040; therefore, it would not make a considerable contribution to cumulative impacts related to land use.

The project vicinity contains some rural residences. These residences would not be removed or otherwise altered by the project. The project also would not add residents to the Stockton area, as no housing would be constructed. The project would have no effect on population or housing and would not involve a significant cumulative population or housing effect, or a contribution to any such effect.

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, and 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. There are no "very significant" noise sources in the project vicinity, other than traffic on Interstate 5. For the purposes of this SEIR, the geographic context for cumulative noise analysis is defined as the project vicinity.

The General Plan 2040 EIR concluded that noise impacts would be less than significant except along identified segments of roadways that do not include any roads in the project vicinity. No other known projects have potential to contribute to construction noise generated by the project. As discussed in Chapter 14.0, Noise, project operations would not generate any noise. In addition, the project would not increase traffic on local roadways (see Section 18.2.13 below), thereby increasing noise from traffic. 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 a community level. For this project, the level of impact would be the jurisdiction or district that provides the particular public service as described in the Stockton General Plan 2040 EIR.

The General Plan 2040 EIR concluded that public service impacts would be less than significant. As noted in Chapter 15.0, Public Services, the project would not place demands on any public services, including parks and recreation. Therefore, the project

would not make a considerable contribution to any cumulative effects related to public services.

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. The General Plan 2040 EIR indicated that increased vehicle traffic would occur in the Stockton area and was a significant and unavoidable impact.

As noted in Chapter 16.0, Transportation, the project by itself would not generate any traffic, other than construction traffic that would cease once construction work is completed. However, the purpose of the project is to provide water and sanitary sewer service to the proposed CBOC/CLC to be constructed by the VA. The CBOC/CLC would generate traffic that is likely to have impacts on roadways and intersections in the vicinity.

The W-Trans study discussed in Chapter 16.0 analyzed future traffic conditions at the same intersections and roadway segments in the vicinity of the CBOC/CLC project site as were analyzed under existing conditions. "Future" conditions were developed from traffic volumes that were computed by determining the growth in volumes along the study segments as provided in the Stockton General Plan 2040 EIR, along with future development that includes the Weston Ranch Towne Center, a planned 710,000-square-foot commercial shopping development located on the north side of French Camp Road at Manthey Road. For this analysis, the future conditions in the W-Trans study are considered cumulative conditions. Again, while the CBOC/CLC project site is under County jurisdiction, the W-Trans study used City LOS standards (see Chapter 16.0, Transportation).

Under future conditions without the project, all the French Camp Road intersections experience acceptable LOS; however, all the Mathews Road intersections operate at unacceptable LOS during at least one of the peak hours. The same situation occurs with the project, although the Mathews Road/I-5 South Ramp and Mathews Road/Manthey Road intersections would experience LOS degradation from E to F with the CBOC/CLC (W-Trans 2019).

The W-Trans study also evaluated existing LOS conditions at the four roadway segments. Under future conditions without and with the project, all roadway segments would operate acceptably at LOS E or better on French Camp Road, and LOS C or better on northbound Manthey Road. Interstate 5 in both directions at the segment from the French Camp Road intersection to the Mathews Road intersection would operate at LOS C or better (W-Trans 2019).

As discussed in Chapter 16.0, Transportation, the proposed project is intended to support the VA's proposed development of the CBOC/CLC, but the proposed project itself would not involve any substantial long-term contributions to traffic in the vicinity. The off-site utilities project would not contribute to the identified adverse traffic impacts of the CBOC/CLC project. Future traffic improvements described in Chapter 16.0 would be the responsibility of the CBOC/CLC project; the proposed project itself would not involve significant traffic impacts. Based on this, the project would not make a considerable contribution to cumulative transportation impacts.

Contribution to Significant Cumulative Impacts: No impact

Mitigation Measures: None required

18.3.14 Utilities and Energy

Cumulative utility impacts are appropriately considered at the level of the service area of the utilities. For water, sanitary 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.

The General Plan 2040 EIR concluded that utility impacts would be less than significant. Project operations would not require utility services. The sanitary sewer and water lines would be installed to serve the proposed CBOC/CLC. As noted above, the CBOC/CLC is consistent with the Professional Administrative designation of the site by the Stockton General Plan. A portion of the project alignment is within an area designated for agriculture; as such, no development would occur in the area adjacent to that portion of the alignment.

For this project, cumulative impacts related to energy are considered at the level of the PG&E service area. PG&E's service area covers most of northern and central California, except for areas along the Oregon border and the eastern Sierra Nevada and scattered areas served by municipal utilities and irrigation districts. PG&E obtains its electricity from power plants and hydroelectric facilities it owns along with power purchases. PG&E imports most of its natural gas from other states, although it also uses in-state gas wells. The project would not generate a demand for electricity or natural gas, so no energy services are required. The project would not make a considerable contribution to cumulative impacts related to energy systems or consumption.

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 "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." It further provides that the EIR "consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation." 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. The EIR must consider a range of reasonable alternatives that can feasibly attain most of the basic objectives of the project, and that would avoid or substantially lessen one or more of the significant effects of the project, even if the alternative would be costlier or would impede to some degree the attainment of the project objectives.

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 alternative feasibility 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.

19.2 SELECTION OF ALTERNATIVES

Alternatives to the project were selected for evaluation in this SEIR 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. These criteria are discussed in more detail below.

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 in Chapter 3.0, Project Description, the project objective is the provision of potable water and sanitary sewer collection services to the proposed CBOC/CLC project.

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 SEIR. 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.

19.3 ALTERNATIVES NOT CONSIDERED IN DETAIL

As discussed in the CBOC/CLC EA, the VA has considered various design alternatives for the locations and layouts for the buildings, parking, ingress and egress, landscaping, and on-site infrastructure. Since the inception of the CBOC/CLC project, the VA has worked with architects and engineers to identify and design a range of alternatives. By nature of the design process, site alternatives were continually assessed for technical feasibility; compliance with applicable VA guidance (to include VA Document PG-18-1, *Master Construction Specifications*; the VA's 2016 *Small House Model Prototype* for CLCs; and the VA's 2014 *Prototypes for Standardized Design and Construction of Community Based Outpatient Clinics*); and impacts on valued resources. No other on-site

configuration for the CBOC, CLC, and associated facilities was considered better for achieving the project purpose and need. Therefore, other site design alternatives were eliminated from further study (Department of Veterans Affairs 2019).

19.4 ALTERNATIVES CONSIDERED IN DETAIL

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 SEIR, the No Project Alternative is defined as no utility improvements as proposed by the project. There would be no water or sanitary sewer lines extended to the CBOC/CLC site.

Since development would not occur under this alternative, there would be no impacts associated with such development on the proposed project alignment. Environmental impacts associated with the proposed project would be avoided, particularly air pollutant emissions and noise associated with construction activities and potential restrictions on traffic movement on public roads. Also, the No Project alternative would eliminate any potential growth-inducing impacts associated with infrastructure development in a relatively undeveloped area, even though growth-inducing impacts are considered less than significant as noted in the Stockton General Plan 2040 EIR (see Chapter 20.0, Other CEQA Issues).

However, this alternative would meet none of the objectives of the proposed project, which is to provide water and sanitary sewer service to the proposed CBOC/CLC. The CBOC/CLC EA presumes that these services would be extended to the facility. Under the No Project Alternative, then, the proposed CBOC/CLC would most likely not be developed. The consequences of the CBOC/CLC not being developed were analyzed

under the No Action Alternative in the EA. The existing Stockton CBOC would continue serving veterans at existing levels of service until at least 2022, when the current lease expires. If the proposed CBOC/CLC is not constructed, the VA would also continue to operate the Livermore VA Medical Center, a 1940s-era facility that the CBOC/CLC EA notes currently requires a considerable amount of resources to maintain its aging infrastructure water service to the CBOC/CLC project. The EA for CBOC/CLC was revised based on this understanding. Without the proposed project, existing conditions at the CBOC/CLC site would remain, which is no sanitary sewer or water infrastructure. The implications of this for the CBOC/CLC project are not known. Thus, while this alternative would avoid the environmental impacts of the proposed project, it would not satisfy proposed project objectives. 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 Sewer Line Alignment

The CBOC/CLC EA discusses an alternative alignment for the sanitary sewer line, which was designated as the Preferred Alternative in the EA. The alternative alignment would begin at the intersection of French Camp Road and Wolfe Road, run east along French Camp Road, then south along South Manthey Road to the CBOC/CLC site. This alignment would be entirely within the road right-of-way. The portion of the sanitary sewer line along French Camp Road would be a 21-inch main at the connection to the sanitary sewer main, and transition to an 18-inch main. The portion along South Manthey Road between French Camp Road and Yettner Road would be an 18-inch main; the remainder would be a 12-inch main. The sanitary sewer line would be installed at depths ranging from approximately 18 feet at the interconnection at Wolfe Road to 6 feet at South Manthey Road, depending on pipe size and topography of the route. The total length would be approximately 1.45 miles (Department of Veterans Affairs 2019). The water line alignment of the proposed project would not change under this alternative.

This alternative would meet the objectives of the proposed project. Development under this alternative would have similar impacts to the proposed project; however, it would avoid placement of a portion of the line within private agricultural land (the Long property). While such placement would have minimal environmental impact, this alternative would avoid disruption of existing agricultural operations and the need to acquire an easement through private property.

However, this alternative would be lengthier than the proposed project by approximately 590 linear feet. As such, construction impacts associated with installation of the sanitary sewer line would increase accordingly. In particular, this alternative would expose more residences to noise and air quality associated with construction. Most of these residences are located along the north side of French Camp Road. Also, installation along French Camp Road and South Manthey Road could potentially be a greater disruption to traffic. French Camp Road is a main access road to the Weston Ranch development and connects with Interstate 5.

Thus, while this alternative would generally have similar environmental impacts to the proposed project, it would potentially have impacts on a few issues that are greater than the proposed project. 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.

19.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) indicates that an EIR should identify an "environmentally superior" alternative. If the No Project alternative is considered the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

The No Project Alternative would eliminate or avoid potential environmental effects associated with the proposed project; therefore, it may be considered the environmentally superior alternative. However, it would not meet project objectives.

The Alternative Sewer Alignment would generally have similar environmental impacts to the proposed project while meeting project objectives, but it would have impacts on a few issues that may be greater than the proposed project. Therefore, the proposed project is considered the environmentally superior alternative.

20.0 OTHER CEQA ISSUES

20.1 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.

The Stockton General Plan 2040 EIR analyzed the potential impacts of development under the General Plan, which covers the proposed project alignment and adjacent properties. The EIR identified several impacts that were considered significant and unavoidable, mainly conversion of farmland to urban uses, increases in air pollutant and GHG emissions, noise along specific roadway segments, increased vehicle traffic, and substantial employment growth. These impacts were on a programmatic level rather than on a project-specific level.

Table 2-1 of this SEIR identifies all the potentially significant environmental effects of the project and the mitigation measures to address these effects. In all cases, the proposed mitigation measures would be effective in reducing potential environmental effects to levels that would be less than significant. As discussed in this SEIR, impacts on the level of the proposed project would be less than significant, especially since project operations would have little to no impact on the issues named above. The project would not contribute new or more severe impacts related to the significant and unavoidable impacts identified in the General Plan 2040 EIR.

20.2 IRREVERSIBLE ENVIRONMENTAL COMMITMENTS

CEQA Guidelines Section 15126.2(c) states that an EIR shall discuss significant irreversible environmental changes which would be involved in a proposed project should it be 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 construction materials to the construction of water and sewer lines. Construction materials would involve plastics and metals for the lines and potentially asphalt for road work. 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 removed in the future.

As discussed in this SEIR, the project would not involve significant irreversible environmental changes. Existing agricultural land through which the proposed sewer and water lines would run would be made available for agricultural use once the line is installed. There are no other changes associated with the project, or resources impacted by the project, that are irreversible, other than the use of energy during project construction. Energy use is discussed in Chapter 17.0, Utilities, in which it was determined that the project would not consume energy in a wasteful, inefficient, or unnecessary manner.

20.3 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 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. These are considered "direct" growth-inducing impacts.

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 to unserved areas may facilitate development of these areas. Expansion of other utility systems, like electrical systems, can have similar effects. These are considered "indirect" growth-inducing impacts.

The Stockton General Plan 2040 EIR evaluated both direct and indirect growth-inducing impacts of development under the Stockton General Plan 2040. The General Plan would directly induce population, employment, and economic growth by allowing development and associated infrastructure in areas that are currently undeveloped. The primary

mechanism for this growth is the General Plan land use map, which allows for some development in areas presently used as agriculture and vacant land. Through the Open Space and Agriculture designation in the land use map, the General Plan would control the geographical extent of growth (City of Stockton 2018b).

In addition, the General Plan commits the City to controlled and orderly use of its natural resources through policies to conserve agricultural land and promote compact growth. Specifically, Policy LU-5.3 and Action LU-5.3.B direct the City to define discrete and clear city edges that preserve agriculture, open space, and scenic views. Policy LU-5.2 and its assorted actions would protect natural resources, fish and wildlife habitat, scenic areas, open space areas, and agricultural lands. The General Plan 2040 EIR concluded that the combination of the land use map with General Plan policies and actions would reduce direct growth-inducing impacts to a level that would be less than significant. This same combination would also reduce indirect growth-inducing impacts to less-than-significant level (City of Stockton 2018b).

The SEIR evaluated the potential growth-inducing impacts of the proposed project. Chapter 13.0, Land Use, analyzed the potential effects of the project on land use, population, and housing. The CBOC/CLC that the proposed project would serve would be consistent with the land use designation of the Stockton General Plan 2040 for the site. The project would not induce population growth not anticipated by the Stockton General Plan 2040, as it would not encourage development that is inconsistent with the plan.

Chapter 5.0, Agricultural Resources, discussed the possibility that owners of agricultural lands adjacent to the project alignment may develop such lands in the future, taking advantage of the installed infrastructure. However, future development would require a General Plan amendment and rezoning by the City, and it would most likely require annexation that must be reviewed and approved by the San Joaquin LAFCo. All these actions would require CEQA review and would most likely require mitigation. There is no evidence at this time that these agricultural lands would be developed in the near future, especially as these lands are under the Open Space and Agriculture designation in the General Plan land use map.

The project would be consistent with the conditions described and analyzed in the General Plan 2040 EIR. It would not have growth-inducing impacts that are otherwise not analyzed in the General Plan 2040 EIR. The project would not introduce any new or more severe growth-inducing impacts.

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APPENDIX A
NOTICE OF PREPARATION AND COMMENTS

NOTICE OF PREPARATION

ENVIRONMENTAL IMPACT REPORT
PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
CITY OF STOCKTON

August 7, 2019

To: (See attached distribution list)

From: City of Stockton, Lead Agency
Community Development Department
345 N. El Dorado Street
Stockton, CA 95202

SUBJECT: **V.A. OFF-SITE IMPROVEMENTS PROJECT**
NOTICE OF PREPARATION OF A DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT PURSUANT TO PUBLIC RESOURCES CODE §21080.4 AND CALIFORNIA CODE OF REGULATIONS TITLE 14, §15082(a)

The City of Stockton Municipal Utilities Department (COSMUD) is the project proponent and therefore the Lead Agency for the above-referenced project under CEQA. On behalf of COSMUD, the Stockton Community Development Department will prepare a Supplement to the City's certified 2018 EIR for the Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements for the proposed project. The Lead Agency wants to know your agency's views with respect to environmental information that should be included in the EIR, provided it is germane to your agency's statutory responsibilities. Your agency may need to use this EIR in connection with future approvals.

The project description, location and the probable environmental effects of the project are contained in the attached materials.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. We respectfully request that you return your comments to david.kwong@stocktonca.gov or the above-noted address **by 5:00 p.m. on September 9, 2019**.

If you have any questions regarding this matter, please contact Community Development Director David Kwong at (209) 937-8266 or david.kwong@stocktonca.gov.

Governor's Office of Planning & Research

AUG 09 2019

STATE CLEARINGHOUSE

PROJECT DESCRIPTION/LOCATION:

The United States Department of Veterans Affairs (VA) proposes to construct and operate a Community Based Outpatient Clinic (CBOC) and Community Living Center (CLC), with associated improvements, on approximately 37 acres of a 58.5-acre site located west of Manthey Road in the unincorporated area of San Joaquin County immediately south of the City of Stockton. The proposed CBOC-CLC is located on federally-owned land. The VA prepared an Environmental Assessment (EA) for the project and adopted a Finding of No Significant Impact (FONSI) under the National Environmental Policy Act (NEPA). The VA is in the process of finalizing a Supplemental EA and FONSI for the project. The CBOC-CLC requires the provision of wastewater and water utility services; the City of Stockton has agreed to provide these services.

The City's proposed project would construct water and sanitary sewer lines connecting existing City facilities with the CBOC-CLC site. The proposed water line, approximately 1.1 mile in length, would connect to an existing line in Wolfe Road with the existing Weston Ranch Reservoir and then run east and south along Yettner Road and South Manthey Road to the CBOC-CLC site. The proposed 1.4-mile wastewater line would extend from French Camp Road to the CBOC-CLC along Wolfe Road, Yettner Road and South Manthey Road. The location of the proposed facilities is shown on the attachments.

DAVID KWONG, DIRECTOR
STOCKTON COMMUNITY DEVELOPMENT DEPARTMENT

DAVID KWONG

8-7-19
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ATTACHMENT A

NOTICE OF PREPARATION, SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT
VA OFF-SITE IMPROVEMENTS PROJECT

A.1 Project Location

The proposed project is in unincorporated San Joaquin County adjacent to southwest Stockton (see attached Figures 1 through 4). The project site is within Sections 1 and D of Township 1 North, Range 6 East, Mt. Diablo Base and Meridian. The latitude of the approximate center of the project alignment (intersection of Yettner Road and South Manthey Road) is 37° 53' 39" North, and the longitude is 121° 17' 22" West.

A.2 Project Background

The U.S. Department of Veterans Affairs (VA) proposes to construct and operate a Community-Based Outpatient Clinic and a Community Living Center (CBOC-CLC) at 6505 South Manthey Road in the community of French Camp, an unincorporated community in San Joaquin County south of Stockton (Figure 5). The purpose of the CBOC-CLC is to improve, realign, and expand medical services to military veterans in the Central Valley. The CBOC-CLC will be constructed on approximately 37 acres of a 58.5-acre parcel adjacent to and north of San Joaquin General Hospital. The CBOC will be a four-story structure, approximately 158,000 gross square feet in floor area, that will provide various medical services. The CLC will be a resident patient facility consisting of three buildings with a total of 120 beds, along with a community center. The project will also include associated utility buildings and infrastructure. The CBOC-CLC proposes to obtain potable water and wastewater collection services through connection with the water and sewer systems of the City of Stockton.

In accordance with the National Environmental Policy Act (NEPA), the VA has prepared an Environmental Assessment (EA) for the CBOC-CLC. The EA analyzes the potential environmental impacts of the CBOC-CLC, including development of the CBOC-CLC site as well as options for provision of water and wastewater services in accordance with NEPA requirements. However, as the City proposes extension of new water and sanitary sewer services to the CBOC-CLC site, and as the City is responsible for maintenance and improvement of its water and sanitary sewer systems, it is obligated to implement the requirements of the California Environmental Quality Act (CEQA). Consequently, the City has determined that a CEQA document should be prepared for the proposed off-site water and sanitary sewer improvements.

The City recently completed an update to its general plan and certified an EIR for the plan, known as Envision Stockton 2040, together with updated infrastructure master plans, in December 2018. The plans and EIR consider anticipated land development in the project

vicinity and the extension of water and sanitary sewer utilities needed to serve anticipated urban development in the project area; these planned utilities include elements of the proposed project. The City determined that CEQA review needs for the project would be best met by considering the analysis contained in a Supplement to the Envision Stockton 2040 EIR, which would tier from the information contained in the more-generalized Envision Stockton 2040 analysis and provide project-specific information as needed to meet CEQA requirements. The environmental concerns to be addressed in the Supplemental EIR are outlined below.

A.3 Project Objectives

The objective of the project is to provide potable water and sanitary sewer collection service for the proposed CBOC-CLC in the community of French Camp.

A.4 Project Details

The project proposes an extension of water and sanitary sewer lines from existing City facilities in southwest Stockton to the CBOC-CLC site (see attached Figures 5 and 6). The proposed 16-inch water main would extend from the existing Weston Ranch Reservoir east along Yettner Road and south along South Manthey Road to the CBOC-CLC site, all within existing road right-of-way. The 16-inch line will also extend west along the extension of Yettner Road through private land to an existing City 18-inch line in Wolfe Road. The total length of the proposed off-site water line would be approximately 1.1 miles.

The proposed sanitary sewer line would extend from an existing City maintenance hole at the intersection of French Camp Road and Wolfe Road south along Wolfe Road as a 42-inch line; a 21-inch line would extend east along the extension of Yettner Road in an acquired easement to existing Yettner Road; from this point, a 15-inch line would extend east along the Yettner Road right-of-way to South Manthey Road, then as a 12-inch line south along South Manthey Road right-of-way to the CBOC-CLC. The total length of the off-site sewer line would be approximately 1.4 miles.

The VA project will retain stormwater from the site and adjacent street frontage improvements in on-site basins. No City storm drainage facilities are available to serve the VA project. The proposed off-site improvements involve installation of underground pipelines and restoration of existing surface conditions after construction and will not generate any substantial new runoff or need for drainage improvements.

A primary concern will be potential construction noise, dust and glare effects where the project alignment is near existing residential uses in Weston Ranch and along Yettner Road. Dust control and construction hours requirements will be defined in the contract documents, and these issues will be discussed in detail in the EIR.

A.5 Issues to be Analyzed in the Supplemental EIR

The City will prepare a supplement to the certified EIR for the Envision Stockton 2040 General Plan Update. The Supplemental EIR (SEIR) will identify the potential environmental effects of the project, the degree to which these effects were addressed in the General Plan Update EIR and, if significant environmental effects were identified, whether adequate mitigation measures were prescribed and how they would apply to the proposed project. The SEIR will determine whether these effects have been adequately analyzed with respect to the project; if additional analysis is required, it will be provided in the SEIR. The SEIR would consider the following potential environmental issues and concerns:

- Aesthetics and Visual Resources – Short-term visual and aesthetic impacts of pipeline construction. Incorporation of limitations on construction hours and glare control requirements into the project construction documents.

- Agricultural Resources – Temporary and permanent effects of pipeline construction and right-of-way acquisition on agricultural lands.

- Air Quality – Quantification of construction air pollutant emissions, comparison to adopted significance thresholds, and potential impacts on nearby residences or other sensitive receptors. Incorporation of dust control requirements into the project construction documents.

- Biological Resources – Temporary and permanent effects of pipeline construction and right-of-way acquisition on special-status species, migratory birds, wetlands and other sensitive habitat areas. Construction impacts on special status species nesting and foraging activities.

- Cultural Resources – Existence of historical and archaeological resources on and near the project alignments. Potential construction impacts on known and undiscovered historical and archaeological resources.

- Energy – Energy consumption associated with project construction and whether such consumption would be wasteful or inefficient.

- Geology, Soils, and Mineral Resources – Soil disturbance and erosion associated with project construction, and exposure of proposed facilities to geologic and seismic hazards.

- Greenhouse Gas Emissions – Construction GHG emissions and consistency with applicable GHG management plans, including the Stockton Climate Action Plan.

- Hazards and Hazardous Materials – Existence of environmental contamination on and near project site. Transportation, use and storage of hazardous materials during the construction process, potential for environmental contamination from releases and prevention systems.

- Hydrology and Water Quality – Impacts of project construction on surface and groundwater resources, storm water runoff and water pollution control. Exposure of proposed facilities to potential 100-year and 200-year flooding hazards.

- Land Use – Consistency of proposed facilities with applicable existing land use plans and ordinances, relationship to planned urban growth and growth-inducing impact analysis.

- Noise – Construction noise levels and impacts on nearby noise-sensitive land uses. Incorporation of limitations on construction hours and other application noise control requirements into the project construction documents.

- Population and Housing – Impacts on proposed right-of-way acquisition and project construction on existing population and housing. Impacts of urban infrastructure extension on population growth and housing needs.

- Public Services and Recreation – The relationship between proposed infrastructure improvements and existing and future public services and more specifically whether the project would require new or expanded facilities for agencies responsible for fire protection, police protection, schools, parks and recreation.

- Transportation – Construction-related vehicular traffic and impact on traffic flow in streets and intersections in area and creation of traffic hazards. Potential direct effects on existing facilities of, or accessibility to, pedestrian and bicycle ways and other alternative travel modes.

- Tribal Cultural Resources – Potential impacts of the project on resources of potential importance to local tribes, including the results of tribal consultation as required by AB 52.

- Utilities and Service Systems – Environmental impacts of any modification or extension of water, wastewater, storm drainage, solid waste, and other utility services that may be connected to the project.

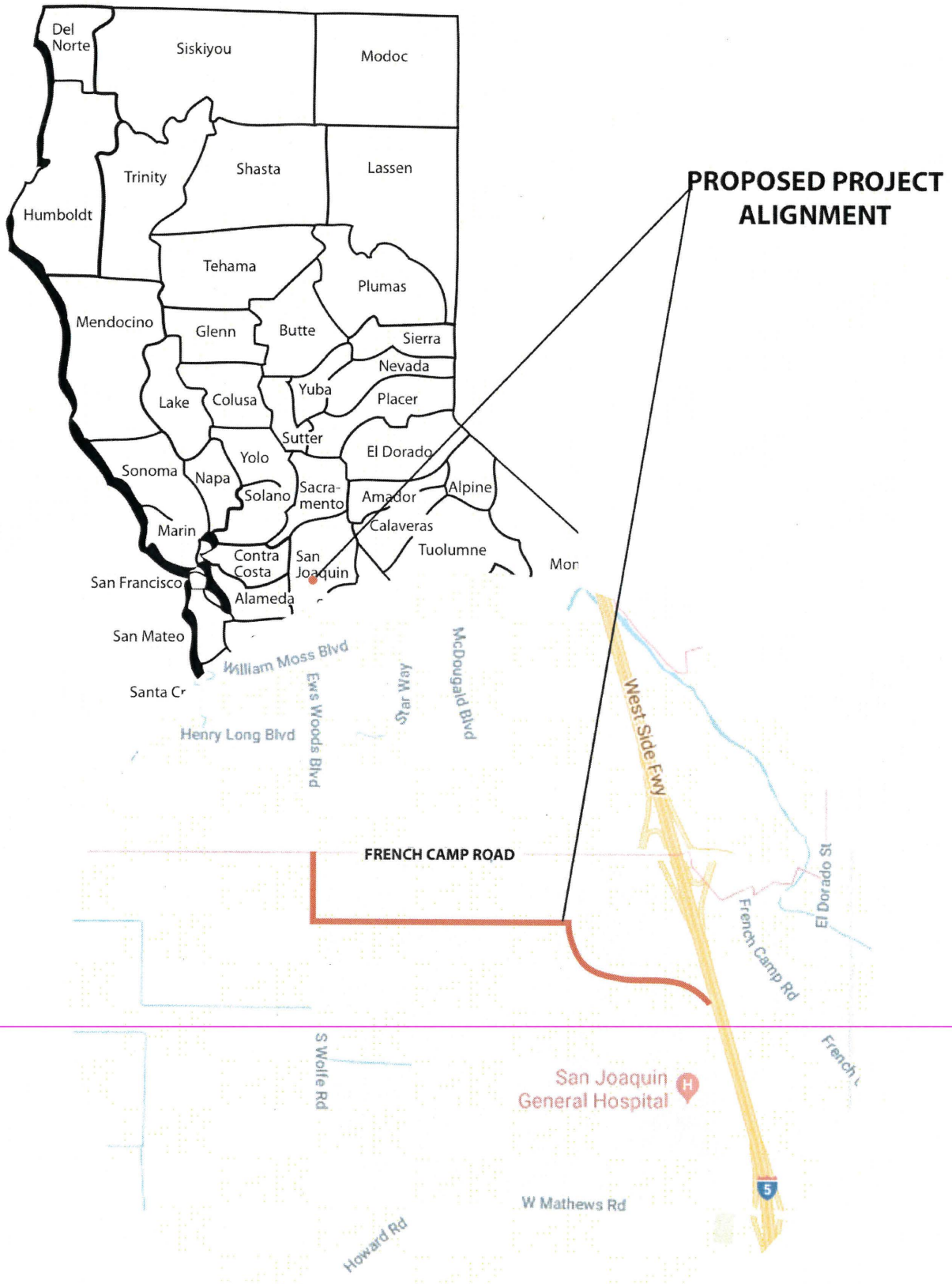
- Wildfire – Potential effects of the project on or exposure to wildfire hazard risks.

- Cumulative Impacts – Summary of the potential cumulative impacts of the project in the listed resource areas, based on their analysis in Envision Stockton 2040 EIR and the CBOC-CLC Environmental Assessment.

- Alternatives to the Proposed Project – Summary of alternatives considered in the Envision Stockton 2040 EIR and the CBOC-CLC Environmental Assessment and additional alternatives analysis of the project, if warranted.

- Growth-Inducing Impacts – Consideration of the potential effects of the proposed utility infrastructure extension on planned or potential urban development in the southwest Stockton area, including growth-inducing impact analysis provided in the Envision Stockton 2040 EIR.

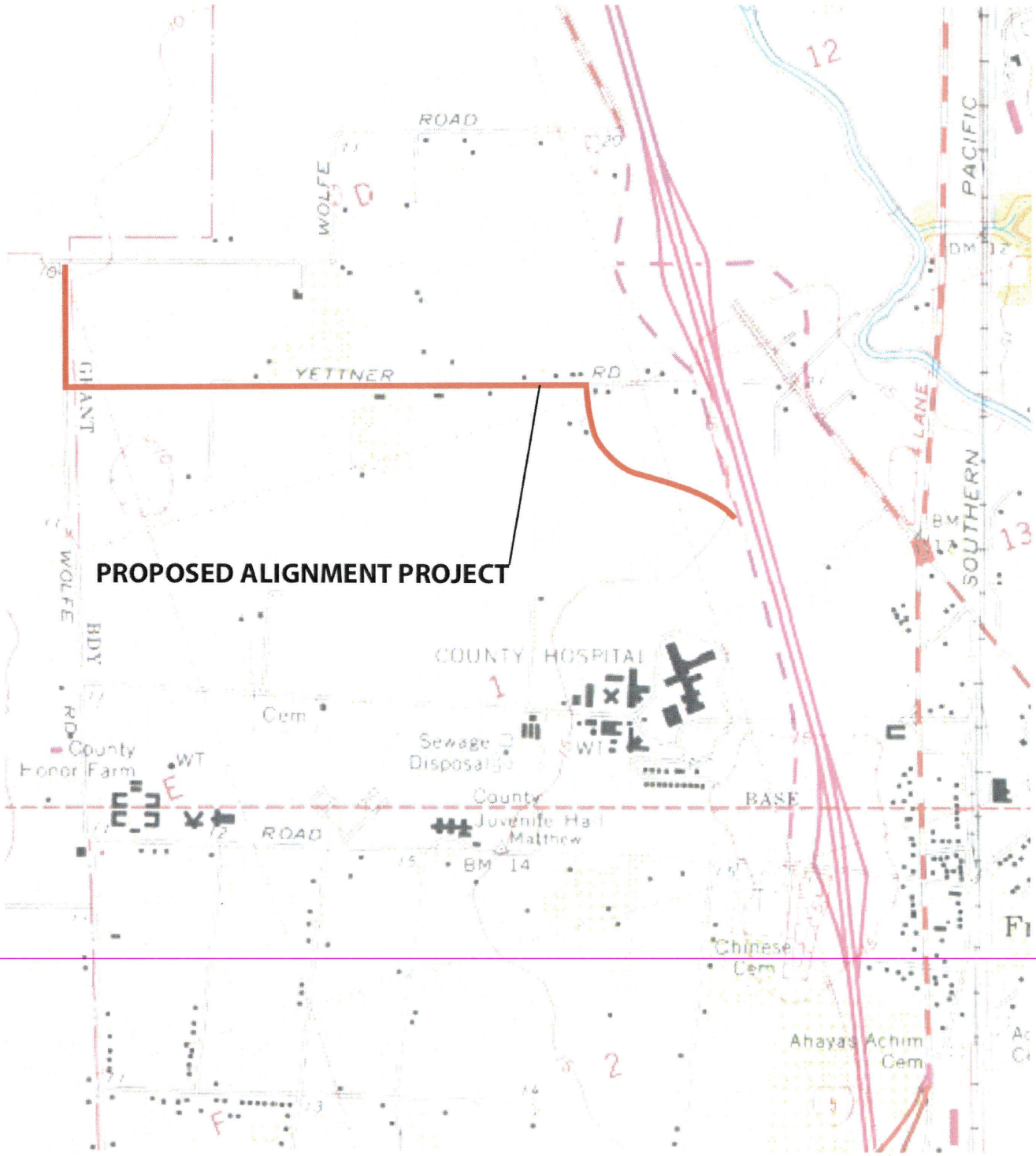
Based on comments received in response to this Notice of Preparation (NOP), the scope of or issues addressed in the SEIR may be modified as required.



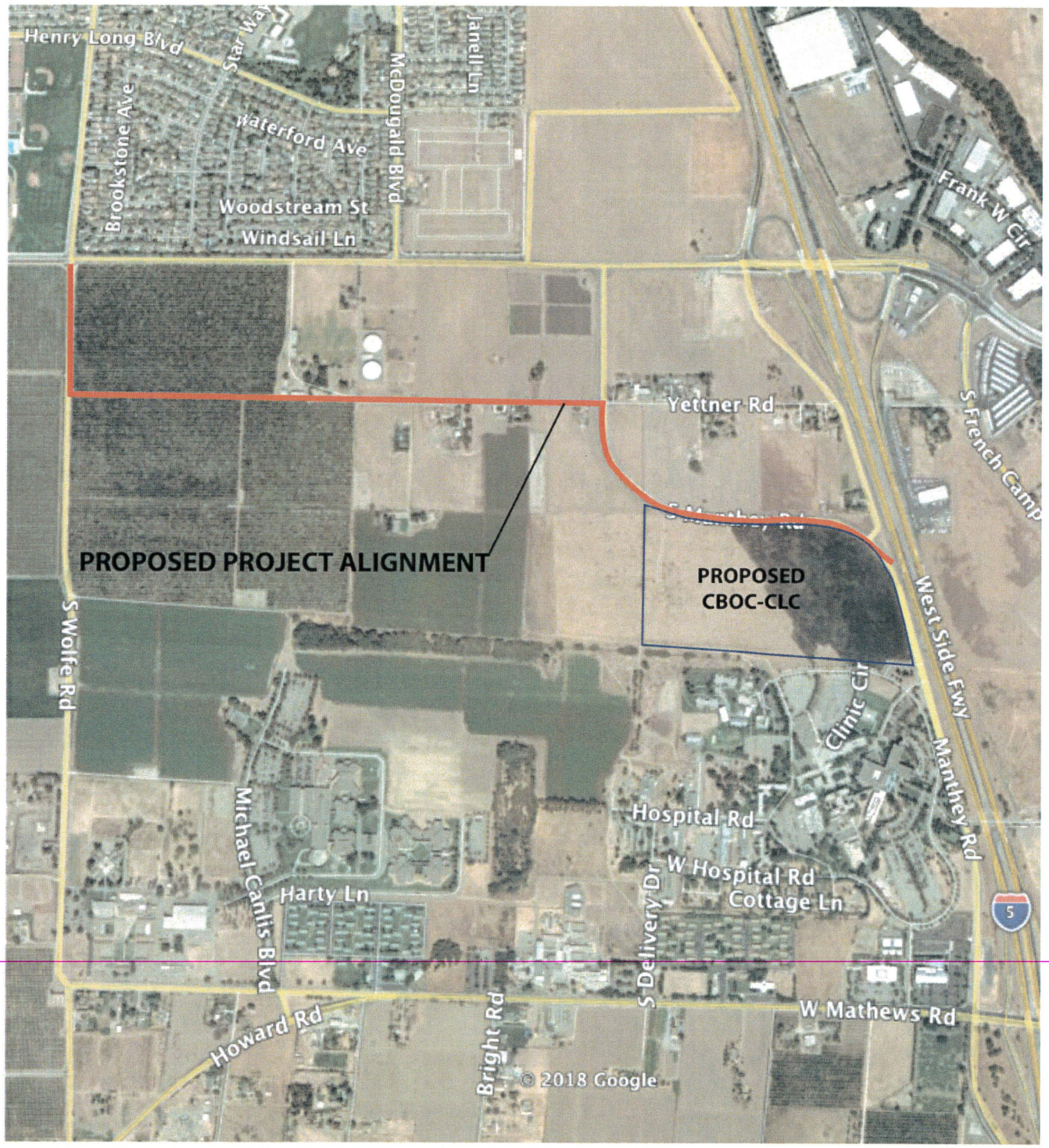
SOURCE: www. csac.counties.org and Google Maps

BaseCamp Environmental

Figure 1-1
REGIONAL LOCATION MAP

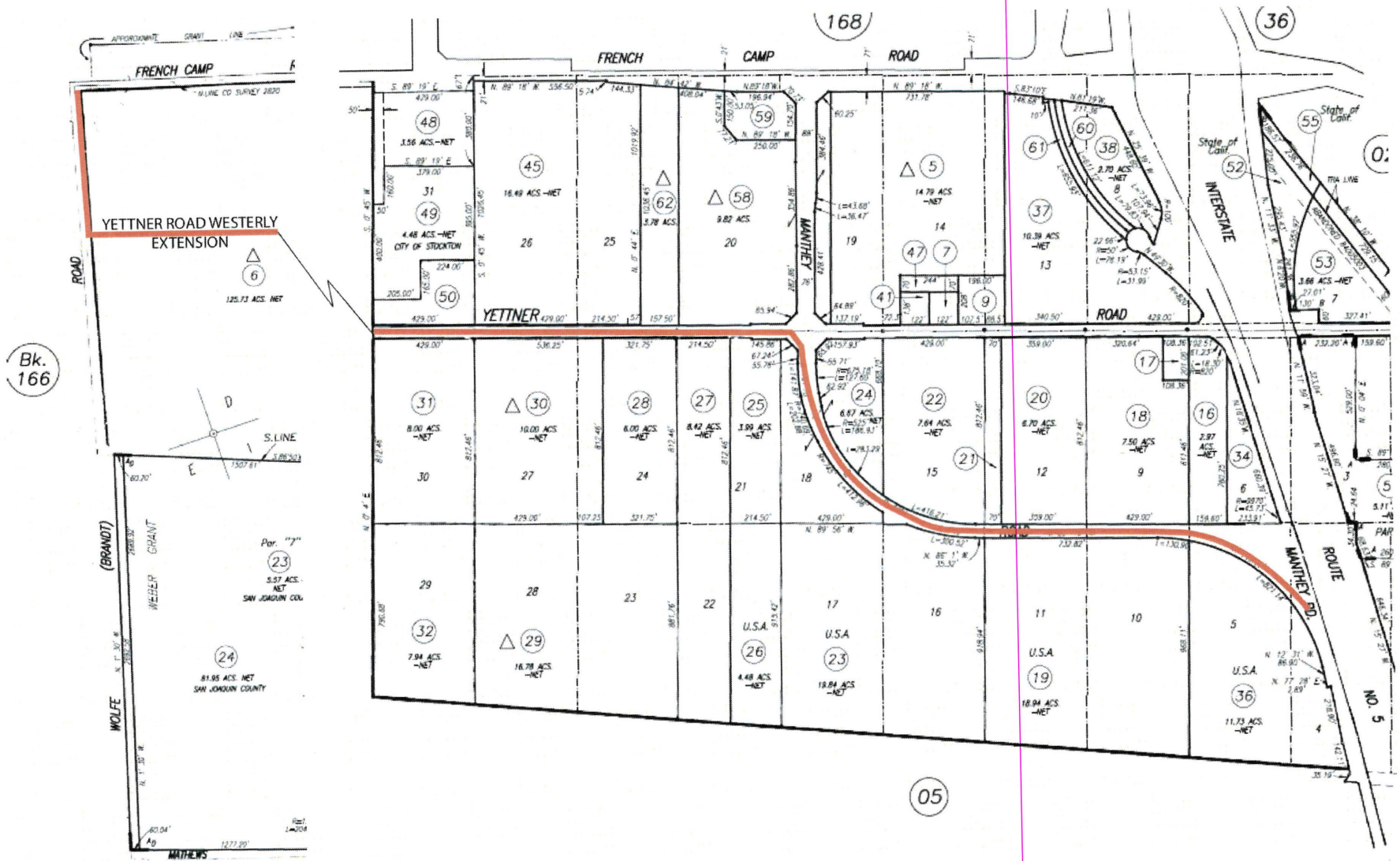


SOURCE: Stockton West USGS Quadrangle Map, T1N, R6E, S1, 1968.



BaseCamp Environmental

Figure 1-4
AERIAL PHOTO



SOURCE: San Joaquin County Assessor's Office, 193-06-36,19,18,22,23,25,27,28,30,31. 193-05-06

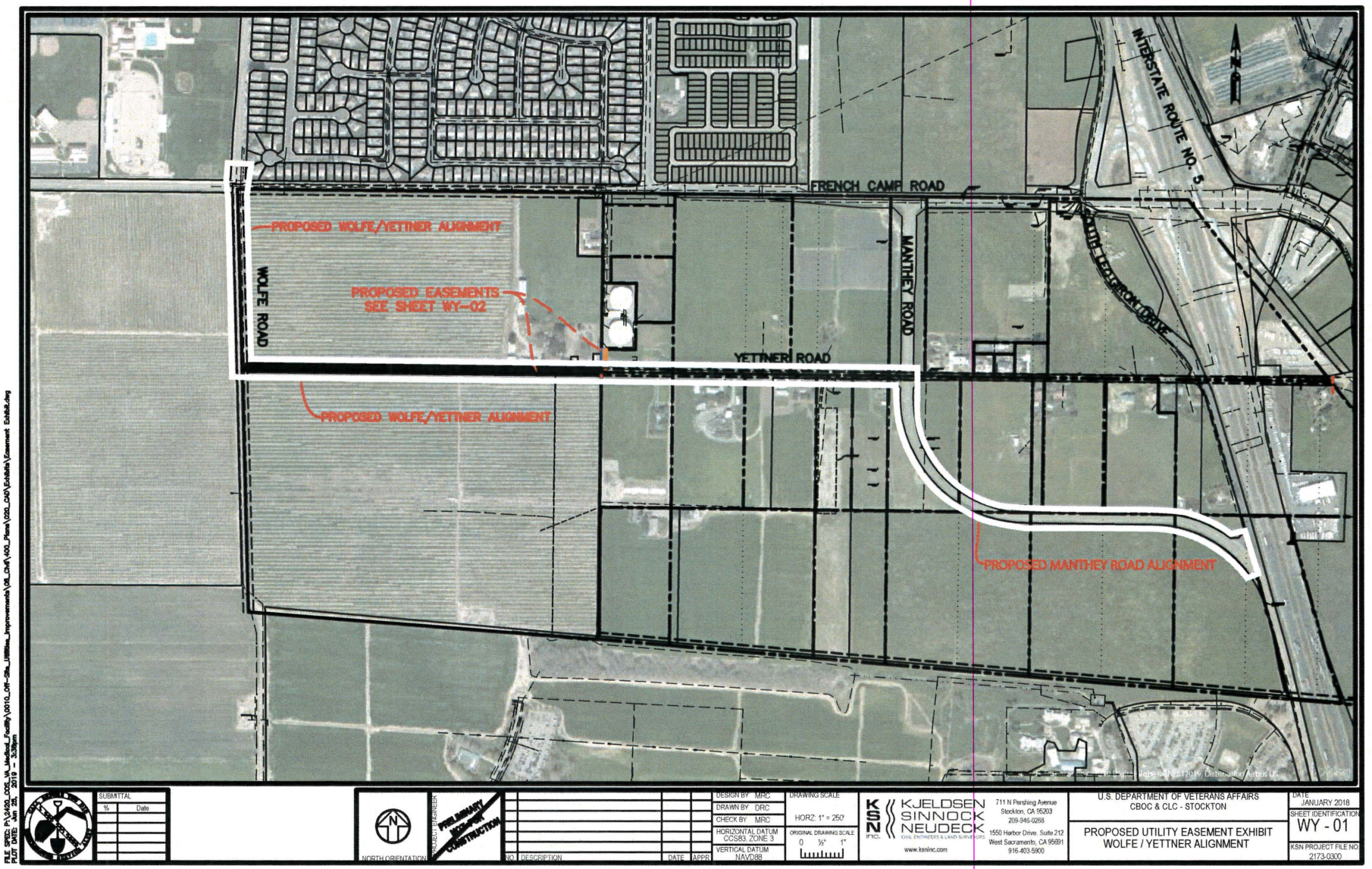
BaseCamp Environmental

Figure 4
ASSESSOR PARCEL MAP



BaseCamp Environmental

Figure 5
PROPOSED CBOC & CLC PROJECT



BaseCamp Environmental

Figure 6
PROPOSED PROJECT SITE

ORIGINAL

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: VA 0FF-SITE IMPROVEMENTS PROJECT

Lead Agency: CITY OF STOCKTON | Contact Person: DAVID KWONG
Mailing Address: 345 N EL DORADO STREET | Phone: 209-937-8266
City: STOCKTON | Zip: 95202 | County: SAN JOAQUIN

Project Location: County: SAN JOAQUIN | City/Nearest Community: STOCKTON
Cross Streets: FRENCH CAMP ROAD AND WOLFE ROAD | Zip Code: 95206
Longitude/Latitude (degrees, minutes and seconds): 37 ° 53 ′ 42 ″ N / 121 ° 17 ′ 12 ″ W Total Acres: NA
Assessor's Parcel No.: NA (LINEAR PROJECT) | Section: NA | Twp.: 1N | Range: 6E | Base: MDBM
Within 2 Miles: State Hwy #: 5 | Waterways: FRENCH CAMP SLOUGH
Airports: STOCKTON METROPOLITAN | Railways: UNION PACIFIC | Schools: WESTON RANCH HIGH SCH

Document Type:

CEQA: ☒ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other:
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☒ FONSI Other: ☐ Joint Document ☐ Final Document ☐ Other:

Governor's Office of Planning & Research

AUG 09 2019
After 12pm
STATE CLEARINGHOUSE

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: UTILITY LINES

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational: ____
☐ Recreational: ____
☒ Water Facilities: Type TRUNK LINE MGD NA
☐ Transportation: Type ____
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type ____
☐ Other: SANITARY SEWER TRUNK LINE

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☒ Agricultural Land ☒ Air Quality ☒ Archeological/Historical ☒ Biological Resources ☐ Coastal Zone ☒ Drainage/Absorption ☐ Economic/Jobs
☐ Fiscal ☒ Flood Plain/Flooding ☒ Forest Land/Fire Hazard ☒ Geologic/Seismic ☒ Minerals ☒ Noise ☒ Population/Housing Balance ☒ Public Services/Facilities
☒ Recreation/Parks ☐ Schools/Universities ☐ Septic Systems ☐ Sewer Capacity ☒ Soil Erosion/Compaction/Grading ☒ Solid Waste ☒ Toxic/Hazardous ☒ Traffic/Circulation
☒ Vegetation ☒ Water Quality ☒ Water Supply/Groundwater ☒ Wetland/Riparian ☒ Growth Inducement ☒ Land Use ☒ Cumulative Effects ☐ Other:

Present Land Use/Zoning/General Plan Designation:

LINEAR PROJECT IN PUBLIC ROADS AND ACQUIRED EASEMENTS IN PLANNED COMMERCIAL AREAS

Project Description: *(please use a separate page if necessary)*

1.5 MILES OF WATER AND SEWER TRUNK LINES IN EASEMENTS AND PUBLIC ROADS.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

____	Air Resources Board	X	Office of Historic Preservation
____	Boating & Waterways, Department of	____	Office of Public School Construction
____	California Emergency Management Agency	____	Parks & Recreation, Department of
____	California Highway Patrol	____	Pesticide Regulation, Department of
X	Caltrans District # 10	____	Public Utilities Commission
____	Caltrans Division of Aeronautics	X	Regional WQCB # 5
____	Caltrans Planning	____	Resources Agency
____	Central Valley Flood Protection Board	____	Resources Recycling and Recovery, Department of
____	Coachella Valley Mtns. Conservancy	____	S.F. Bay Conservation & Development Comm.
____	Coastal Commission	____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
____	Colorado River Board	____	San Joaquin River Conservancy
X	Conservation, Department of	____	Santa Monica Mtns. Conservancy
____	Corrections, Department of	____	State Lands Commission
____	Delta Protection Commission	____	SWRCB: Clean Water Grants
____	Education, Department of	X	SWRCB: Water Quality
____	Energy Commission	____	SWRCB: Water Rights
X	Fish & Game Region # 2	____	Tahoe Regional Planning Agency
____	Food & Agriculture, Department of	____	Toxic Substances Control, Department of
____	Forestry and Fire Protection, Department of	____	Water Resources, Department of
____	General Services, Department of		
X	Health Services, Department of	____	Other:
____	Housing & Community Development	____	Other:
____	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date AUGUST 12, 2019 Ending Date SEPTEMBER 10, 2019

Lead Agency (Complete if applicable):

Consulting Firm: BASECAMP ENVIRONMENTAL, INC
Address: 115 S SCHOOL STREET, SUITE 14
City/State/Zip: LODI, CA 95240
Contact: CHARLIE SIMPSON
Phone: 209-224-8213

Applicant:
Address:
City/State/Zip:
Phone:

Signature of Lead Agency Representative: **Date:** 8-8-19

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

NOP Distribution List

County: San Joaquin **SCH#**

Resources Agency

- [x] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  Denise Peterson
- [ ] **California Coastal Commission**
  Allyson Hitt
- [ ] **Colorado River Board**
  Elsa Contreras
- [ ] **Dept. of Conservation**
  Crina Chan
- [ ] **Cal Fire**
  Dan Foster
- [ ] **Central Valley Flood Protection Board**
  James Herota
- [ ] **Office of Historic Preservation**
  Ron Parsons
- [x] **Dept of Parks & Recreation**
  Environmental Stewardship Section
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve Goldbeck
- [ ] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

Fish and Wildlife

- [ ] **Depart. of Fish & Wildlife**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Wildlife Region 1**
  Curt Babcock
- [ ] **Fish & Wildlife Region 1E**
  Laurie Harnsberger
- [ ] **Fish & Wildlife Region 2**
  Jeff Drongesen
- [ ] **Fish & Wildlife Region 3**
  Craig Weightman
- [x] **Fish & Wildlife Region 4**
  Julie Vance
- [ ] **Fish & Wildlife Region 5**
  Leslie Newton-Reed
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6**
  Tiffany Ellis
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6 I/M**
  Heidi Calvert
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Wildlife M**
  William Paznokas
  Marine Region

Other Departments

- [ ] **California Department of Education**
  Lesley Taylor
- [x] **OES (Office of Emergency Services)**
  Monique Wilber
- [ ] **Food & Agriculture**
  Sandra Schubert
  Dept. of Food and Agriculture
- [ ] **Dept. of General Services**
  Cathy Buck
  Environmental Services Section
- [ ] **Housing & Comm. Dev.**
  CEQA Coordinator
  Housing Policy Division

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Erik Vink
- [ ] **Delta Stewardship Council**
  Anthony Navasero
- [ ] **California Energy Commission**
  Eric Knight
- [x] **Native American Heritage Comm.**
  Debbie Treadway
- [x] **Public Utilities Commission**
  Supervisor
- [ ] **Santa Monica Bay Restoration**
  Guangyu Wang
- [ ] **State Lands Commission**
  Jennifer Deleong
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Cal State Transportation Agency CalSTA

- [x] **Caltrans - Division of Aeronautics**
  Philip Crimmins
- [ ] **Caltrans – Planning HQ LD-IGR**
  Christian Bushong
- [x] **California Highway Patrol**
  Suzann Ikeuchi
  Office of Special Projects

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jackman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [ ] **Caltrans, District 3**
  Susan Zanchi
- [ ] **Caltrans, District 4**
  Patricia Maurice
- [ ] **Caltrans, District 5**
  Larry Newland
- [ ] **Caltrans, District 6**
  Michael Navarro
- [ ] **Caltrans, District 7**
  Dianna Watson
- [ ] **Caltrans, District 8**
  Mark Roberts
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [x] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Jacob Armstrong
- [ ] **Caltrans, District 12**
  Maureen El Harake

Cal EPA

Air Resources Board

- [ ] **Airport & Freight**
  Jack Wursten
- [x] **Transportation Projects**
  Nesamani Kalandiyur
- [ ] **Industrial/Energy Projects**
  Mike Tollstrup
- [ ] **California Department of Resources, Recycling & Recovery**
  Kevin Taylor/Jeff Esquivel
- [x] **State Water Resources Control Board**
  Regional Programs Unit
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Cindy Forbes – Asst Deputy
  Division of Drinking Water
- [ ] **State Water Resources Control Board**
  Div. Drinking Water #_____
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Phil Crader
  Division of Water Rights
- [ ] **Dept. of Toxic Substances Control Reg. #_____**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [ ] **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- [x] **RWQCB 5S**
  Central Valley Region (5)
  - [ ] **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
  - [ ] **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** _____
  _____
  _____
- [ ] _____
  Conservancy

Last Updated 5/22/18

Gavin Newsom
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Kate Gordon
Director

Notice of Preparation

August 12, 2019

To: Reviewing Agencies

Re: VA OFF-SITE IMPROVEMENTS PROJECT
SCH# 2019080202

Attached for your review and comment is the Notice of Preparation (NOP) for the VA OFF-SITE IMPROVEMENTS PROJECT draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

DAVID KWONG
Stockton, City of
345 N EL DORADO STREET
STOCKTON, CA 95205

with a copy to the State Clearinghouse in the Office of Planning and Research at state.clearinghouse@opr.ca.gov . Please refer to the SCH number noted above in all correspondence concerning this project on our website: https://ceqanet.opr.ca.gov/2019080202/2 .

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

cc: Lead Agency

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov

Governor's Office of Planning & Research

AUG 26 2019

STATE CLEARINGHOUSE

August 21, 2019

David Kwong
Stockton, City of
345 N El Dorado Street
Stockton, CA 95205

RE: SCH# 2019080202, VA Off-Site Improvements Project, San Joaquin County

Dear Mr. Kwong:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP) for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
   - **a.** A brief description of the project.
   - **b.** The lead agency contact information.
   - **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
   - **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
   - **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
   - **a.** Alternatives to the project**.**
   - **b.** Recommended mitigation measures**.**
   - **c.** Significant effects**.** (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   - **a.** Type of environmental review necessary.
   - **b.** Significance of the tribal cultural resources.
   - **c.** Significance of the project's impacts on tribal cultural resources.
   - **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   - **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
   - **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
    a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
    b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Staff Services Analyst

cc: State Clearinghouse

CALIFORNIA
Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

29 August 2019

Governor's Office of Planning & Research

SEP 03 2019

STATE CLEARINGHOUSE

David Kwong
City of Stockton
345 North El Dorado Street
Stockton, CA 95205

CERTIFIED MAIL
7014 2120 0001 4292 4409

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, VA OFF-SITE IMPROVEMENTS PROJECT, SCH#2019080202, SAN JOAQUIN COUNTY

Pursuant to the State Clearinghouse's 12 August 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Va Off-Site Improvements Project, located in San Joaquin County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental

Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

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[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program.

There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently $1,277 + $8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding

the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

APPENDIX B
AIR QUALITY MODELING RESULTS

Road Construction Emissions Model **Version 9.0.0**
Data Entry Worksheet

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Input Type

Project Name	VA Clinic Improvements	
Construction Start Year	2020	Enter a Year between 2014 and 2040 (inclusive)
Project Type For 4: Other Linear Project Type, please provide project specific off-road equipment population and vehicle trip data	4	1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction
Project Construction Time	3.00	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	1	1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)
Project Length	1.34	miles
Total Project Area	4.89	acres
Maximum Area Disturbed/Day	0.05	acres
Water Trucks Used?	1	1. Yes 2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd^3) (assume 20 if unknown)	Import Volume (yd^3/day)	Export Volume (yd^3/day)
Soil	Grubbing/Land Clearing	20.00		1.00
	Grading/Excavation	20.00		1.00
	Drainage/Utilities/Sub-Grade	20.00		1.00
	Paving	20.00		1.00
Asphalt	Grubbing/Land Clearing			
	Grading/Excavation			
	Drainage/Utilities/Sub-Grade			
	Paving			

Mitigation Options

On-road Fleet Emissions Mitigation		Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer
Off-road Equipment Emissions Mitigation		Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation). Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard

The remaining sections of this sheet contain areas that require modification when 'Other Project Type' is selected.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		0.30		1/1/2020
Grading/Excavation		1.20		1/11/2020
Drainage/Utilities/Sub-Grade		1.05		2/17/2020
Paving		0.45		3/20/2020
Totals (Months)	3			

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions User Input	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
Miles/round trip: Grubbing/Land Clearing	5.00			1	5.00
Miles/round trip: Grading/Excavation	5.00			1	5.00
Miles/round trip: Drainage/Utilities/Sub-Grade	5.00			1	5.00
Miles/round trip: Paving	5.00			1	5.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Grading/Excavation (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Paving (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Grubbing/Land Clearing (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.04	0.00	0.00	0.00	19.86	0.00	0.00	20.79
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.07
Pounds per day - Grading/Excavation	0.00	0.00	0.04	0.00	0.00	0.00	19.86	0.00	0.00	20.79
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.27
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.04	0.00	0.00	0.00	19.86	0.00	0.00	20.79
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.24
Pounds per day - Paving	0.00	0.00	0.04	0.00	0.00	0.00	19.86	0.00	0.00	20.79
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.10
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.69

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions User Input	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
Miles/round trip: Grubbing/Land Clearing				0	0.00
Miles/round trip: Grading/Excavation				0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade				0	0.00
Miles/round trip: Paving				0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Grading/Excavation (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Paving (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Grubbing/Land Clearing (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values		
User Input				
Miles/ one-way trip	10		Calculated Daily Trips	Calculated Daily VMT
One-way trips/day	2			
No. of employees: Grubbing/Land Clearing	2		4	40.00
No. of employees: Grading/Excavation	2		4	40.00
No. of employees: Drainage/Utilities/Sub-Grade	2		4	40.00
No. of employees: Paving	2		4	40.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.02	1.22	0.11	0.05	0.02	0.00	350.90	0.01	0.01	353.67
Grading/Excavation (grams/mile)	0.02	1.22	0.11	0.05	0.02	0.00	350.90	0.01	0.01	353.67
Draining/Utilities/Sub-Grade (grams/mile)	0.02	1.22	0.11	0.05	0.02	0.00	350.90	0.01	0.01	353.67
Paving (grams/mile)	0.02	1.22	0.11	0.05	0.02	0.00	350.90	0.01	0.01	353.67
Grubbing/Land Clearing (grams/trip)	1.25	3.05	0.37	0.00	0.00	0.00	75.08	0.09	0.04	88.34
Grading/Excavation (grams/trip)	1.25	3.05	0.37	0.00	0.00	0.00	75.08	0.09	0.04	88.34
Draining/Utilities/Sub-Grade (grams/trip)	1.25	3.05	0.37	0.00	0.00	0.00	75.08	0.09	0.04	88.34
Paving (grams/trip)	1.25	3.05	0.37	0.00	0.00	0.00	75.08	0.09	0.04	88.34
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.01	0.13	0.01	0.00	0.00	0.00	31.61	0.00	0.00	31.97
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.11
Pounds per day - Grading/Excavation	0.01	0.13	0.01	0.00	0.00	0.00	31.61	0.00	0.00	31.97
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.42
Pounds per day - Drainage/Utilities/Sub-Grade	0.01	0.13	0.01	0.00	0.00	0.00	31.61	0.00	0.00	31.97
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.37
Pounds per day - Paving	0.01	0.13	0.01	0.00	0.00	0.00	31.61	0.00	0.00	31.97
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.16
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.00	0.00	1.05

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

Water Truck Emissions	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Round Trips/Vehicle/Day	Default Values Round Trips/Vehicle/Day	Calculated Trips/day	User Override of Miles/Round Trip	Default Values Miles/Round Trip	Calculated Daily VMT
User Input								
Grubbing/Land Clearing - Exhaust	1		1.00			10.00		10.00
Grading/Excavation - Exhaust	1		1.00			10.00		10.00
Drainage/Utilities/Subgrade	1		1.00			10.00		10.00
Paving	1		1.00			10.00		10.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Grading/Excavation (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Paving (grams/mile)	0.04	0.42	3.03	0.11	0.05	0.02	1,801.75	0.00	0.28	1,886.20
Grubbing/Land Clearing (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.01	0.07	0.00	0.00	0.00	39.72	0.00	0.01	41.58
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.14
Pounds per day - Grading/Excavation	0.00	0.01	0.07	0.00	0.00	0.00	39.72	0.00	0.01	41.58
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.55
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.01	0.07	0.00	0.00	0.00	39.72	0.00	0.01	41.58
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.48
Pounds per day - Paving	0.00	0.01	0.07	0.00	0.00	0.00	39.72	0.00	0.01	41.58
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.21
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.00	1.37

Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing	0.05		0.50	0.00	0.10	0.00
Fugitive Dust - Grading/Excavation	0.05		0.50	0.01	0.10	0.00
Fugitive Dust - Drainage/Utilities/Subgrade	0.05		0.50	0.01	0.10	0.00

Values in cells D195 through D228, D246 through D279, D297 through D330, and D348 through D381 are required when 'Other Project Type' is selected.

Off-Road Equipment Emissions

Grubbing/Land Clearing	Default Number of Vehicles	Mitigation Option: Override of	Default		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Override of Default Number of Vehicles	*Program-estimate*	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Other Construction Equipment	0.49	4.12	5.24	0.28	0.25	0.01	598.80	0.19	0.01	605.27
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Rubber Tired Dozers	1.08	4.13	11.33	0.55	0.51	0.01	827.34	0.27	0.01	836.25
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Scrapers	0.99	7.46	11.75	0.46	0.42	0.02	1,467.02	0.47	0.01	1,482.83
			Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Tractors/Loaders/Backhoes	0.21	2.28	2.11	0.13	0.12	0.00	300.77	0.10	0.00	304.01
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment	If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Number of Vehicles	Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Grubbing/Land Clearing	pounds per day	2.78	17.99	30.43	1.42	1.31	0.03	3,193.93	1.03	0.03	3,228.36
	Grubbing/Land Clearing	tons per phase	0.01	0.06	0.10	0.00	0.00	0.00	10.54	0.00	0.00	10.65

Grading/Excavation	Default Number of Vehicles	Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Mitigation Option Default Equipment Tier		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Override of Default Number of Vehicles	*Program-estimate*		Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Excavators	0.25	3.27	2.41	0.12	0.11	0.01	500.12	0.16	0.00	505.51
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Graders	0.48	1.81	6.33	0.20	0.19	0.01	642.72	0.21	0.01	649.64
1.00			Model Default Tier	Off-Highway Tractors	0.26	3.09	2.78	0.13	0.12	0.00	455.08	0.15	0.00	459.98
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Other Construction Equipment	0.49	4.12	5.24	0.28	0.25	0.01	598.80	0.19	0.01	605.27
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Rollers	0.21	1.89	2.08	0.13	0.12	0.00	254.07	0.08	0.00	256.80
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Tractors/Loaders/Backhoes	0.21	2.28	2.11	0.13	0.12	0.00	300.77	0.10	0.00	304.01
1.00			Model Default Tier	Trenchers	0.42	2.64	3.80	0.28	0.26	0.00	326.81	0.11	0.00	330.33
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment	If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Number of Vehicles	Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Grading/Excavation	pounds per day	2.31	19.11	24.74	1.28	1.18	0.03	3,078.37	1.00	0.03	3,111.54
	Grading/Excavation	tons per phase	0.03	0.25	0.33	0.02	0.02	0.00	40.63	0.01	0.00	41.07

Drainage/Utilities/Subgrade	Default Number of Vehicles	Mitigation Option Override of	Default		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Override of Default Number of Vehicles	*Program-estimate*	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Cranes	0.45	2.12	5.39	0.22	0.20	0.01	558.79	0.18	0.01	564.81
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Forklifts	0.14	1.18	1.30	0.10	0.09	0.00	148.03	0.05	0.00	149.63
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Other Construction Equipment	0.49	4.12	5.24	0.28	0.25	0.01	598.80	0.19	0.01	605.27
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Tractors/Loaders/Backhoes	0.21	2.28	2.11	0.13	0.12	0.00	300.77	0.10	0.00	304.01
1.00			Model Default Tier	Trenchers	0.42	2.64	3.80	0.28	0.26	0.00	326.81	0.11	0.00	330.33
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment	If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Number of Vehicles	Equipment Tier	Type		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Drainage/Utilities/Sub-Grade	pounds per day	1.72	12.33	17.83	1.01	0.93	0.02	1,933.21	0.63	0.02	1,954.05
Drainage/Utilities/Sub-Grade	tons per phase	0.02	0.14	0.21	0.01	0.01	0.00	22.33	0.01	0.00	22.57

Paving	Default Number of Vehicles	Override of Default Number of Vehicles	Mitigation Option: Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier	Type	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Program-estimate					pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
				Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00				Model Default Tier	Other Construction Equipment	0.49	4.12	5.24	0.28	0.25	0.01	598.80	0.19	0.01	605.27
				Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00				Model Default Tier	Pavers	0.26	2.90	2.81	0.14	0.13	0.00	455.27	0.15	0.00	460.18
1.00				Model Default Tier	Paving Equipment	0.21	2.53	2.14	0.11	0.10	0.00	394.53	0.13	0.00	398.78
				Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00				Model Default Tier	Rollers	0.21	1.89	2.08	0.13	0.12	0.00	254.07	0.08	0.00	256.80
				Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00				Model Default Tier	Tractors/Loaders/Backhoes	0.21	2.28	2.11	0.13	0.12	0.00	300.77	0.10	0.00	304.01
				Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment	If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab												
Number of Vehicles	Equipment Tier	Type		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
				pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Paving	pounds per day	1.38	13.73	14.38	0.79	0.72	0.02	2,003.44	0.65	0.02	2,025.05
	Paving	tons per phase	0.01	0.07	0.07	0.00	0.00	0.00	9.92	0.00	0.00	10.02
Total Emissions all Phases (tons per construction period) =>			0.07	0.52	0.70	0.04	0.03	0.00	83.42	0.03	0.00	84.32

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187		8
Off-Highway Tractors		124		8
Off-Highway Trucks		402		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		247		8
Rubber Tired Loaders		203		8
Scrapers		367		8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET

APPENDIX C
BIOLOGICAL RESOURCES REPORT

MOORE BIOLOGICAL CONSULTANTS

August 21, 2019

Ms. Amy Gartin
BaseCamp Environmental
115 South School Street, Ste.14
Lodi, CA 95240

Subject: "VA CLINIC OFF-SITE IMPROVEMENTS PROJECT", SAN JOAQUIN COUNTY, CALIFORNIA: BIOLOGICAL ASSESSMENT

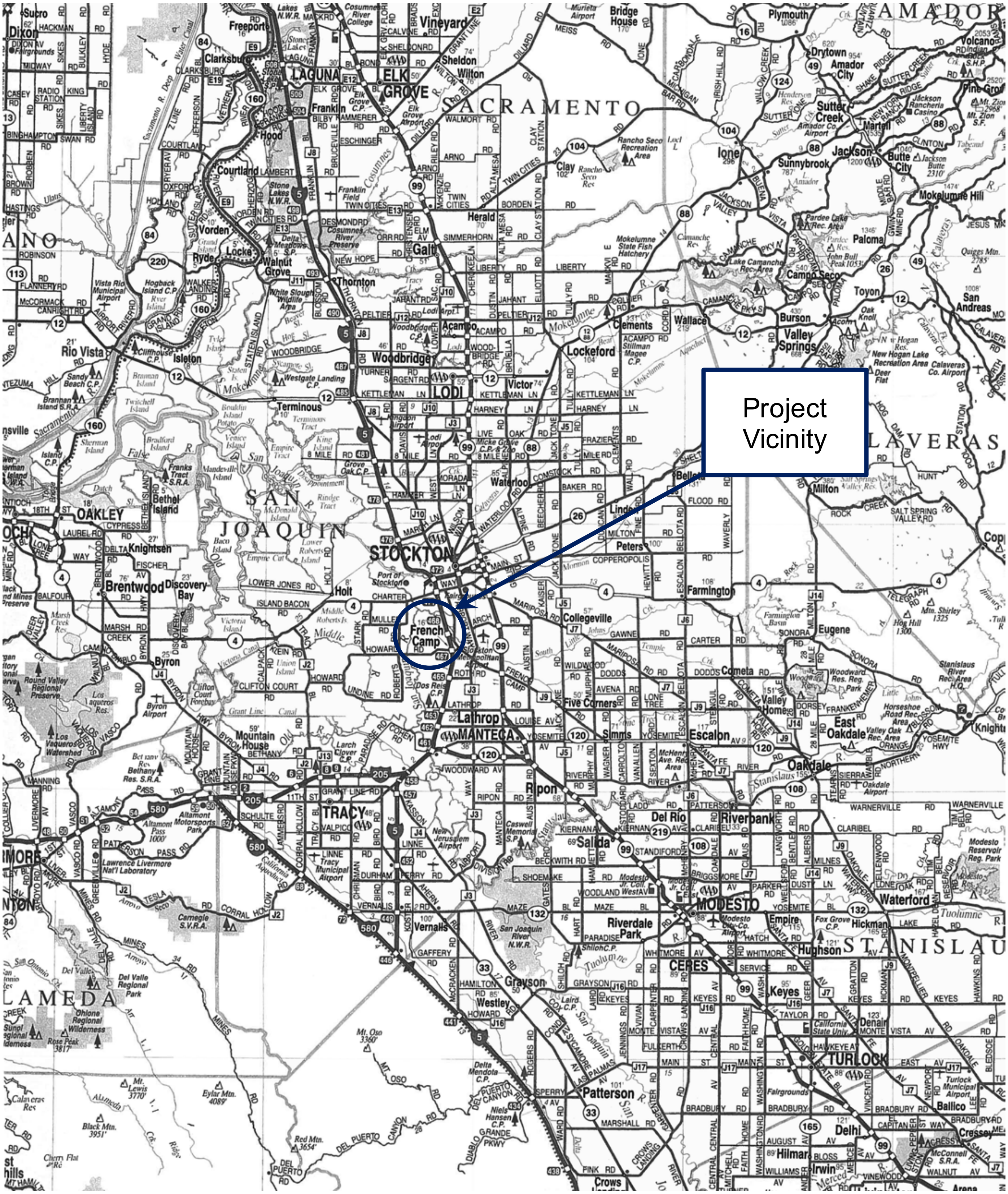
Dear Amy:

Thank you for asking Moore Biological Consultants to assist with the Veterans Administration (VA) Clinic Off-site Improvements Project near Stockton, in San Joaquin County, California (Figures 1 and 2). The purpose of this assessment is to describe existing biological resources in the project site, identify potentially significant impacts to biological resources from the project, and provide recommendations for how to reduce those impacts to a less-than-significant level. The work involved reviewing databases, aerial photographs, and documents, and conducting a field survey to document vegetation communities, potentially jurisdictional Waters of the U.S. and/or wetlands, and potentially suitable habitat for or presence of special-status species. This report details the methodology and results of our investigation.

Project Overview

The Veteran's Administration plans to construct a Community Based Outpatient Clinic and Community Living Center (CBOC/CLC) in unincorporated San Joaquin County west of Interstate I-5 and South Manthey Road (see Site Plan in Attachment A). The CBOC/CLC involves 158,000 square feet of medical service area along with a 120-bedroom resident patient facility and community center.

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e-mail: moorebio@softcom.net



Source: California State Automobile Association

Moore Biological Consultants

0 9 18 Miles

FIGURE 1

PROJECT VICINITY

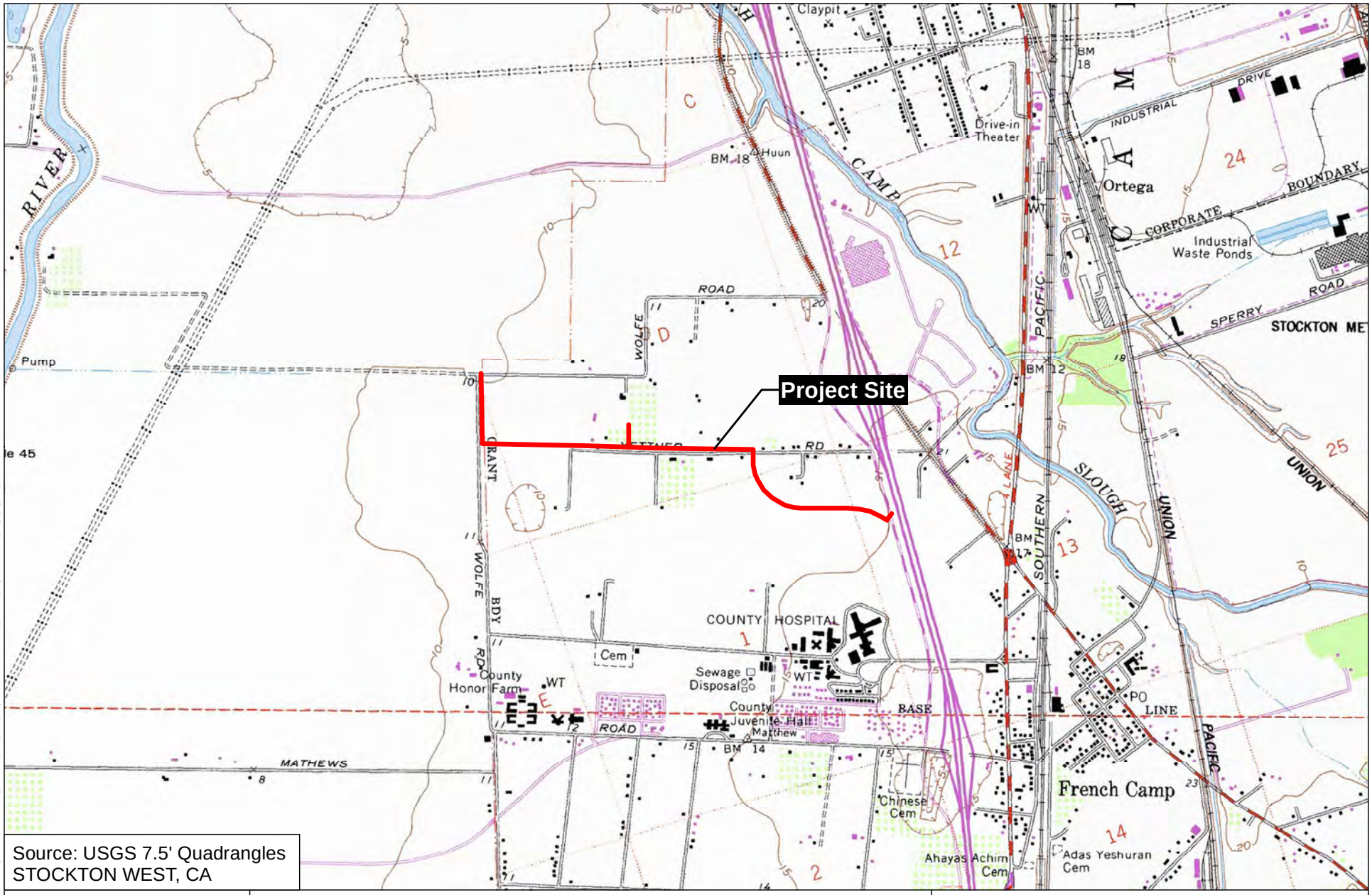


Figure 2

Moore Biological Consultants

Map Date: 07/02/2019

USGS

VA Off-Site Improvements Project

San Joaquin County, CA

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In support of the project, the City of Stockton will provide water and wastewater services to the CBOC/CLC this Biological Assessment addresses the City's "VA Off-Site Improvements" project. Proposed utility lines would extend from the intersection of Wolfe Road and French Camp Road in Stockton south along Wolfe Road, east through agricultural lands to Yettner Road, along Yettner Road, then south along South Manthey Road to the CBOC/CLC site (see Utilities Plan in Attachment A). Water (18-inch) and wastewater (up to 42-inch) pipelines would be buried within existing road rights-of-way in easements to be acquired through agricultural lands. These alignments are collectively referred to as the "Project Site".

Construction of the project would involve trenching, installation of the pipelines, and backfilling the trenches. Following construction, vegetation and wildlife habitats in the project site would be comparable to those prior to construction.

Methods

Prior to the field surveys, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, 2019).. The CNDDB search was conducted on the USGS 7.5-minute Stockton West, Stockton East, Manteca, and Lathrop topographic quadrangles, encompassing approximately 240+/- square miles surrounding the site (Attachment B). The United States Fish and Wildlife Service (USFWS*)* IPaC Trust Resource Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity was also reviewed (Attachment B). This information was used to identify special-status wildlife and plant species that have been previously documented in the vicinity or have the potential to occur based on suitable habitat and geographical distribution. Additionally, the CNDDB depicts the locations of sensitive habitats. The USFWS on-line-maps of designated critical habitat in the area were also downloaded.

Field surveys were conducted on July 8 and August 19, 2019. The survey area included the pipeline alignments (i.e., roads, road shoulders, and part of an orchard) as well as adjacent areas that may be subject to construction disturbance. The survey consisted of driving and walking throughout the site making observations of habitat conditions and noting surrounding land uses, habitat types, and plant and wildlife species. The fieldwork included an assessment of potentially jurisdictional Waters of the U.S. and wetlands as defined by the U.S. Army Corps of Engineers (ACOE, 1987; 2008) and a search for special-status species and suitable habitat for special-status species (e.g., blue elderberry shrubs, vernal pools). Trees in and near the site were assessed for the potential use by nesting raptors, especially Swainson's hawk (*Buteo swainsoni*). The orchards and grasslands in the site and adjacent areas visible from the site were searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows with evidence of past occupancy.

Results

GENERAL SETTING: The project site is located just south of Stockton, in San Joaquin, County California (Figure 1). The site is in Unnumbered Section within Township 1 North and Range 6 East of the USGS 7.5-minute Stockton West topographic quadrangle (Figure 2). The site is essentially flat and is at elevations of approximately 10 to 15 feet above mean sea level. The site is a long, narrow strip, extending generally northwest to southeast through agricultural lands (Figure 3 and photographs in Attachment C).

Surrounding land uses in this part of San Joaquin County are primarily agricultural with scattered residences and rural communities. The site is in an area of leveled fields that are primarily farmed in annual and orchard crops, interspersed with ranchette-style homes and fallow fields (Figure 3). The parcels along the roads in the east part of the site are primarily fallow fields and the west part of the site is located in a relatively young walnut orchard. The surrounding



Figure 3

Moore Biological Consultants

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Map Date: 07/03/2019
Aerial Source: DigitalGlobe (2018)

AERIAL

VA Off-Site Improvements Project

San Joaquin County, CA

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areas extending further out from the project site are more developed with some residential subdivisions further north of the project site and a hospital further south. Interstate 5 is adjacent to the east edge of Manthey Road in the east part of the site.

VEGETATION: The pipeline alignment will be placed along the road shoulder along portions of South Wolfe Road, Yettner Road, and South Manthey Road; a portion will also extend through the middle of a walnut orchard. Theses road shoulders, which are subject to periodic disturbance, are sparsely vegetated with highly disturbed ruderal grasses and weeds and do not contain defined road-side ditches. The fallow fields adjacent to the road shoulders support similar vegetation, consisting almost entirely of non-native grasses and weeds.

Oats (*Avena* sp.), soft chess brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), foxtail barley (*Hordeum murinum*), and perennial ryegrass (*Lolium perenne*) are some of the most common grasses in the ruderal grassland vegetation found within and adjacent to the project site. Other grassland species such as yellow star-thistle (*Centaurea solstitalis*), black mustard (*Brassica nigra*), Italian thistle (*Carduus pycnocephalus*), morning glory (*Convolvulus arvensis*), common sunflower (*Helianthus annuus*), prickly lettuce (*Lactuca serriola*), horseweed (*Conyza canadensis*), and filaree (*Erodium* spp.) are intermixed with the grasses. Table 1 is a list of plant species observed in the site.

The only trees in the project site are the planted walnuts in the orchard. There are several large trees in close proximity to the project site, most of which are associated with residences. Dominant tree species include valley oak (*Quercus lobata*), black walnut (*Juglans californicus*), ornamental pine (*Pinus* sp.), and a variety of other ornamentals. No blue elderberry (*Sambucus mexicana*) shrubs were observed within or adjacent to the project site.

WILDLIFE: A variety of bird species were observed in the site. Turkey vulture (*Cathartes aura*), Swainson's hawk (*Buteo swainsoni*), American kestrel (*Falco*

TABLE 1

PLANT SPECIES OBSERVED IN THE SITE

Albutilon theophrasti	velvetleaf
Avena sp.	wild oat
Brassica nigra	black mustard
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft chess brome
Carduus pycnocephalus	Italian thistle
Centaurea solstitialis	yellow star-thistle
Convolulus arvensis	morning glory
Conyza bonariensis	hairy fleabane
Conyza canadensis	horseweed
Cynodon dactylon	Bermuda grass
Erodium botrys	filaree
Eschscholzia californica	California poppy
Foeniculum vulgare	fennel
Eucalyptus sp.	blue gum
Helianthus annuus	common sunflower
Heterotheca grandiflora	telegraph weed
Hordeum murinum	foxtail barley
Hypochaeris glabra	smooth cat's ear
Lactuca serriola	prickly lettuce
Lolium perenne	perennial ryegrass
Malva sp.	mallow
Medicago sativa	alfalfa
Plantago lanceolata	plantain
Raphanus sativus	wild radish
Rumex crispus	curly dock
Salsola tragus	Russian thistle
Sonchus asper	spiny sow thistle
Sorghum halepense	Johnson grass
Tribulus terrestris	puncture vine
Trifolium hirtum	rose clover

sparverius), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), killdeer (*Charadrius vociferous*), Brewer's blackbird (*Euphagus cyanocephalus*), and house finch (*Carpodacus mexicanus*) are representative bird species observed in and near the site (Table 2). All of these are species commonly found in agricultural areas in the greater project vicinity.

There are several individual trees and a few clusters of trees adjacent to or near the project site that are suitable for nesting raptors, including Swainson's hawks. Given the presence of trees and shrubs in and near the site, it is likely one or more pairs of raptors and a variety of songbirds nest in and/or near the site during most years. It is possible that ground-nesting songbirds such as killdeer and red-winged blackbird (*Agelaius phoeniceus*) nest in the grassland habitats in the site.

A variety of mammals are likely to occur in the project site. However, no mammals were observed in the site during the recent survey. Although most of the project site is along heavily trafficked roads, California ground squirrel (*Spermophilus beecheyi*), raccoon (*Procyon lotor*), Coyote (*Canis latrans*), black-tailed hare (*Lepus californicus*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*) are expected to occur in the greater project vicinity and may occur in the site. A number of species of small rodents including mice (*Mus musculus, Reithrodontomys megalotis,* and *Peromyscus maniculatus*) and voles (*Microtus californicus*) also likely occur.

Based on habitat types present, only a few amphibian and reptile species are expected to use habitats in the site. Although none were observed, common species such as western fence lizard (*Sceloporus occidentalis*), Pacific chorus frog (*Pseudacris regilla*), gopher snake (*Pituophis melanoleucus*), common king snake (*Lampropeltis getulus*), and common garter snake (*Thamnophis sirtalis*) are expected to occur at the site.

TABLE 2

WILDLIFE SPECIES OBSERVED IN THE SITE

Birds	
Great egret	*Casmerodius albus*
Turkey vulture	*Cathartes aura*
Swainson's hawk	*Buteo swainsoni*
Red-tailed hawk	*Buteo jamaicensis*
American kestrel	*Falco sparverius*
Killdeer	*Charadrius vociferus*
Rock dove	*Columba livia*
Mourning dove	*Zenaida macroura*
Western kingbird	*Tyrannus verticalis*
Yellow-billed magpie	*Pica nuttalli*
American crow	*Corvus brachyrhynchos*
American robin	*Turdus migratorius*
Northern mockingbird	*Mimus polyglottos*
European starling	*Sturnus vulgaris*
Brewer's blackbird	*Euphagus cyanocephalus*
House finch	*Carpodacus mexicanus*

WATERS OF THE U.S. AND WETLANDS: Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. ACOE, CDFW, and the California Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to riverbanks, lakes, stream channels and other wetland features.

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes interstate and intrastate rivers and streams, as well as their tributaries. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. extends to the "ordinary high water mark". The ordinary high water mark 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.

Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the ACOE *Wetlands Delineation Manual* and Regional Supplement (ACOE, 1987; 2008). Jurisdictional wetlands are usually adjacent to or hydrologically associated with Waters of the U.S. Isolated wetlands are outside federal jurisdiction, but may still be regulated by state agencies including CDFW and RWQCB.

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. 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.

No potentially jurisdictional Waters of the U.S. or wetlands were observed within the footprint of the proposed project. The pipelines will be installed in either graveled road shoulders, in disturbed upland ruderal grassland vegetation adjacent to the roads, or in the floor up a walnut orchard. No areas meeting the technical and regulatory criteria of jurisdictional Waters of the U.S. or wetlands were observed in the site.

SPECIAL-STATUS SPECIES: Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve

endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species. Both FESA and CESA prohibit unauthorized “take” (i.e., killing) of listed species, with take broadly defined in both acts to include activities such as harassment, pursuit and possession.

Special-status wildlife species also includes 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. The federal Migratory Bird Treaty Act and Fish and Game Code of California protect special-status bird species year-round, as well as their eggs and nests during the nesting season. Fish and Game Code of California also provides protection for mammals and fish.

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2019). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

Table 3 provides a summary of the listing status and habitat requirements of special-status plant and wildlife species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the project area. This table also includes an assessment of the likelihood of occurrence of each of these species in 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.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
PLANTS						
Large-flowered fiddleneck	*Amsinckia grandiflora*	None	None	1B	Cismontane woodland, valley and foothill grassland; generally found in elevations between 1,000 and 2,000 feet	None: the elevation of the site is well below the well-known range of this species (CNPS, 2019). There are no recorded occurrences of this species in the CNDDB (2019) search area.
Alkali milk-vetch	*Astragalus tener var. tener*	None	None	1B	Alkali vernal pools.	None: the project site does not provide suitable habitat for this species; there are no vernal pools in the project site. The nearest occurrence of alkali milk-vetch in the CNDDB (2019) search area is approximately 5 miles northwest of the site.
Heartscale	*Atriplex cordulata var cordulata*	None	None	1B	Valley and foothill grassland, chenopod scrub.	None: the grassland in the project site is highly disturbed and does not provide suitable habitat for heartscale. The nearest occurrence of this species in the CNDDB (2019) search area is a historical record (1896) mapped nonspecifically in downtown Stockton, approximately 4.5 miles north of the project site.
Big tarplant	*Blepharizonia plumosa*	None	None	1B	Valley and foothill grassland.	None: the grassland in the project site is highly disturbed and does not provide suitable habitat for big tarplant. The nearest occurrence of this species in the CNDDB (2019) search area is a historical record (1874) mapped non-specifically in downtown Stockton, approximately 4.5 miles north of the site.
Watershield	*Brasenia schreberi*	None	None	2	Marshes and swamps.	Unlikely: there are no marshes or swamps in the project site to support this species. The only occurrence of water shield in the CNDDB (2019) search area is an historical population mapped non-specifically in downtown Stockton, approximately 4.5 miles north of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Palmate-bracted salty bird's-beak	*Chloropyron palmatum*	E	E	1B	Chenopod scrub, valley and foothill grassland; in alkaline soils.	None: the project site does not provide suitable habitat for this species. The nearest occurrence of palmate-bracted salty bird's-beak in the CNDDB (2019) search area is a historical record mapped non-specifically around the vicinity of Stockton, approximately 4.5 miles north of the site.
Slough thistle	*Cirsium crassicaule*	None	None	1B	Chenopod scrub, marshes and swamps, and riparian scrub.	Unlikely: there is no suitable habitat for slough thistle in the site. The nearest occurrence of slough thistle in the CNDDB (2019) search area is approximately 6 miles southwest of the site.
Recurved larkspur	*Delphinium recurvatum*	None	None	1B	Chenopod scrub in alkaline soils.	Unlikely: the site does not contain suitable habitat for this species. The CNDDB (2019) search area contains only one historical (1937) sighting of recurved larkspur, mapped nonspecifically, approximately 7 miles northeast of the site.
Delta button celery	*Eryngium racemosum*	None	E	1B	Riparian scrub in seasonally inundated floodplain with clay substrates.	Unlikely: there is no suitable habitat in the site for this species. The nearest occurrence of Delta button celery in the CNDDB (2019) search area is approximately 7.5 miles south of the site.
San Joaquin spearscale	*Extriplex joaquinana*	None	None	1B	Chenopod scrub, alkali meadow, valley and foothill grassland.	None: the project site does not provide suitable habitat for this species. The nearest occurrence of San Joaquin spearscale in the CNDDB (2019) search area is an historical population mapped non-specifically in downtown Stockton, approximately 4.5 miles north of the site.
Woolly rose mallow	*Hibiscus lasiocarpos var. occidentalis*	None	None	2	Freshwater marshes and swamps.	Unlikely: the site does not provide suitable habitat for woolly rose mallow. The nearest occurrence of this species in the CNDDB (2019) search area is in the Calaveras River, approximately 6 miles northwest of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Delta tule pea	*Lathyrus jepsonii var. jepsonii*	None	None	1B	Marshes and swamps.	Unlikely: the project site does not provide suitable habitat for this species. The nearest occurrence of delta tule pea in the CNDDB (2019) search area is an historical population on Rough and Ready Island, approximately 5 miles northwest of the project site.
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 for this species. The nearest occurrence of Sanford's arrowhead in the CNDDB (2019) search area is an historical population mapped non-specifically in downtown Stockton, approximately 4.5 miles north of the project site.
Suisun marsh aster	*Symphotrichum lentum*	None	None	1B	Marshes and swamps.	Unlikely: the project site does not provide suitable habitat for this species. The nearest occurrence of Suisun marsh aster in the CNDDB (2019) search area is in the Calaveras River, approximately 6.5 miles northwest of the project site.
Wright's trichocoronis	*Trichocoronis wrightii var. wrightii*	None	None	2	Marshes and swamps, riparian forest, meadows and seeps and vernal pools.	Unlikely: there is no suitable habitat for Wright's trichocoronis in the site. The nearest occurrence of this species in the CNDDB (2019) search area is approximately 7.5 miles south of the site.
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 for this species. The nearest occurrence of saline clover in the CNDDB (2019) search area is an historical population mapped non-specifically in downtown Stockton, approximately 4.5 miles north of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
WILDLIFE						
Birds						
Burrowing owl	*Athene cunicularia*	None	SC	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: it is unlikely this species would nest in close proximity to the road shoulder. The grasslands in the site are dense and weedy, providing provide poor quality habitat for burrowing owl. No burrowing owls or burrows with evidence of owl occupancy were observed during the survey. There are several occurrences of nesting burrowing owls in the CNDDB (2019) search area within 1 mile of the site.
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.	High: the road shoulder provides poor quality foraging habitat for Swainson's hawks. Large trees near the site are suitable for nesting Swainson's hawks and several Swainson's hawks were observed perching in trees and flying near the site during the July 8, 2019 survey. An active nest was documented in a tree just northeast of the intersection of Yettner Road an South Manthey Road. There are several records of Swainson's hawks in the project vicinity; this species is recorded in the CNDDB (2019) in several locations within a mile of the site.
Tricolored blackbird	*Agelaius tricolor*	None	CE	N/A	Requires open water and protected nesting substrate, usually cattails and riparian scrub with surrounding foraging habitat.	Unlikely: there is no emergent wetland vegetation or other vegetation in the site that could be used by nesting tricolored blackbirds. The nearest occurrence of this species in the CNDDB (2019) search area is approximately 2 miles northwest of the site.
White-tailed kite	*Elanus leucurus*	None	FP	N/A	Herbaceous lowlands with variable tree growth and dense population of voles.	Low: the site provides marginally suitable habitat for white-tailed kite. The grasslands in adjacent to the site provide foraging habitat for white-tailed kite and trees near the site are suitable for nesting. The nearest occurrence of white-tailed kite in the CNDDB (2019) search area is approximately 3 miles northeast of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Loggerhead shrike	*Lanius ludovicianus*	None	SC	N/A	Annual grasslands and agricultural areas; nests in trees and shrubs.	Low: the grasslands in the site provide marginally suitable foraging habitat for loggerhead shrike and trees and shrubs in and near the site are suitable for nesting. The nearest occurrence of this species in the CNDDB (2019) search area is approximately 7 miles south 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 site does not provide aquatic habitat for this species. The nearest occurrence of Modesto song sparrow in the CNDDB (2019) search area is approximately 4.5 miles southwest of the site.
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 for least Bell's vireo in or near the site and this species is not known from the area. The nearest occurrence of least Bell's vireo in the CNDDB (2019) search area is a historical population from 1878 mapped non-specifically in downtown Stockton, approximately 4.5 miles north of the site.
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	None	SC	N/A	Brackish and fresh water marshes; usually nests in expansive patches of cattails or tules, often along borders of lakes and ponds.	Unlikely: the site does not provide suitable habitat for this species. The nearest occurrence of yellow-headed blackbird in the CNDDB (2019) search area is a historical record (1894) mapped non-specifically approximately 5 miles south of the site.
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 for riparian brush rabbit. The site does not contain well-developed riparian forest vegetation; there is no expansive scrub-shrub vegetation to support this species. The nearest occurrence of riparian brush rabbit in the CNDDB (2019) search area is approximately 4 miles southwest of the project site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Reptiles & 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 aquatic habitat for California red-legged frog in or near the project site. California red-legged frog is also presumed extinct on the floor of the Central Valley of California. There are no recorded occurrences of this species in the CNDDB (2019) search area. The site is not within designated critical habitat for California red-legged frog (USFWS, 2006).
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 within or near the site for California tiger salamander. This species occurs in the transitional bands between the valley floor and foothills. The nearest occurrence of California tiger salamander in the CNDDB (2019) search area is a historical record (1923) in downtown Stockton, approximately 5 miles northwest of the site. The site is not within designated critical habitat for California tiger salamander (USFWS, 2005a).
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: the project site does not provide suitable habitat for giant garter snake. The nearest occurrence of this species in the CNDDB (2019) search area is approximately 4 miles northwest of the site.
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 aquatic habitat in the site to support this species; delta smelt occurs in delta waterways. The nearest occurrence of delta smelt in the CNDDB (2019) approximately 6 miles northwest of the site in the San Joaquin River. The project site is within designated critical habitat for delta smelt (USFWS, 1994).

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Longfin smelt	*Spirinchus thaleichthys*	C	T	N/A	Brackish estuarine habitats.	None: there is no aquatic habitat in the site to support this species. The nearest occurrence of longfin smelt in the CNDDB (2019) approximately 6 miles southwest of the site in the San Joaquin River.
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 aquatic habitat in the site to support this species. The nearest occurrence of Central Valley steelhead in the CNDDB (2019) search area is approximately 1.5 miles west of the site in the San Joaquin River. The site is not in designated critical habitat for Central Valley steelhead (NOAA, 2005).
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 in or near the site. The nearest occurrence of valley elderberry longhorn beetle in the CNDDB (2019) search area is approximately 5 miles southwest of the site.
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools	Unlikely: there are no vernal pools in the site. There are no occurrences of vernal pool fairy shrimp recorded in the CNDDB (2019) in the search area. The site is not within designated critical habitat for vernal pool fairy shrimp (USFWS, 2005b).
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools	Unlikely: there are no vernal pools in the site. There are no occurrences of vernal pool tadpole shrimp recorded in the CNDDB (2019) in the search area. The site is not within designated critical habitat for vernal pool tadpole shrimp (USFWS, 2005b).

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 CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere; List 2 includes plants that are rare, threatened or endangered in California but are more common elsewhere.

SPECIAL-STATUS PLANTS: Species of special-status plants identified in the CNDDB (2019) search include alkali milk-vetch (*Astragalus tener var. tener*), heartscale (*Atriplex cordulata*), big tarplant (*Blepharizonia plumosa*), watershield (*Brasenia schreberi*), palmate-bracted salty bird's-beak (*Chloropyron palmatum*), slough thistle (*Cirsium crassicaule*), recurved larkspur (*Delphinium recurvatum*), delta button celery (*Eryngium racemosum*), San Joaquin spearscale (*Extriplex joaquinana*), woolly rose mallow (*Hibiscus lasiocarpos var. occidentalis*), delta tule pea (*Lathyrus jepsonii var. jepsonii*), Sanford's arrowhead (*Sagittaria sanfordii*), Suisun marsh aster (*Symphotrichum lentum*), wright's trichocornis (*Trichocoronis wrightii var. wrightii*), and saline clover (*Trifolium hydrophilum*) (Table 3 and Attachment B). Although not within the CNDDB (2019) search area, large-flowered fiddleneck (*Amsinckia grandiflora*) is in the USFWS IPaC Trust Resource Report (Attachment B).

Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, seasonal wetlands, riparian scrub, chenopod scrub, and areas with unusual soils. None of these vegetation communities occur in the site. The ruderal grasslands in the site are highly disturbed and do not provide suitable habitat for any of the plants in Table 3 or any other special-status plants; the orchard also does not provide suitable habitat for special-status plants. Due to lack of suitable habitat, no other special-status plant species are expected to occur in the site.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of habitats within the project site by special-status wildlife species is generally low. Special-status wildlife species that have been recorded in greater project vicinity in the CNDDB (2019) include Swainson's hawk, burrowing owl, tricolored blackbird (*Agelaius tricolor*), white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), song sparrow ("Modesto population") (*Melospiza melodia*), least Bell's vireo (*Vireo bellii pusillus*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), riparian brush rabbit (*Sylvilagus bachmani riparius*), California tiger salamander (*Ambystoma californiense*), giant garter snake (*Thamnophis*

gigas), Delta smelt (*Hypomesus transpacificus*), longfin smelt (*Spirinchus thaleichthys*), Central Valley steelhead (*Oncorhynchus mykiss*), and valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). Although not included in the CNDDB within the search area, California red-legged frog (*Rana aurora draytonii*), vernal pool fairy shrimp (*Branchinecta lynchi*), and vernal pool tadpole shrimp (*Lepidurus packardi*) were added to Table 3 because they are included in the USFWS IPaC Trust Resource Report (Attachment B).

The project site and surrounding areas may have provided habitat for the special-status wildlife species listed in Table 3 at some time in the past. However, farming, development, and construction and maintenance of roads and utilities, have substantially modified natural habitats within the greater project vicinity. Of the wildlife species identified in the CNDDB, Swainson's hawk, burrowing owl, white-tailed kite, and loggerhead shrike are the only species with potential to occur in the project site on more than a transitory or very occasional basis. These birds are discussed further below because they could be disturbed by noise if they nested in or near the project site during construction.

SWAINSON'S HAWK: The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The Migratory Bird Treaty Act and Fish and Game Code of California 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.

Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, hay, and wheat crops. Most Swainson's hawks are migratory, wintering in Mexico and breeding in California and elsewhere in the western United States. This raptor generally arrives in the Central Valley in mid-March, and begins courtship and nest construction immediately upon arrival at the breeding sites. The young fledge in

early July, and most Swainson's hawks leave their breeding territories by late August.

The CNDDB (2019) contains several records of nesting Swainson's hawk in the greater project vicinity. There are several records of nesting Swainson's hawks within a mile of the project site. There are suitable nest trees near the proposed pipeline alignments and the annual cropland and grasslands in the region provide suitable foraging habitat for this species. Several Swainson's hawks were observed foraging in the fallow fields adjacent and perched in trees near the site during the surveys. An active Swainson's hawk nest was documented in a tree just northeast of the intersection of Yettner Road and South Manthey Road during the July 8, 2019 survey. The adult Swainson's hawks were perched in th tree a few feet above the nest and looking down in to the nest, which is behavior indicative of adults tending to chicks in the nest. The project site is in an area that is heavily utilized by nesting Swainson's hawks and there are likely more nesting territories in trees near the proposed pipeline alignments.

The project is expected to participate in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (HCP) (SJCOG, 2000). Standard Incidental Take Minimization Measures (ITMMs) under the HCP outline protective measures for Swainson's hawk. In the event that construction commences during the nesting season (i.e., if construction starts between March 1 and August 31) and Swainson's hawks are nesting in or adjacent to the site, a construction setback from the nest tree would be required until nesting is complete. The setback is calculated as twice the diameter of the dripline of the nest tree as measured from under the nest, and is usually less than 100 feet. In the event that a Swainson's hawk nests in an off-site tree within the required setback, the area in the setback would be unavailable for construction until the Swainson's hawk nesting season is over. In the event the project does not participate in the HCP, a setback of up to 0.5 mile from active nests may be required, pursuant to California Department of Fish and Game's (CDFG, 1994) Staff Report on Swainson's hawks.

BURROWING OWL: The Migratory Bird Treaty Act and Fish and Game Code of California 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. In urban areas, burrowing owls often utilize artificial burrows including pipes, culverts, and piles of concrete pieces. This semi-colonial owl breeds from March through August, and is most active while hunting during dawn and dusk. There are several records of this species in the CNDDB (2019) search area within a mile of the project site.

The intensity of development and agriculture within and surrounding the site reduces the likelihood of burrowing owls using the site for nesting. No burrowing owls were observed in the project site during the recent survey and no ground squirrel burrows were observed in the site. This species is known to occur in the area and if burrow habitat becomes available in the future, this species may utilize habitats in the site for nesting.

Standard ITMMs under the HCP outline protective measures for burrowing owl. If construction is scheduled to commence outside the nesting season (i.e., if construction starts between September 1 and January 31) and burrowing owls are present on-site, they can be passively relocated. In the event that construction commences during the nesting season and burrowing owls are present on-site, a 250-foot construction setback from the natal burrow would be required until nesting is complete. In the event the project does not participate in the HCP, the same 250-foot setback from active nests would be required, pursuant to CDFG's (2012) Staff Report on burrowing owl.

WHITE-TAILED KITE: White-tailed kite is a State of California Species of Concern, but is not a listed species at the state or federal level. The Migratory Bird Treaty Act and 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 in the general project vicinity and may forage in habitats nearby. Nesting usually commences in the early-spring, concurrent with other resident Central Valley raptors, and most young fledge by early-July. The nearest occurrence of white-tailed kite in the CNDDB (2019) search area is approximately 3 miles northeast of the site. No white-tailed kites were observed foraging or nesting in or adjacent to the project site during the recent survey.

Standard ITMMs under the HCP outline protective measures for white-tailed kite. In the event that construction commences during the nesting season (February 15 to September 15) and white-tailed kites are present on-site, a 100-foot construction setback from the nesting area shall be established and maintained during the nesting season until the young have fledged. In the event the project does not participate in the HCP, a qualified biologist should provide guidance on an appropriate construction setback.

LOGGERHEAD SHRIKE: Loggerhead shrike is a State of California Species of Concern, but is not a listed species at the state or federal level. The Migratory Bird Treaty Act and Fish and Game Code protect loggerhead shrike year-round, as well as their nests during nesting season; nesting for this species peaks from January to July. Loggerhead shrike can be found variable habitats such as agricultural fields, riparian areas, and pastures. Loggerhead shrike breeds mainly in open areas with scattered shrubs and trees dominated.

Shrubs and trees within adjacent to the pipeline alignment may be used or nesting by loggerhead shrike and grasslands nearby may provide suitable foraging habitat for this species. The nearest occurrence of Loggerhead shrike in the CNDDB (2019) search area is approximately 7 miles south of the site.

Standard ITMMs under the HCP outline protective measures for loggerhead shrike. In the event that construction commences during the nesting season and loggerhead shrikes are present on-site, a 100-foot construction setback from the nesting area shall be established and maintained during the nesting season until the young have fledged. In the event the project does not participate in the HCP, a qualified biologist should provide guidance on an appropriate construction setback.

OTHER SPECIAL-STATUS SPECIES: The site does not provide suitable aquatic habitat for any type of fish, giant garter snake, California tiger salamander, or California red-legged frog. There is no emergent wetland habitat in the site for nesting tricolored blackbird, yellow-headed blackbird, or song sparrow. The site lacks riparian habitat vegetation to support riparian brush rabbit or nesting least Bell's vireo. There are no blue elderberry shrubs in the site, precluding the potential occurrence of valley elderberry longhorn beetle. There are no vernal pools or seasonal wetlands in the site for vernal pool branchiopods (i.e., fairy and tadpole shrimp).

CRITICAL HABITAT: The site is not within designated critical habitat for California red-legged frog (USFWS, 2006), California tiger salamander (USFWS, 2005a), federally listed vernal pool shrimp or plants (USFWS, 2005b), delta smelt (USFWS, 1994), valley elderberry longhorn beetle (USFWS, 1980), or Central Valley steelhead (NOAA, 2005) (Attachment D). The west tip of the site abuts designated critical habitat for delta smelt, as the habitat extends far inland from the waterways where this fish actually occurs. The project will not adversely impact delta smelt critical habitat.

Conclusions and Recommendations

- The site consists of highly disturbed habitats along road shoulders and an intensively managed walnut orchard. On-site habitats are biologically unremarkable.

- No potentially jurisdictional Waters of the U.S. or wetlands were observed in or adjacent to the site.

- No sensitive natural communities were observed in the site.

- Due to a lack of suitable habitat, it is unlikely that special-status plants occur in the site.

- With the exception of Swainson's hawk, burrowing owl, white-tailed kite, and loggerhead shrike, no special-status wildlife species are expected to occur in or near the site on more than a very occasional or transitory basis.

- The site does not provide habitat for riparian brush rabbit, giant garter snake, California tiger salamander, California red-legged frog, Fresno kangaroo rat, or blunt-nosed leopard lizard and will have no effect on these special-status amphibians and reptiles. As there are no blue elderberry shrubs in the site, the project will have no effect on valley elderberry longhorn beetle. Due to a lack of vernal pools or seasonal wetlands in the site, the project will have no effect on vernal pool fairy shrimp, longhorn fairy shrimp, or vernal pool tadpole shrimp. As the project will not involve work in rivers or streams and will not change regional drainage patterns, it will have no effect on delta smelt.

- The project site is not within areas that are designated as critical habitat for federally listed species. While the west tip of the site abuts designated

critical habitat for delta smelt, the project will not adversely impact delta smelt or its critical habitat.

- If the project participates in the HCP, standard Take Avoidance measures outlined in the HCP for nesting Swainson's hawks and burrowing owl will be required. These will include pre-construction surveys for nesting Swainson's hawks within 0.5 miles of the site for construction activities between March 1 and September 15 and pre-construction surveys for nesting burrowing owls within 250 feet of the site for construction activities between February 1 through August 31. If active nests are found, temporal restrictions on construction that are specified in the HCP will be be required.

- If the project chooses to not participate in the HCP, pre-construction surveys for nesting Swainson's hawks within 0.5 miles of the project site are recommended if construction commences between March 1 and September 15. If active nests are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction. The determination should be pursuant to criteria set forth by CDFW (CDFG, 1994).

- If the project chooses to not participate in the HCP, pre-construction surveys for burrowing owls within 250 feet of the site are recommended if construction commences between February 1 and August 31. If occupied burrows are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction. The determination should be pursuant to criteria set forth by CDFW (CDFG, 2012).

- Trees, shrubs, and grasslands in and near the site could be used by birds protected by the MBTA and/or Fish and Game Code of California, such as white-tailed kite, loggerhead shrike, and red-winged blackbird. If the project participates in the HCP, standard Take Avoidance measures outlined in the HCP for nesting birds will be required within 14 days of the start of

construction. If active nests are found, restrictions on construction that are specified in the HCP will be required. These setbacks vary by species

- If construction commences during the general avian nesting season (March 1 through July 31), a pre-construction survey for nesting birds protected by the MBTA and/or Fish and Game Code of California will be required. If active nests are found, work in the vicinity of the nest will be delayed until the young fledge.

Thank you, again, for asking Moore Biological Consultants to assist with the project. Please call me at (209) 745-1159 with any questions.

Sincerely,

Diane S. Moore, M.S.
Principal Biologist

References and Literature Consulted

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Attachment A

VA Clinic Site Plan

& Conceptual Utility Alignments Plan



Figure 5
PROPOSED CBOC & CLC PROJECT



VA OFF-SITE IMPROVEMENTS PROJECT

(green) Water Line
(red) Sewer Line

Attachment B

CNDDB Summary Report and Exhibits

& USFWS IPaC Trust Report

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Stockton East (3712182) OR Stockton West (3712183) OR Lathrop (3712173) OR Manteca (3712172))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Blepharizonia plumosa big tarplant	PDAST1C011	None	None	G1G2	S1S2	1B.1
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Brasenia schreberi watershield	PDCAB01010	None	None	G5	S3	2B.3
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Chloropyron palmatum palmate-bracted bird's-beak	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
Cirsium crassicaule slough thistle	PDAST2E0U0	None	None	G1	S1	1B.1
Delphinium recurvatum recurved larkspur	PDRAN0B1J0	None	None	G2?	S2?	1B.2
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Eryngium racemosum Delta button-celery	PDAPI0Z0S0	None	Endangered	G1	S1	1B.1
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Hibiscus lasiocarpos var. occidentalis woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
Hypomesus transpacificus Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Lathyrus jepsonii var. jepsonii Delta tule pea	PDFAB250D2	None	None	G5T2	S2	1B.2
Lytta moesta moestan blister beetle	IICOL4C020	None	None	G2	S2	
Melospiza melodia song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Sylvilagus bachmani riparius riparian brush rabbit	AMAEB01021	Endangered	Endangered	G5T1	S1	
Symphyotrichum lentum Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Trichocoronis wrightii var. wrightii Wright's trichocoronis	PDAST9F031	None	None	G4T3	S1	2B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Xanthocephalus xanthocephalus yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 32

Suisun Marsh aster
Mason's lilaeopsis
Mason's lilaeopsis
Mason's lilaeopsis
Mason's lilaeopsis
Suisun Marsh aster
woolly rose-mallow
alkali milk-vetch
Sanford's arrowhead
big tarplant
palmate-bracted bird's-beak heartscale San Joaquin spearscale
watershield
saline clover
Delta tule pea
Delta button-celery
recurved larkspur
Project Site
slough thistle
Delta button-celery
Wright's trichocoronis
slough thistle
t Valley Cottonwood Riparian Forest
Delta button-ce
Great Valley Mixed Rip
Elderberry Savanna

CNDDB PLANT

VA Off-Site Improvements Project

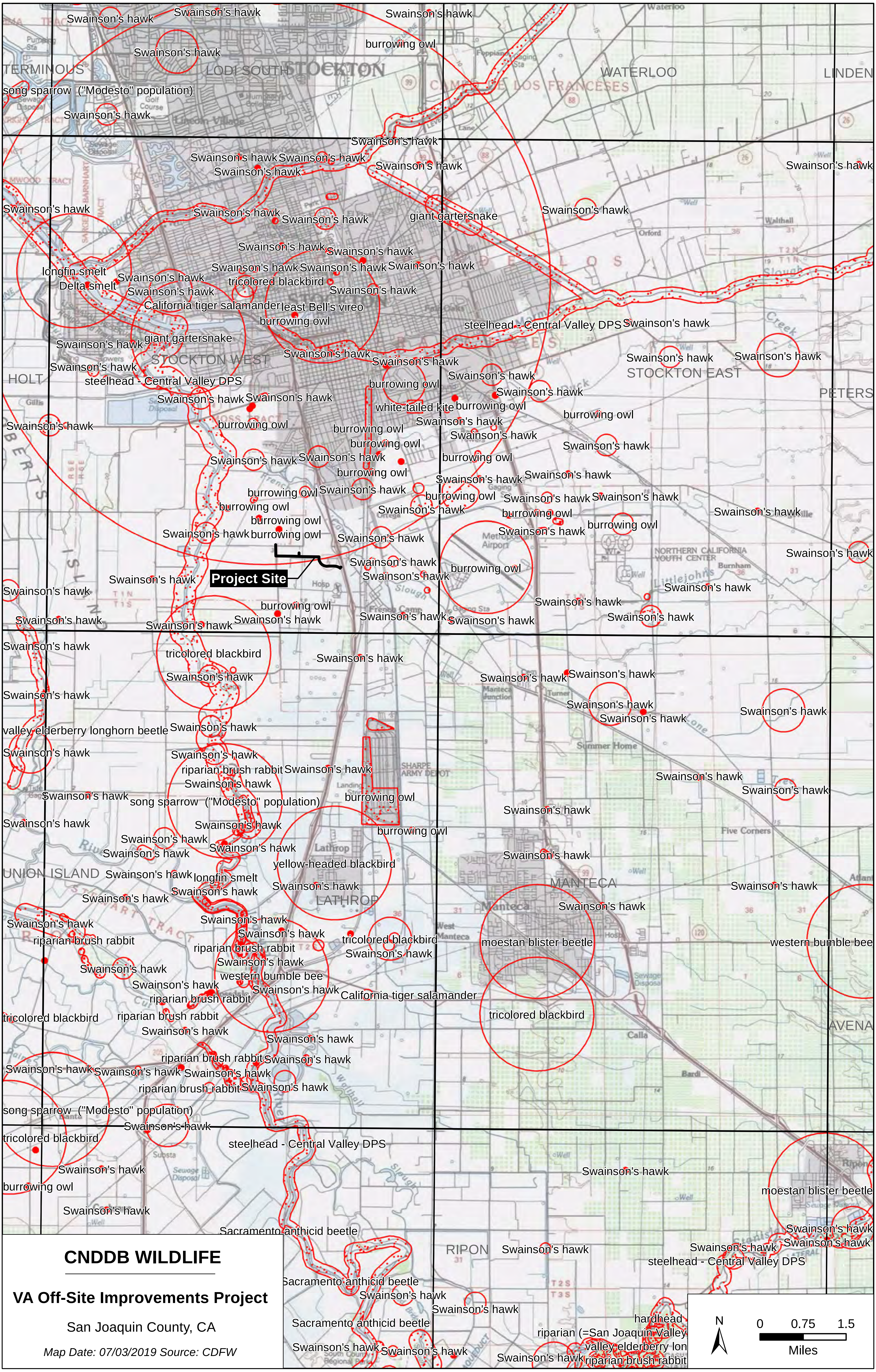
San Joaquin County, CA

Map Date: 07/03/2019 Source: CDFW

N

0 0.75 1.5

Miles



CNDDB WILDLIFE

VA Off-Site Improvements Project

San Joaquin County, CA

Map Date: 07/03/2019 Source: CDFW

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

San Joaquin County, California



Local offices

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

San Francisco Bay-Delta Fish And Wildlife

(916) 930-5603
(916) 930-5654

650 Capitol Mall
Suite 8-300
Sacramento, CA 95814

http://kim_squires@fws.gov

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Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Riparian Brush Rabbit Sylvilagus bachmani riparius — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6189

Reptiles

NAME	STATUS
Giant Garter Snake Thamnophis gigas No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS

NOT FOR CONSULTATION

Vernal Pool Fairy Shrimp Branchinecta lynchi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Large-flowered Fiddleneck Amsinckia grandiflora There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/5558	Endangered
Palmate-bracted Bird's Beak Cordylanthus palmatus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1616	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Delta Smelt Hypomesus transpacificus https://ecos.fws.gov/ecp/species/321#crithab	Final

NOT FOR CONSULTATION

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

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NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Burrowing Owl *Athene cunicularia* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9737	Breeds Mar 15 to Aug 31

Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Long-billed Curlew Numenius americanus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Song Sparrow Melospiza melodia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee Pipilo maculatus clementae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

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Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

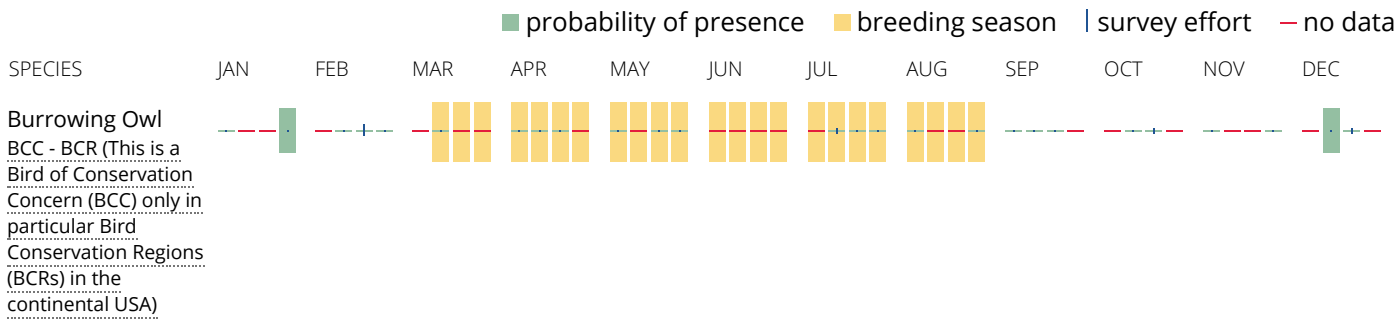
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

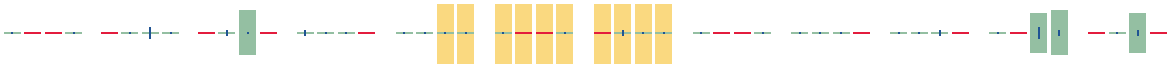
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



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Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



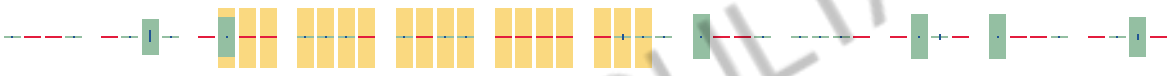
Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



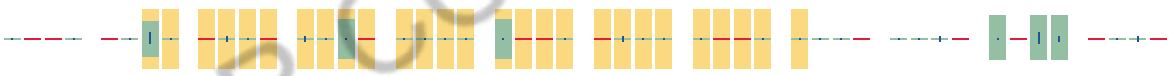
Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



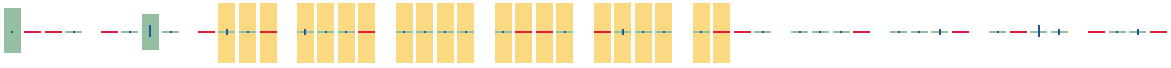
Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

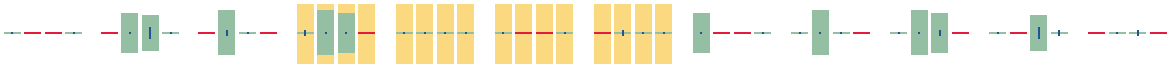


Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



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Yellow-billed Magpie
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

- PEM1Cx
- PEM1A

FRESHWATER FORESTED/SHRUB WETLAND

- PFOC
- PFOR

FRESHWATER POND

- PABHx

RIVERINE

- R1UBV
- R5UBFx
- R4SBC
- R5UBF

A full description for each wetland code can be found at the National Wetlands Inventory website

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Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Attachment C

Photographs



East edge of the site, looking southwest toward South Manthey Road; 07/08/19. The edges of the roads within the project site contain ruderal weeds.



Large tree within a pasture north of South Manthey Road in the east part of the site, looking northeast; 07/08/19. Two Swainson's hawks were seen flying over and perching on this tree.



Weedy road shoulder on the north edge of South Manthey Road, looking west from the east edge of the site; 07/08/19. There is no road-side ditch along South Manthey Road.



Bare dirt and weedy road shoulder on the south edge of South Manthey Road, looking west from the east edge of the site; 07/08/19.



Large tree associated with the residence at the northwest corner of Yettner Road and South Manthey Road, looking northeast; 07/08/19. A Swainson's hawk is currently nesting in this tree.



Approximate Swainson's hawk nest lcoation in the tree mentioned above, looking northwest; 07/08/19. Two adult Swainson's hawks were seen observed perched above the nest.



Approximate area in the west part of the site where the pipeline will be placed through an orchard, looking west from the west end of Yettner Road; 07/08/19.



Large water tanks near the west end of Yettner Road, looking north; 07/08/19. A majority of the fields surrounding the project site are fallow and contain ruderal vegetation.



Road shoulder on the east edge of South Wolfe Road, looking north; 07/08/19. The pipeline will be installed along one of the road shoulders along South Wolfe Road.



Road shoulder on the west edge of South Wolfe Road, looking north; 07/08/19. The road shoulders along South Wolfe Road contains weedy ruderal vegetation.



West end of the site where the pipeline will lay through the orchard, looking east from South Wolfe Road; 07/08/19. The dashed line represents an approximate location of the pipeline.



Northwest part of the site where the pipeline will tie into an existing pipeline, looking north toward the intersection of French Camp Road and South Wolfe Road.

Attachment D

Designated Critical Habitat

Steelhead
Delta smelt

TERMINOUS
LODI SOUTH
WATERLOO
HOLT
STOCKTON WEST
STOCKTON EAST
PETERS
Project Site
UNION ISLAND
LATHROP
MANTECA
AVENA
RIPON
SALIDA

CRITICAL HABITAT

VA Off-Site Improvements Project

San Joaquin County, CA

Map Date: 07/03/2019 Source: USFWS

N
0 0.75 1.5
Miles

APPENDIX D
CULTURAL RESOURCES REPORT
(REDACTED VERSION)

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Suisun, CA 94585-2064

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www.solanoarchaeology.com

CULTURAL RESOURCES TECHNICAL MEMORANDUM

Date: July 26, 2019

To: Basecamp Environmental, Inc.

From: Solano Archaeological Services

Subject: Cultural Resources Study – Veteran's Administration Off-Site Improvements Project, San Joaquin County, California

INTRODUCTION

This technical memorandum summarizes the background research, Native American outreach, pedestrian survey, and findings for the Veteran's Administration (VA) Off-Site Improvements Project (the Project) located in San Joaquin County, California (Figure 1). The Project is subject to California Environmental Quality Act (CEQA) requirements, and Solano Archaeological Services (SAS) has prepared this technical memorandum to support those needs.

PROJECT LOCATION

The project alignment extends from a point on Manthey Road, the Interstate 5 frontage road, along and within the existing Manthey Road right-of-way to Yettner Road, then west along Yettner Road and the extension of Yettner Road through undeveloped agricultural land to South Wolfe Road, and then north along Wolfe Road to its intersection with French Camp Road at the south boundary of the City of Stockton, near the community of French Camp in San Joaquin County (Attachment A, Figure 1). The project area is situated on the Stockton West, California U.S. Geological Survey (USGS) topographic quadrangle in Township 1 North, Range 6 East, sections 1, and 13 and an un-sectioned land grant parcel (Attachment A, Figure 2).

PROJECT DESCRIPTION

The VA proposes to construct and operate a Community Based Outpatient Clinic and Community Living Center CBOC-CLC), with associated improvements, on approximately 37 acres of a 58.5-acre site located west of Manthey Road immediately south of the City of Stockton. The CBOC-CLC Project includes importation of approximately 180,000 cubic yards of fill to reduce flood exposure. The Project, located on federal land in the unincorporated area of San Joaquin County, requires wastewater and water services, which will be provided by the City of Stockton as documented in the City's will-serve and special conditions letters to the VA.

The City proposes to construct approximately 1.1 miles of 18-inch-diameter potable water trunk line and 1.4 miles of wastewater trunk line approximately 16 inches in diameter to serve the CBOC-CLC. In addition, the City proposes to extend the proposed water line approximately 700 feet west to an existing water trunk link in Wolfe Road (Attachment A, Figure 3). These proposed "off-site" facilities would meet the needs of the VA project as well as other future urban development south of French Camp Road as provided in the recently updated Stockton General Plan. This work is known, for the purposes of this proposal, as the "Off-Site Improvements Project."

The VA has considered the potential environmental effects of the CBOC-CLC and the City's proposed off-site utilities under NEPA in an Environmental Assessment (Department of Veteran's Affairs 2018). The City of Stockton's agreement to design, permit and construct the Off-Site Improvements Project is, however, subject to fulfillment of CEQA environmental review requirements. The City is the project proponent and Lead Agency under CEQA for these improvements. The City has considered whether the VA's NEPA Environmental Assessment could or should substitute for a separate City CEQA review. The City has determined that it must conduct its own CEQA review process and that the appropriate CEQA document is a Supplement to the City's recently-adopted General Plan Environmental Impact Report.

REGULATORY SETTING

CEQA requires that public agencies having authority to finance or approve public or private projects assess the effects of the projects on cultural resources. Cultural resources include buildings, sites, structures, objects, or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance. CEQA states that if a proposed project would result in an effect that may cause a substantial adverse change in the significance of a significant cultural resource (termed a "historical resource"), alternative plans or mitigation measures must be considered. Because only significant cultural resources need to be addressed, the significance of cultural resources must be determined before mitigation measures are developed.

CEQA §5024.1 (Public Resources Code §5024.1) and §15064.5 of the State CEQA Guidelines (14 California Code of Regulations [CCR] §15064.5) define a historical resource as "a resource listed or eligible for listing on the California Register of Historical Resources." A historical resource may be eligible for inclusion in the California Register of Historical Resources (CRHR) if it:

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

In addition, CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, and "unique archaeological resources." An archaeological resource is considered "unique" if it:

- Is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory;
- Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
- Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
- Is at least 100 years old and possesses substantial stratigraphic integrity; or
- Involves important research questions that historical research has shown can be answered only with archaeological methods (Public Resources Code §21083.2).

According to the State CEQA Guidelines, a project with an effect that may cause a substantial adverse change in the significance of a historical resource or a unique archaeological resource is a project that may have a significant effect on the environment (14 CCR §15064.5[b]). CEQA further states that a

substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

The State CEQA Guidelines (14 CCR §15064.5[e]) also require that excavation activities be stopped whenever human remains are uncovered, and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of a Native American, the Native American Heritage Commission must be contacted within 24 hours, and the provisions for treating or disposing of the remains and any associated grave goods as described in CCR §15064.5 must be followed.

NATURAL AND CULTURAL SETTING

Existing Environment

The project area lies in the Central Valley, which geologically is filled several kilometers deep with alluvial soils washed down from the Sierra Nevada. The northern portion of the valley is drained by the Sacramento River, and the southern portion by the San Joaquin River. The project area lies approximately 2.0 miles east of the San Joaquin River which constitutes the eastern boundary of Roberts Island and is situated in a watershed consisting of a series of tributary sloughs and creeks. Prehistoric populations were concentrated along these river and creek channels as these were rich with natural resources.

The project area is situated within the climactic band classified as the Lower Sonoran Zone (Storer and Usinger 1970). The climatic pattern is characterized as Mediterranean, with cool, wet winters and hot, dry summers. Locally, this consists of approximately 17 inches of annual rainfall, high summer temperatures, and low humidity. The dominant vegetative communities in this area are prairie grasslands and tule marshes, with some areas of riparian woodland (Kuchler 1977). Valley oak (*Quercus lobata*), cottonwood (*Populus fremontii*), sycamore (*Platanus racemosa*) and willow trees (*Salix spp*.) once grew on the verge of streams and rivers. These differing vegetative zones provided prehistoric populations with a diverse set of natural resources that were regularly exploited.

Faunal species that frequented the prehistoric prairie grasslands and tule marshes included mule deer (*Odocoileus hemionus*), tule elk (*Cervus elaphus*), pronghorn antelope (*Antilocapra americana*), weasel (*Mustela frenata*), river otter (*Lutra canadensis*), raccoon (*Procyon lotor*), and beaver (*Castor canadensis*). Migratory waterfowl such as Canada geese (*Branta canadensis*) and swans (*Olor sp.*) passed through during the winter, joining great blue and black-crowned herons (*Ardea herodias, Nycticorax nycticorax*), ibis (*Plegadis guarauna*), cranes (*Grus canadensis*), cormorants (*Phalacrocorax* sp.), and bald eagles (*Haliaetus leucocephalus*). Badgers (*Taxidea taxus*), coyotes (*Canis latrans*), skunks (*Mephitis mephitis*), jackrabbits (*Lepus californicus*), and cottontail rabbits (*Sylvilagus audubonii*) inhabited higher ground. Within the waterways, Chinook salmon (*Oncorhynchus tshawytscha*), steelhead trout (*Salmo gairdneri*), Pacific lamprey (*Lampetra tridentate*), and white sturgeon (*Acipenser transmontanus*) seasonally joined other fish species indigenous to the area. Predators such as mountain lions (*Felis concolor*), grizzly bears (*Ursus arctos*), wolves (*Canis lupus*), kit fox (*Vulpes macrotis*), and bobcats (*Lynx rufus*) also roamed the area (Moratto 1984).

Prehistoric Setting

Various syntheses have been proposed for the project area region over the past 80 years. In an attempt to unify the various hypothesized cultural periods in California, Fredrickson (1973, 1974, and 1993) proposed an all-encompassing scheme for cultural development, while acknowledging that these general trends may manifest themselves differently and there may be some variation between sub-regions. Fredrickson also recognized that the economic/cultural component of each pattern could be manifested in neighboring geographic regions according to the presence of stylistically different artifact assemblages. He introduced the term aspect as a cultural subset of the pattern, defining it as a set of historically related technological and stylistic cultural assemblages.

The earliest well-documented entry and spread of humans into California occurred at the beginning of the **Paleo-Indian Period (10,000–6,000 B.C.)**. Social units are thought to have been small and highly mobile. Known sites have been identified in the contexts of ancient pluvial lake shores and coast lines. Prehistoric adaptations over the ensuing centuries have been identified in the archaeological record by

numerous researchers working in the area since the early 1900s, as summarized by Fredrickson (1974) and Moratto (1984).

Few archaeological sites have been found in the Valley that date to the Paleo-Indian or the **Lower Archaic (6,000–3,000 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)**. Exchange systems become more complex and formalized and evidence of regular, sustained trade between groups was seen for the first time.

Several technological and social changes characterized the **Emergent Period (A.D. 700–1800)**. The bow and arrow were introduced, ultimately replacing the dart and atlatl. Territorial boundaries between groups became well established. It became increasingly common that distinctions in an individual's social status could be linked to acquired wealth. Exchange of goods between groups became more regularized with more goods, including raw materials, entering into the exchange networks.

The Middle and Upper Archaic and Emergent Periods are further broken down under the Central California Taxonomic System. These three time periods are well represented in archaeological assemblages in the general vicinity of the project area. The assemblages are discussed in detail in Bennyhoff and Fredrickson (1994) and Moratto (1984) and summarized here.

The **Windmiller Pattern (3,000–500 B.C.)** of archaeological assemblages included an increased emphasis on acorn use as well as a continuation of hunting and fishing activities. Ground and polished charmstones, twined basketry, baked-clay artifacts and worked shell and bone were hallmarks of Windmiller culture. Widely ranging trade patterns brought goods in from the Coast Ranges and trans-Sierran sources as well as closer trading partners.

The **Berkeley Pattern (500 B.C.–A.D. 700)** represented a greater reliance on acorns as a food source than was seen previously. Distinctive stone and shell artifacts distinguished it from earlier or later cultural expressions. Minimally shaped mortar and pestle technology was much more prevalent than mano/metate.

The **Augustine Pattern (A.D. 700–1800)** was marked by increasing populations resulting from more intensive food procurement strategies, as well as a marked change in burial practices and increased trade activities. Intensive fishing, hunting and gathering, complex exchange systems and a wider variety in mortuary patterns were all hallmarks of this period. Mortars and pestles were more carefully shaped; bow and arrow technology was present. Fishing implements became more common, trade increased and cremation was used for some higher status individuals.

Ethnographic Setting

The project area is located in Northern Valley Yokuts ethnographic territory. 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 (Wallace 1978). Information on the Yokuts' lifeways has been compiled by ethnographers from various sources; primarily military and missionary reports and diaries written during the Spanish and Mexican periods.

Ethnographically, 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 Yokuts' western boundary (Wallace 1978); the eastern edge would have lain along the Sierra Nevada foothills. The late prehistoric Yokuts may have been the largest ethnic group in pre-contact California.

The Northern Valley Yokuts were organized into at least 11 small political units or tribes (Wallace 1978). 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 (Wallace 1978).

Northern Valley Yokuts material culture included a wide range of implements. Acorn mortars were pecked into bedrock outcrops or could be made from oak to be more portable; pestles were frequently irregular or somewhat crude and were often left in place at bedrock outcrops (Kroeber 1925). Smaller mortars may have been used for tobacco or medicine. Snares, bows and spears were used in hunting, sometimes as part of organized animal drives or after being lured in with decoys. Fish were speared, netted or poisoned then gathered. Tule boats were used on rivers and lakes. Basketry took a wide variety of forms, as did cradle types. Clay cooking balls were used to replace scarce stone in the upper Valley.

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. Cook (1955) attempted to identify San Joaquin Valley village and tribal groups based on early accounts from Spanish explorers and Mission records. Many Yokuts were lured or captured by missionaries and taken to Mission San Jose or Santa Clara. The malaria epidemic of 1833 decimated the indigenous population, killing thousands of the tribesmen. The influx of Europeans during the gold rush era further reduced the population because of disease and violent relations with the miners. Though there was no gold in the Yokuts territory, miners passing through on their way to the diggings caused a certain amount of upheaval. Former miners, who had seen the richness of the San Joaquin Valley on their way east later returned to settle and farm the area (Wallace 1978).

Historic Setting

The Spanish, and later Mexican, governments of California tried to encourage settlement by awarding large plots of land, called ranchos, to prominent men; the eastern-most terminus of the project area is on the border of one such grant, Charles M. Weber's *El Campo De Los Franceses* land grant. Captain Weber was a German immigrant who left his native land in 1836. After stays in New Orleans and Salt Lake City, Weber made his way to Sutter's Fort where he was employed as overseer and general assistant to John Sutter. Eventually he made a trip to San Jose sometime during 1841, where he struck up a partnership with Guillermo Gulnac. In 1842, they built and opened a flourmill and made sea biscuits. In 1843 Gulnac obtained a land grant of 48,000 acres near French Camp and raised cattle (Cook 1975). This became known as *Campo de los Franceses* (Beck and Haase 1974).

Weber moved from San Jose to Stockton in 1847, after Gulnac gave him a half interest in the rancho. Weber could not himself obtain a land grant because he was not a Mexican citizen, but purchased the other half interest from Gulnac after the end of the Mexican Period. Webber also convinced several other settlers to locate to this area by offering them land (Cook 1975). In 1868 the Central Pacific Railroad Company announced their intentions to build a rail yard in Lathrop, near Weber's rancho. Chinese labor was brought in to do the work, and a settlement grew up around the rail yard (Cook 1975).

One of the key components to the settlement of the San Joaquin Valley was the availability of transportation, addressed in the 1870s when the Central Pacific Railroad constructed its line through the San Joaquin Valley to reach southern California. This revolutionized the transportation network, 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, with the expansion of large-scale irrigation in the early 1900s came the production of a variety of fruits and vegetables, vineyards, alfalfa, and cotton, among other crops (Jelinek 1982).

The establishment of a state highway system in the early-to-mid 1900s was the next major transportation development. This included two north-south highways through the Central Valley. One corresponded to today's State Route 99 in the interior; the second to U.S. Highways 1 and 101 along the western 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 (Berlo 1998).

Weber founded the City of Stockton in 1850, and the City incorporated that same year. While Weber drafted subdivision maps of the City of Stockton as early as 1849, greater portions of the City developed around the 1860s and 1870s. During the latter part of the 19th century, the manufacture of agricultural tools and equipment became a major industry in Stockton. Several new inventions from the region revolutionized farming techniques, including the Stockton Gang Plow and the Marvin Combined Harvester (or combine). Benjamin Holt founded the Stockton Wheel Company which eventually became the Holt Manufacturing Company in 1883. The Holt Company thrived as it supported the regional agricultural industry and excelled with its innovative farm machinery. Following the introduction of rail service to the area, Stockton continued to expand. By the conclusion of the 19th century, the City witnessed increased commercial activity as a hub of transportation and agriculture on the Sacramento/San Joaquin Delta (ICF 2008).

The community of French Camp (California State Historic Landmark 668) started out as the southernmost of the Hudson's Bay Company's outposts in California. The Company's southern fur brigades were sent out from Fort Vancouver (now Vancouver, Washington) and this camp was founded by Michel Laframboise in 1832. The camp's name was continued following the creation of Weber's *Campo de los Franceses.*

French Camp was also known as *Castoria*; the Latin word for beaver being "castor", reflecting its central role in the early California fur trade (Gudde 1949). French Camp was strategically sited at the southern end of the southernmost slough (which became known as French Camp Slough) of the Sacramento-San Joaquin Delta, maximizing the use of the waterway for ease of transportation. A trail led off from the site to the southeast into the foothills of the Sierra Nevada. It was subsequently used as an alternate route for the Mariposa Road, part of the Stockton-Los Angeles Road, especially favored during the rainy season because of its exceptional drainage. The route was eventually paved and exists today as "French Camp Road".

NATIVE AMERICAN COMMUNITY OUTREACH

California Public Resources Code (PRC) Sections 21080.1, 21080.3.1, and 21080.3.2 (AB 52) requires public agencies to consult with the appropriate California Native American tribes identified by the NAHC for the purpose of mitigating impacts to cultural resources. In order to comply with the PRC, on June 15, 2019 SAS emailed a letter and a map depicting the project area to the Native American Heritage Commission (NAHC). The letter requested a records search of the Sacred Lands File (SLF) for the project area, and for a list of local Native American tribal groups that should be contacted about the Project. On June 21, 2019, Ms. Katy Sanchez, Associate Environmental Planner for the NAHC, replied in an emailed letter that SLF record search results indicated that no Sacred Lands were known to be present in the project area, and that the Northern Valley Yokuts Tribe need to be contacted for more information. Ms. Sanchez provided a list of Native American community representatives to contact regarding Project recommendations and information on unrecorded cultural resources that may exist within or adjacent to the project area. On July 9, 2019, SAS contacted Ms. Katherine Erolinda Perez, Chair of the North Valley Yokuts Tribe – the only contact provided by the NAHC. Ms. Perez considers the project area and surrounding vicinity sensitive for exhibiting traces of early Native American activities and habitation. She recommended archaeological monitoring of Project ground-disturbances and provided a series of mitigation measure and recommendation documents applicable to the proposed Project.

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM (CHRIS) RECORDS SEARCH

On June 5th, 2019, a records search request was emailed to the Central California Information Center (CCIC), of the California Historical Resources System at California State University, Stanislaus. The CCIC conducted a search of the its archives (I.C. file No. 10858L) for information on previously known or recorded cultural resources within the project area and a half-mile radius. The CCIC review included but was not necessarily restricted to the following sources:

- the *National Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation 2002 and updates);

- the *California Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation 2002 and updates);
- the *California Historical Landmarks* (California Office of Historic Preservation 1996);
- the *California Points of Historical Interest* (California Office of Historic Preservation 1992);
- the *California Inventory of Historic Resources* (California Department of Parks and Recreation 1976 and updates); and
- pertinent historical inventories including historic maps and plat maps.

In a letter dated June 7th, 2019 the CCIC provided SAS with the records search results. According to the CCIC, no formally recorded prehistoric or historic-era cultural resources are known to be present directly within the project area alignment. However, 14 cultural resources have been formally documented within the half-mile search radius along with one informally recorded site (Bridge 29C0124) (Table 1). In addition, 18 previous cultural resources investigations were conducted within one half-mile of the project area (Table 2), and two of these studies (SJ-05746, and SJ-08752) covered approximately 50% of the current Project alignment (Table 3). An additional study, and one not noted by the CCIC, was the 2018 VA Environmental Assessment which addressed cultural resources issues relevant to the project area (Table 3).

Table 1. Previously Documented Resources Within a Half-Mile Radius of the Project Area

Site No. (P-39-00-)	Recorder	Site Description	Date Originally Recorded
4376	C. Havelaar – Jones & Stokes	Historic-era building	2002
4518	M. Lanz – Jones & Stokes	Historic-era building	2001
4519	D. Byrd – Jones & Stokes	Historic-era building	2002
4520	D. Byrd – Jones & Stokes	Historic-era building	2002
4522	M. Lanz – Jones & Stokes	Historic-era building	2001
4523	M. Lanz – Jones & Stokes	Historic-era building	2001
4524	M. Lanz – Jones & Stokes	Historic-era building	2001
4525	M. Bowen – Jones & Stokes	Historic-era building	2000
4526	D. Byrd – Jones & Stokes	Historic-era building	2002
4527	M. Lanz – Jones & Stokes	Historic-era building	2001
4528	M. Lanz – Jones & Stokes	Historic-era building	2001
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]			
n/a	n/a	Caltrans Local Agency Bridge 29C0124	2015

Table 2. *Previously Conducted Studies within a Half Mile Radius of the Project Area*

Report #	Author	Title	Date
SJ-00729	D. Chavez	Cultural Resource Evaluation for the Manteca Wastewater Project, San Joaquin County, California	1981
SJ-00752	L.H. Mounday	An Archaeological Assessment of the San Joaquin General Hospital Wastewater Consolidation Project	1976
SJ-00777	L.K. Napton	Cultural Resource Investigation of the Proposed 1300-Acre Weston Ranch Residential Development, City of Stockton, San Joaquin County, California.	1986
SJ-00786	L.K. Napton	Cultural Resources Investigation of the Proposed Weston Ranch Levee Improvement Project, San Joaquin County, California.	1988
SJ-00823	A. Peak	Cultural Resource Assessment of the Proposed Stockton Reuse Project, San Joaquin County, California	1980
SJ-02800	L.K. Napton	Cultural Resources Investigation of the Proposed Arch/Sperry Specific Road Plan Project, Stockton, San Joaquin County, California.	1996
SJ-03995	W.J. Nelson	Cultural Resource Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield	2000
SJ-04192	P.M. Jensen	Archaeological Inventory Survey: Seven Proposed School Sites within the San Joaquin School System, San Joaquin County, California.	2000
SJ-04284	W.L. Norton	Department of Transportation Negative Archaeological Survey Report: 10-San Joaquin-Interstate 5, P.M. 22.33, EA 10-937181.	2001
SJ-04952	S. Davis-King	Negative Archaeological Survey Report, 10-SJO-El Dorado Street Resurfacing, Project No. STPL-5929 (144) 1. Historic Property Survey Report Negative Findings.	2003
SJ-05746a	Jones & Stokes	Historical Resource Evaluation Report for the I-5/French Camp Road Interchange and Sperry Road Extension Project, 10-SJ-5-KP 35.6/38.1, District 10, San Joaquin County, EA 10-OE4900	2004
SJ-05817	C. Losee	Collocation ("CO") Submission Packet, FCC Form 621, Cingular Wireless French Camp, AWS 006110-A.	2005
SJ-06319	K. Bartoy	Letter RE: Archaeological Survey Report for Prometheus Energy Wolfe Road Facility, French Camp, San Joaquin County, California.	2006
SJ-06345	SWCA Envt. Consultants	Cultural Resources Final Report of Monitoring and Findings for the QWest Network Construction Project, State of California. SWCA Project No. 10715-180.	2006
SJ-06643	URS Corp.	Technical Report, Final: Cultural Resources Report for Geotechnical Evaluation of the Reclamation District 17 Supplemental Explorations.	2008
SJ-06864	S.M. Jensen	Archaeological Inventory Survey, DMC Development Project, c. 60 Acres, South of French Camp Slough, San Joaquin County, CA	2008
SJ-07066	S.M. Jensen	Archaeological Inventory Survey Wolfe Road Project c. One Mile Linear Corridor, San Joaquin County, California	2009

SJ-08573	W. Nolan-Wheatley	Cultural Resources Assessment for Union Pacific Railroad Bridge Replacement, Milepost 88.32, Fresno Subdivision, Stockton, San Joaquin County, CA	2015

Table 3. Previously Conducted Studies in the Project Area

Report #	Author	Title	Date
SJ-05746	Jones & Stokes Associates	Historic Property Survey Report for the I-5/French Camp Road Interchange and Sperry Road Extension Project, 10-SJ-5-KP 35.6/38.1, District 10, San Joaquin County.	2004
SJ-08752	B. Marks – ESA Inc.	Phase I Cultural Resources Assessment for Arnaiz Site Alternative - Veterans Affairs Outpatient Clinic Project, San Joaquin County, California	2011
n/a	U.S. Dept. of Veteran's Affairs	Draft Environmental Assessment for Proposed Community Based Outpatient Clinic and Community Living Center	2018

The most recent study to incorporate the project area was conducted for the 2018 EA prepared by the VA. The cultural resources investigation conducted for the EA noted that no previously recorded prehistoric or historic-era cultural resources were known to exist in the project area. The EA also did not make note of any documented significant Native American properties within or near the project area but provided direction for Native American community consultation.

FIELD SURVEY

Methods

On July 2nd, 2019, SAS archaeologists Jason A. Coleman (M.A., Registered Professional Archaeologist # 15338) and Susan Talcott (M.A.) conducted an intensive pedestrian survey of the project area. All rodent burrows and areas of freshly disturbed soils were carefully inspected for cultural material. A 1-2-meter accurate Trimble GPS unit was utilized for verifying project area boundaries, and digital photographs were taken to document the inventory. Cultural resources were documented utilizing State of California Department of Parks and Recreation forms (523 series).

Results

The majority of the project area consisted of paved roadways and immediately adjacent shoulders, limiting ground surface visibility to approximately 0-5% in most areas. No prehistoric sites, features, or artifacts were encountered during the survey. No historic-era artifacts were noted although two historic-period roadways were documented. Site records for these two road alignments are provided in Attachment B.

SAS-001: South Wolfe Road Segment

This resource consists of a historic-era road segment identified on the 1913 *Stockton, California* USGS 7.5' topographic quadrangle. The 1931 topographic quadrangle map depicts the road but it was unnamed at the time. The name Wolfe Road first appears on the 1954 Stockton West 7.5' quadrangle. No historic-era artifacts were found associated with the site, and no information on the road's namesake was found.

SAS-002: Yettner Road Segment

This resource consists of a historic-era 1,744-foot-long road segment identified on the 1913 *Stockton, California* USGS 7.5' topographic quadrangle. The 1931 topographic map depicts the road but it was unnamed at the time. On the same 1931 map, Yettner Road extended an additional 2,170-feet further west where it terminated at its intersection with Wolfe Road (SAS-001). This recorded segment's western terminus lies just east of where the old western section of Yettner Road was abandoned. This segment's eastern terminus lies at the intersection with Manthey Road 1,744-feet further east. On the 1954 *Stockton West* 7.5' quadrangle the name of this recorded segment was McDougald Road. Sometime between 1969 and 1970 (according to the quadrangles) the road was given a name change to Yettner Road which has remained to the present day.

RESOURCE ASSESSMENT

Although they may have been and continue to be important local transportation routes, archival and field research do not suggest that either the Wolfe Road or Yettner Road segments are directly associated with any specific historical event important in California history. As a result, SAS recommends both resources not eligible for listing on the CRHR under Criterion 1. In addition, neither alignment appears to be associated with any person or persons who played significant roles in California history. Consequently, SAS recommends these roadways not eligible for CRHR listing under Criterion 2. These types of local roads are ubiquitous in the area and throughout California and no information has been uncovered suggesting that they are the oldest or best examples of their kind or that they were designed or built by a recognized master. Due to this lack of association, SAS recommends both road alignments not eligible for CRHR listing under Criterion 3. Lastly, the current level of research appears to have exhausted the data potential of these two resources and no important scientific or historic information is likely to be uncovered as a result of further study. As a result, SAS recommends these two roadways not eligible for CRHR listing under Criterion 4.

RECOMMENDATIONS

Archival research conducted through the CCIC indicates that no previously documented prehistoric or historic-era cultural resources were known to be present within or immediately adjacent to the project area. Similarly, the NAHC SLF review indicated that no recorded sacred lands were known to exist within or near the project area. However, due to the general archaeological sensitivity of the project area and surrounding vicinity, SAS and Ms. Katherine Erolinda Perez from the Northern Valley Yokuts recommend that all ground disturbing Project activities be monitored by a qualified archaeologist and a Native American community representative.

In the event that presently undocumented buried archaeological deposits are encountered during any Project-associated construction activity, work must cease within a 50-foot radius of the discovery. A qualified archaeologist must be retained to document the discovery, assess its significance, and recommend treatment. If human remains or any associated funerary artifacts are discovered during construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the San Joaquin County Sheriff/Coroner must be contacted immediately. If the Coroner determines the remains to be Native American, the Coroner will notify the Native American Heritage Commission, which will in turn appoint a Most Likely Descendent (MLD) to act as a tribal representative. The MLD will work with the Applicant and a qualified archaeologist to determine the proper treatment of the human remains and any associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via Project construction design change.

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ATTACHMENT A

Figures

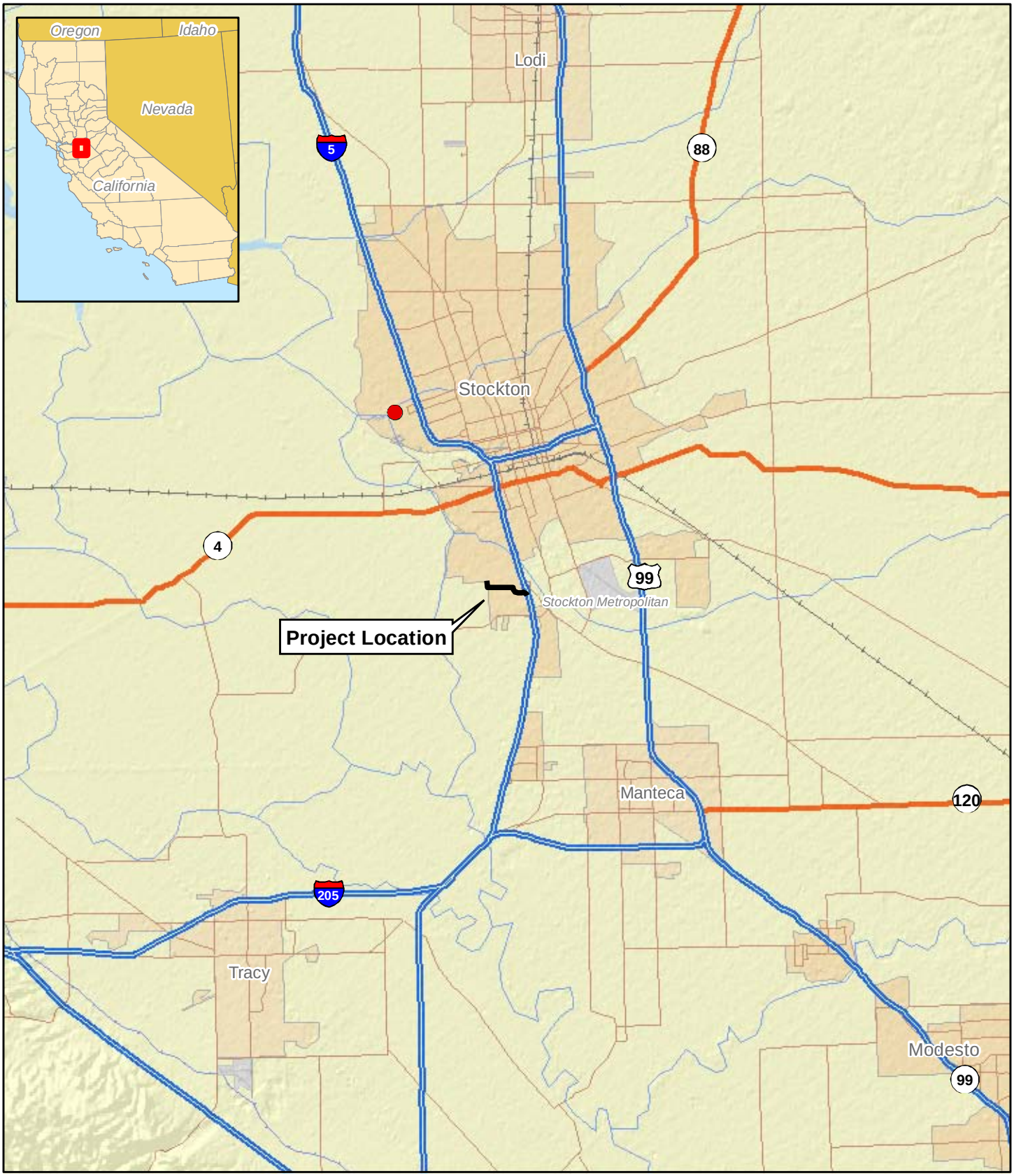


Figure1. Project Vicinity Map.

VA Off-Site Improvements Project Area

Sources: *USA Base Map* [layer],*Data and Maps* [CD]. ESRI, 2006.

1:250,000

0 3 Miles

0 6 Kilometers

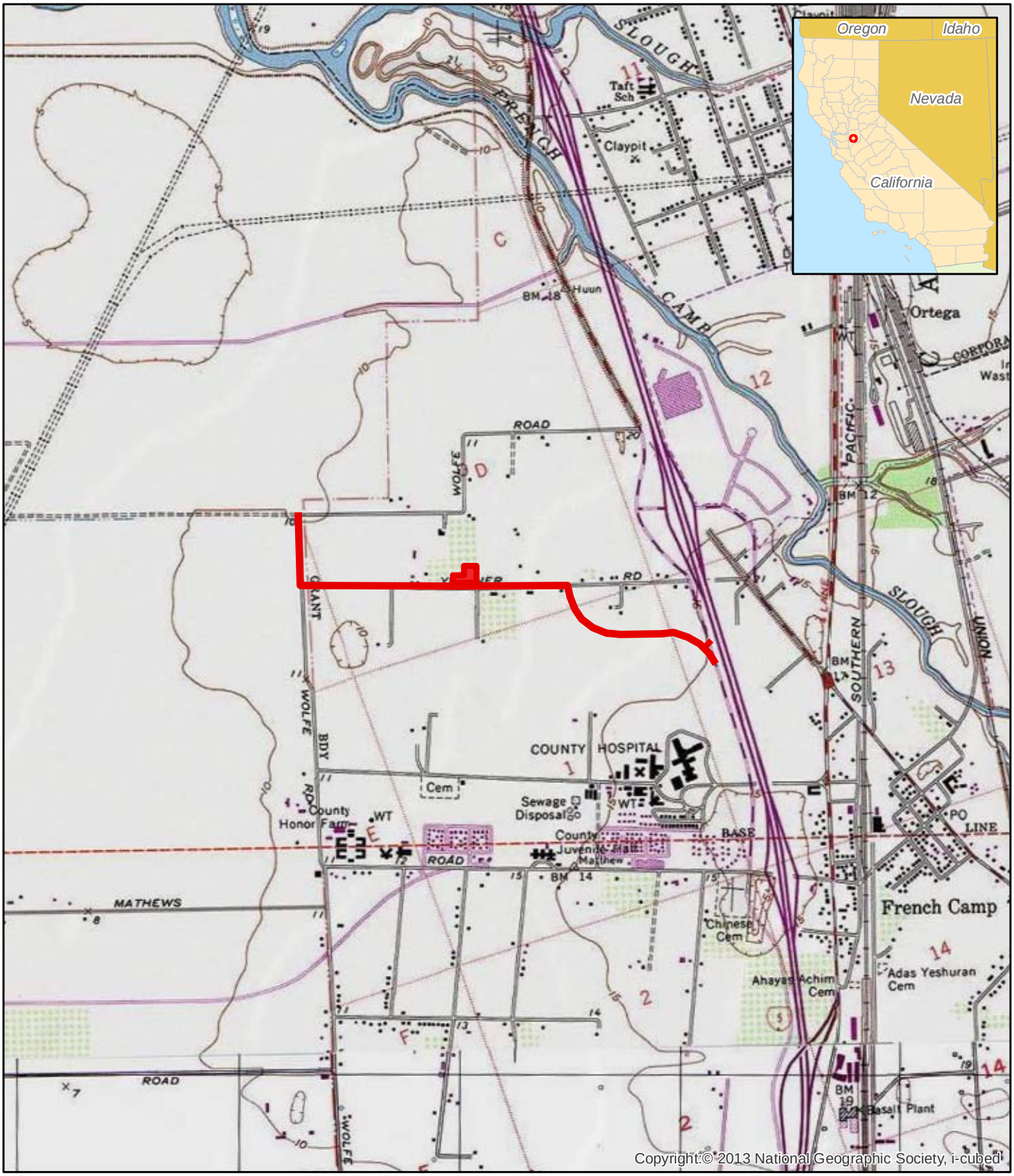


Figure 2. Project Location Map.

VA Clinic Off-Site Improvements Project Area

Wetlands Land Grant (Presumed T01N, R06E, Sections 34 and 35);
Stockton West 7.5' Series Quadrangles, USGS, 1978.

1:24,000

0.5 Miles

1 Kilometers



Figure 3. Project Area Map.

VA Off-Site Improvements Project Area

1:11,000

0 1,000 Feet

0 500 Meters



Figure 4. Cultural Resources Location Map.

Linear Resource

1:11,000

0 1,000 Feet

0 500 Meters

ATTACHMENT B

Native American Outreach Correspondence

131 Sunset Avenue, Suite E # 120
Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

June 5, 2019

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

To Whom It May Concern:

BaseCamp Environmental, Inc. has recently retained Solano Archaeological Services (SAS) to conduct a California Environmental Quality Act (CEQA) level cultural resources inventory of an approximate 7500-foot linear corridor as part of the **VA Clinic Off-Site Improvements Project** (Project) located near Stockton, **San Joaquin County**. The project lies south of French Camp Road and west of Interstate 5. The project area is also situated on the Stockton West, California topographic 7.5 minute quadrangle, Township 1 North, Range 6 East (projected), Section 1 just north of the County Hospital. The Project is also located on the *Campo De Los Franceses* land grant. Attached is a topographic map depicting the location of the Project.

The United States Department of Veterans Affairs (VA) proposes to construct and operate a Community Based Outpatient Clinic (CBOC) and Community Living Center (CLC), with associated improvements, on approximately 37 acres of a 58.5-acre site located west of Manthey Road immediately south of the City of Stockton. The VA project includes importation of approximately 180,000 cubic yards of fill to reduce flood exposure. The project, located on federal land in the unincorporated area of San Joaquin County, requires wastewater and water services, which will be provided by the City of Stockton as documented in the City's will-serve and special conditions letters to the VA (*VA 2019 Draft Environmental Assessment*). The City proposes to construct approximately 1.1 miles of 18-inch diameter potable water trunk line and 1.4 miles of wastewater trunk line approximately 16 inches in diameter; in addition, the City proposes to extend the proposed water line approximately 700 feet west to an existing water trunk link in Wolfe Road. The proposed "off-site" facilities would meet the needs of the VA project as well as other future urban development south of French Camp Road as provided in the recently updated Stockton General Plan (*VA 2019 Draft Environmental Assessment*).

The cultural resources inventory will include a pedestrian survey of the linear project area corridor. Before we commence fieldwork, however, we would like to request a Sacred Land File (SLF) review for any known cultural resources in the project area. If you could please send us a list of Native American individuals/organizations that may have knowledge of cultural resources in the project area, we would greatly appreciate it. We would like to request information from these individuals/entities about any possible unrecorded cultural resources that may exist in the project area, and discuss with them any positive responses to the SLF search**.** Please know that this SLF review request and subsequent outreach with local tribal representatives is for planning purposes only, and is not part of official SB 18 or AB 52 consultation.

Please email results back to jason@solanoarchaeology.com.

If you have any questions, feel free to contact me at the numbers listed above. Thank you very much for your time.

Thanks,

Jason Coleman
Principal Investigator and Owner

Enc. USGS topographic map

STATE OF CALIFORNIA — Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
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Website: http://www.nahc.ca.gov
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June 21, 2019

Jason A. Coleman
Solano Archaeology

VIA Email to: jason@solanoarchaeology.com

RE: VA Clinic Off-Site Improvements Project, San Joaquin County

Dear Mr. Coleman:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez
for

Katy Sanchez
Associate Environmental Planner

Attachment

Native American Heritage Commission
Native American Contacts List
6/21/2019

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden , CA 95236
canutes@verizon.net
(209) 887-3415

Ohlone/Costanoan
Northern Valley Yokuts
Bay Miwok

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed:VA Clinic Off-Site Improvements Project, San Joaquin County.

VA Off-Site Improvements Project

Jason Coleman

Thu 6/27/2019 9:29 AM

To: Katherine Perez <canutes@verizon.net>

2 attachments (538 KB)

NAHC_20190624_160434.pdf; 11099L.pdf;

Hi Kathy,

Here's another project in the Stockton area:

BaseCamp Environmental, Inc. has recently retained Solano Archaeological Services (SAS) to conduct a California Environmental Quality Act (CEQA) level cultural resources inventory of an approximate 7500-foot linear corridor as part of the **VA Clinic Off-Site Improvements Project** (Project) located near Stockton, **San Joaquin County**. The project lies south of French Camp Road and west of Interstate 5. The project area is also situated on the Stockton West, California topographic 7.5 minute quadrangle, Township 1 North, Range 6 East (projected), Section 1 just north of the County Hospital. The Project is also located on the *Campo De Los Franceses* land grant. Attached is a topographic map depicting the location of the Project.

The United States Department of Veterans Affairs (VA) proposes to construct and operate a Community Based Outpatient Clinic (CBOC) and Community Living Center (CLC), with associated improvements, on approximately 37 acres of a 58.5-acre site located west of Manthey Road immediately south of the City of Stockton. The VA project includes importation of approximately 180,000 cubic yards of fill to reduce floodexposure. The project, located on federal land in the unincorporated area of San Joaquin County, requires wastewater and water services, which will be provided by the City of Stockton as documented in the City's will-serve and special conditions letters to the VA (*VA 2019 Draft Environmental Assessment*). The City proposes to construct approximately 1.1 miles of 18-inch diameter potable water trunk line and 1.4 miles of wastewater trunk line approximately 16 inches in diameter; in addition, the City proposes to extend the proposed water line approximately 700 feet west to an existing water trunk link in Wolfe Road. The proposed "off-site" facilities would meet the needs of the VA project as well as other future urban development south of French Camp Road as provided in the recently updated Stockton General Plan (*VA 2019 Draft Environmental Assessment*).

The NAHC SLF and CCIC results were negative (attached). We should be surveying the alignments on July 2. Do you know of any unrecorded sites in the project area or in the vicinity? Any project recommendations would be greatly appreciated.

Cheers,

Jason

Jason A. Coleman, M.A., R.P.A.
Owner and Principal
131 Sunset Avenue, Ste. E 120
Suisun City, CA 94585
Phone 707-718-1416 Fax 707-451-4775
www.solanoarchaeology.com


SOLAN ARCHAEOLOGICAL SERVICES
SAS

Re: VA Off-Site Improvement Project

canutes@verizon.net

Wed 7/10/2019 4:56 PM

To: Jason Coleman <jason@solanoarchaeology.com>

6 attachments (6 MB)

Post-Ground Disturbance Site Visit MM July 2019.pdf; Tribal Cultural Resource-Awarness Training MM July 2019.pdf; Tribal Culutral Resource Avoidance MM July 2019.pdf; Inadverent Discoveries MM July 2019.pdf; MM CUL-1 Avoidance 2019.pdf; MM Cul-2 Avoid Potential Effects on Presviously Undiscovered Paleontological Resources July 2019.pdf;

Jason,

I may have sent the attachments once before to Charlie regarding the VA off-Site Improvement Project. Here are the Mitigation Measures and recommendation for the EIR from the Tribes perspective. Please make sure Charlie receives them.

Thanks,

Nototomne Cultural Preservation
Northern Valley Yokut
Katherine Perez
P.O Box 717
Linden, CA 95236
Cell: 209.649.8972
Email: canutes@verizon.net

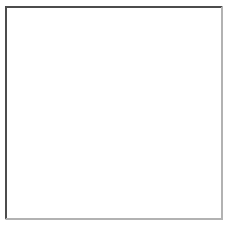
-----Original Message-----
From: Jason Coleman <jason@solanoarchaeology.com>
To: canutes <canutes@verizon.net>
Sent: Tue, Jul 9, 2019 8:29 am
Subject: Re: VA Off-Site Improvement Project

Hi Kathy, attached is the records search results. No sites in the project area, all are in the 1/2 mile buffer.

Cheers,

Jason

Jason A. Coleman, M.A., R.P.A.
Owner and Principal
131 Sunset Avenue, Ste. E 120
Suisun City, CA 94585
Phone 707-718-1416 Fax 707-451-4775
www.solanoarchaeology.com



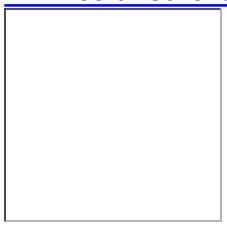
From: canutes <canutes@verizon.net>
Sent: Sunday, July 7, 2019 6:56 AM
To: Jason Coleman
Subject: Re: VA Off-Site Improvement Project

Hi Jason,
Can we have a site visit. We have concerns.

Katherine Perez

Sent from my iPad

On Jun 28, 2019, at 3:52 PM, Jason Coleman <jason@solanoarchaeology.com> wrote:

> Hi Kathy,
>
> Looks like I forgot to send you the maps for the project--my apologies. They are attached.
>
> Happy Friday,
>
> Jason
>
> _____
> Jason A. Coleman, M.A., R.P.A.
> Owner and Principal
> 131 Sunset Avenue, Ste. E 120
> Suisun City, CA 94585
> Phone 707-718-1416 Fax 707-451-4775
> www.solanoarchaeology.com
>
> 
>
> <Fig2_ProjLoc_VA_Offsite_Imp.pdf>
>
> <Fig3_ProjArea_VA_Offsite_Imp.pdf>

ATTACHMENT C

Photographs



Plate 1. *Yettner Road, facing East.*



Plate 2. *Project area between Yettner and Wolfe Roads, facing west.*



Plate 3. *Project area midsection near Yettner Road, facing east.*



Plate 4. *Project area at intersection of Manthey and Vettner roads, facing west.*

ATTACHMENT D

DPR Site Records

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code **Reviewer** **Date**

Page 1 **of** 2 *** Resource Name or #:** SAS-001 South Wolfe Road segment

P1. Other Identifier:
***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County:** San Joaquin
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b USGS 7.5' Quad:** Stockton West **Date:** 1987 **T** 1N **R** 6E
Unsectioned; *Campo De Los Francess* M.D. **B.M.**
c. Address: South Wolfe Road **City:** Stockton **Zip:** 95231
d. UTM: Zone: 10; 649,165 mE/ 4,195,742 mN Datum: NAD 83 NORTHERN TERMINUS
10; 649,178 mE/ 4,195,448 mN NAD 83 SOUTHERN TERMINUS
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 10'
From the corner of Interstate 5 and French Camp Road, head west on French Camp Road for 1.0 mile. Park, you are at the northern terminus of the segment.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This resource consists of a historic-era road segment identified on the 1913 Stockton, California USGS 7.5' topographic quadrangle. The 1931 topographic quadrangle map depicts the road but it was unnamed at the time. The name Wolfe Road first appears on the 1954 Stockton West 7.5' quadrangle. No historic-era artifacts were found associated with the site, and no information on the road's namesake was found.

***P3b. Resource Attributes:** AH7. Roads
***P34. Resources Present:** ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a.



P5b. Description of Photo:
Site overview, facing south, July 2, 2019.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
San Joaquin County
44 North San Joaquin Street
Stockton, CA 95202

***P8. Recorded by:**
J. Coleman and S. Talcott
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

P9. Date Recorded: July 2, 2019

P.10. Survey Type: Intensive pedestrian

***P11. Report Citation:** Coleman, 2019 Cultural Resources Cultural Resources Technical Memorandum for the Veteran's Administration Off-Site Improvements Project, San Joaquin County, California. Submitted to the BaseCamp Environmental by Solano Archaeological Services.

* Attachments: ☐ NONE ☒ Location Map ☐Sketch Map ☐ Continuation Sheet ☐ Building, Structure, Object Record
☐Archaeological Record ☐ District Record ☒ Linear Feature Record ☐Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #
LINEAR FEATURE RECORD
Trinomial

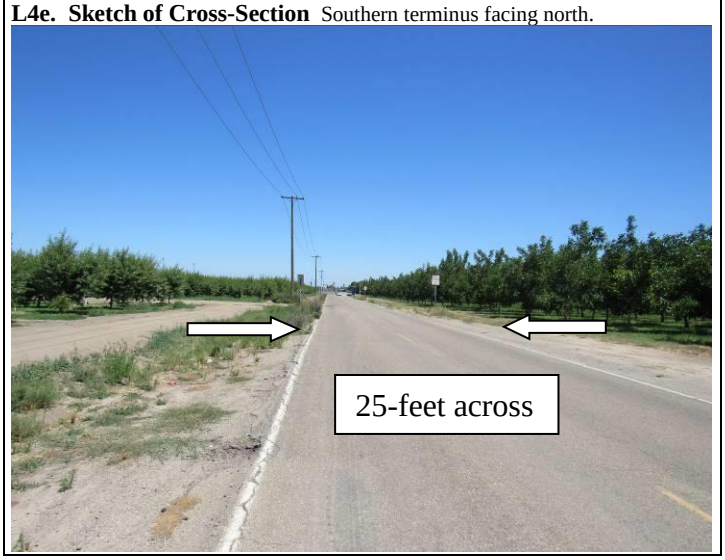
 Resource Name or #: SAS-001 South Wolfe Road segment

L1. Historic and/or Common Name: Wolfe Road
L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**
b. Location of point or segment:

UTM: Zone:	10;	649,165	mE/	4,195,742	mN	Datum:	NAD 83	NORTHERN TERMINUS
	10;	649,178	mE/	4,195,448	mN		NAD 83	SOUTHERN TERMINUS

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)
The segment is 960-feet long and now consists of a two lane asphalted measuring 25-feet across. Surrounded by orchards on the segment's east and west side, Wolfe Road is a maintained county road and that terminates at French Camp Road at its northern trajectory. Southward past this recorded segment's southern terminus the road continues for another two miles to where it terminates at a "T"-junction with Bowman Road.

L4e. Sketch of Cross-Section Southern terminus facing north.



L4. Dimensions: (In feet for historic features and meters for prehistoric features)
a. Top Width: 25 feet (5m)
b. Bottom Width: n/a
c. Height or Depth: ~1 foot
d. Length of Segment: 960 feet

L5. Associated Resources:
none

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)
This road segment was found in an agricultural area of French Camp surrounded by orchards to the east and west sides.

L7. Integrity Considerations: The road has been maintained over 106 years.

L8a. Photograph, Map or Drawing none

L8b. Description of Photo, Map, or Drawing
none

L9. Remarks:
Given the loss of historic integrity and lack of historic significance, SAS recommends the road segment ineligible for the California Register of Historic Resources.

L10. Form Prepared by:
J. Coleman
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

L11. Date: July 2, 2019

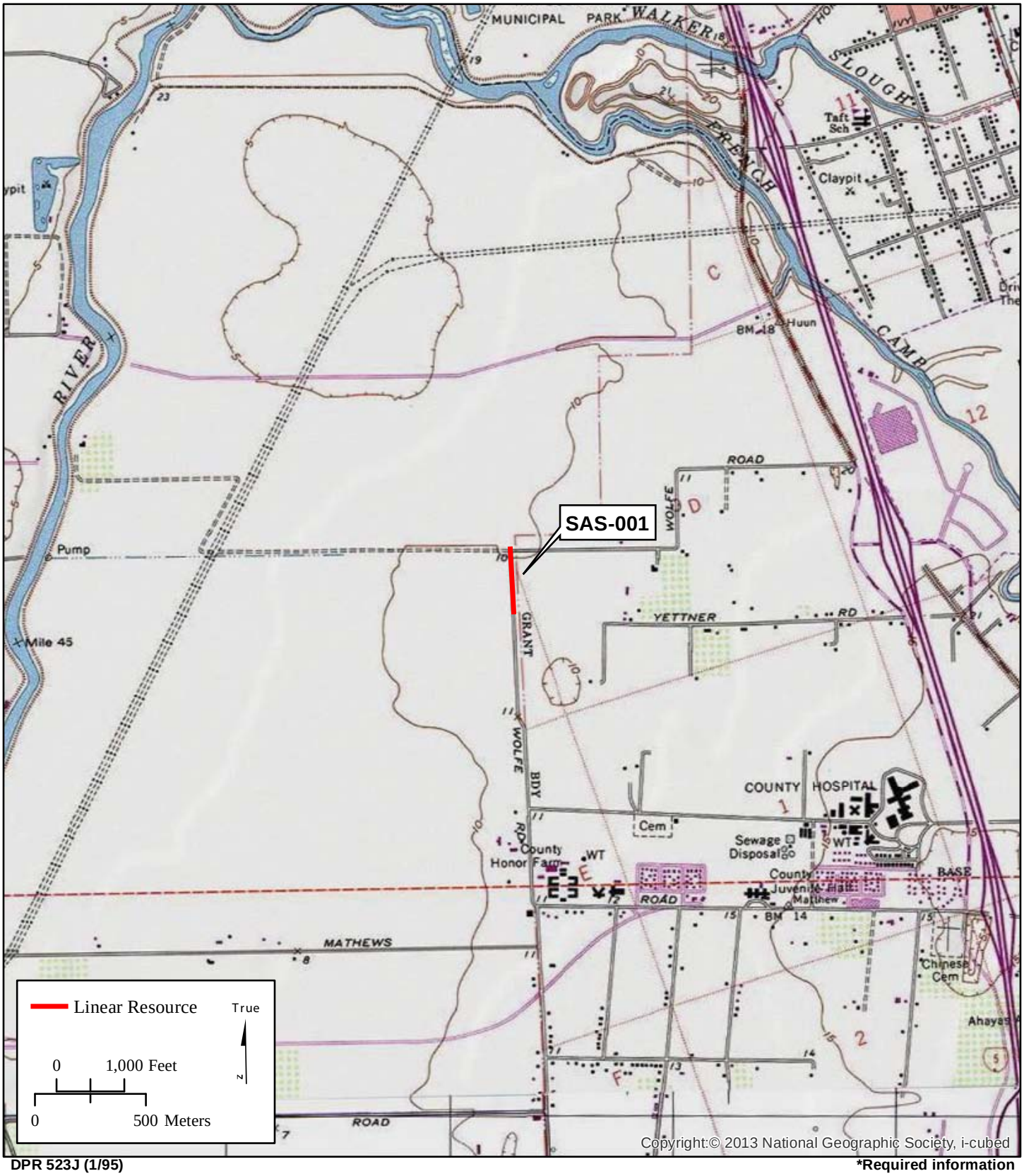
State of California ♘ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 3 of 3 ***Resource Name or #** SAS-001 Wolfe Road segment

***Map Name:** Stockton West ***Scale:** 1:24,000 ***Date of Map:** 1978



State of California – The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # HRI # Trinomial NRHP Status Code
Other Listings Review Code	Reviewer Date

Page 1 **of** 2 *** Resource Name or #:** SAS-001 Yettner Road segment

P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County:** San Joaquin

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b USGS 7.5' Quad:** Stockton West **Date:** 1987 **T** 1N **R** 6E

Unsectioned; *Campo De Los Francess* M.D. **B.M.**

c. Address: Yettner Road **City:** Stockton **Zip:** 95231

d. UTM: Zone: 10; 649,849 mE/ 4,195,443 mN Datum: NAD 83 WESTERN TERMINUS

10; 649,400 mE/ 4,195,450 mN NAD 83 EASTERN TERMINUS

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 10'

From the corner of Interstate 5 and French Camp Road, head west on French Camp Road for 0.2 mile. Turn left onto Manthey Road and drive for another 0.2 mile, then Park. You are at the eastern terminus of the segment.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This resource consists of a historic-era 1,744-foot-long road segment identified on the 1913 Stockton, California USGS 7.5' topographic quadrangle. The 1931 topographic map depicts the road but it was unnamed at the time. On the same 1931 map, Yettner Road extended an additional 2,170-feet further west where it terminated at its intersection with Wolfe Road (SAS-001). This recorded segment's western terminus lies just east of where the old western section of Yettner Road was abandoned. This segment's eastern terminus lies at the intersection with Manthey Road 1,744-feet further east. On the 1954 Stockton West 7.5' quadrangle the name of this recorded segment was McDougald Road. Sometime between 1969 and 1970 (according to the quadrangles) the road was given a name change to Yettner Road which has remained to the present day.

***P3b. Resource Attributes:** AH7. Roads

***P34. Resources Present:** ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a.



P5b. Description of Photo:
Site overview at western terminus, facing west, July 2, 2019.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
San Joaquin County
44 North San Joaquin Street
Stockton, CA 95202

***P8. Recorded by:**
J. Coleman and S. Talcott
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

P9. Date Recorded: July 2, 2019

P.10. Survey Type: Intensive pedestrian

***P11. Report Citation:** Coleman, 2019 Cultural Resources Cultural Resources Technical Memorandum for the Veteran's Administration Off-Site Improvements Project, San Joaquin County, California. Submitted to the BaseCamp Environmental by Solano Archaeological Services.

* Attachments: ☐ NONE ☒ Location Map ☐Sketch Map ☐ Continuation Sheet ☐ Building, Structure, Object Record
☐Archaeological Record ☐ District Record ☒ Linear Feature Record ☐Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #
LINEAR FEATURE RECORD
Trinomial

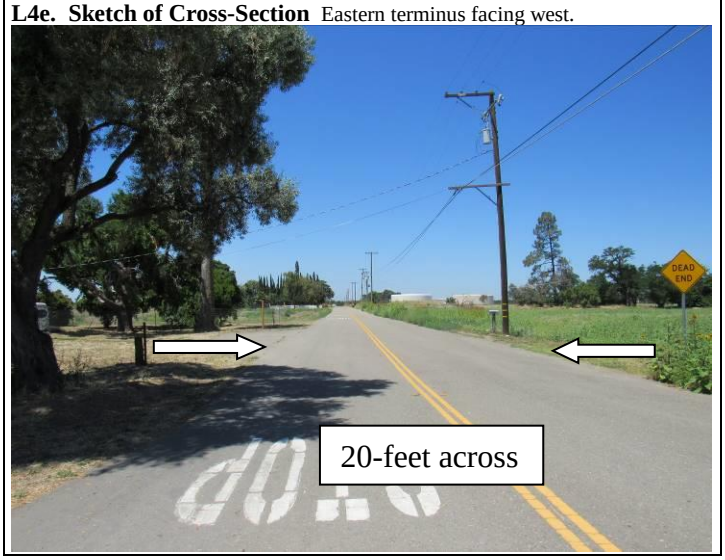
 Resource Name or #: SAS-002 Yettner segment

L1. Historic and/or Common Name: McDougald Road, Yettner Road
L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**
b. Location of point or segment:

UTM: Zone:	10;	649,165	mE/	4,195,742	mN	Datum:	NAD 83	NORTHERN TERMINUS
	10;	649,178	mE/	4,195,448	mN		NAD 83	SOUTHERN TERMINUS

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)
This 1,744-foot long segment is a 20-foot wide paved asphalt road, but the abandoned western section not being recorded as part of this segment is a 6-10 foot wide access road used to maintain the surrounding orchards. No historic-era artifacts were found associated with the site.

L4e. Sketch of Cross-Section Eastern terminus facing west.



L4. Dimensions: (In feet for historic features and meters for prehistoric features)
a. Top Width: 20 feet (5m)
b. Bottom Width: n/a
c. Height or Depth: ~1 foot
d. Length of Segment: 1,744 feet

L5. Associated Resources:
none

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)
This road segment was found in a rural neighborhood and an agricultural area of French Camp south of Stockton.

L7. Integrity Considerations: The road has been maintained over 106 years.

L8a. Photograph, Map or Drawing none

L8b. Description of Photo, Map, or Drawing
none

L9. Remarks:
Given the loss of historic integrity and lack of historic significance, SAS recommends the road segment ineligible for the California Register of Historic Resources.

L10. Form Prepared by:
J. Coleman
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

L11. Date: July 2, 2019

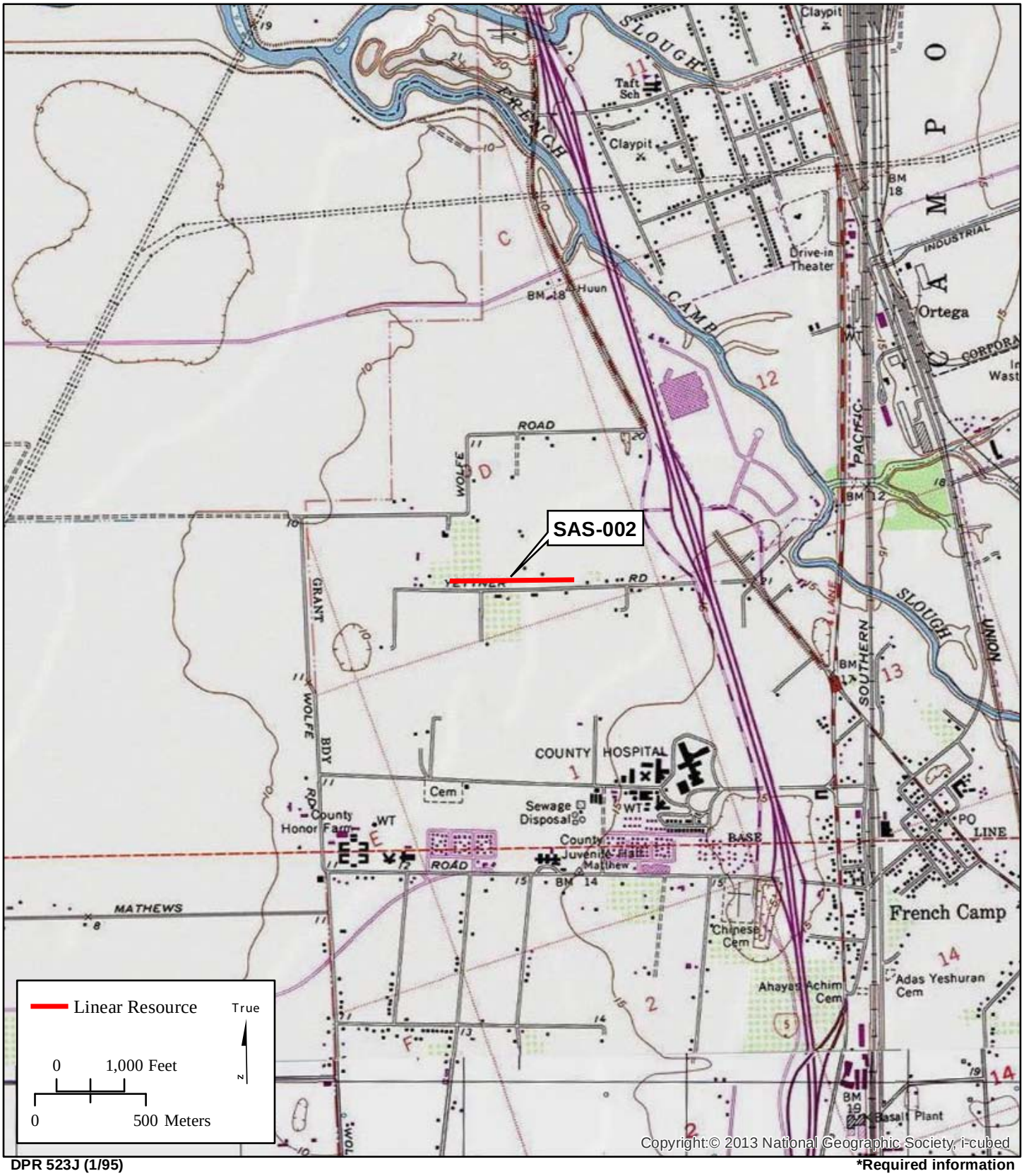
State of California ♘ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 3 of 3 ***Resource Name or #** SAS-002 Yettner Road segment

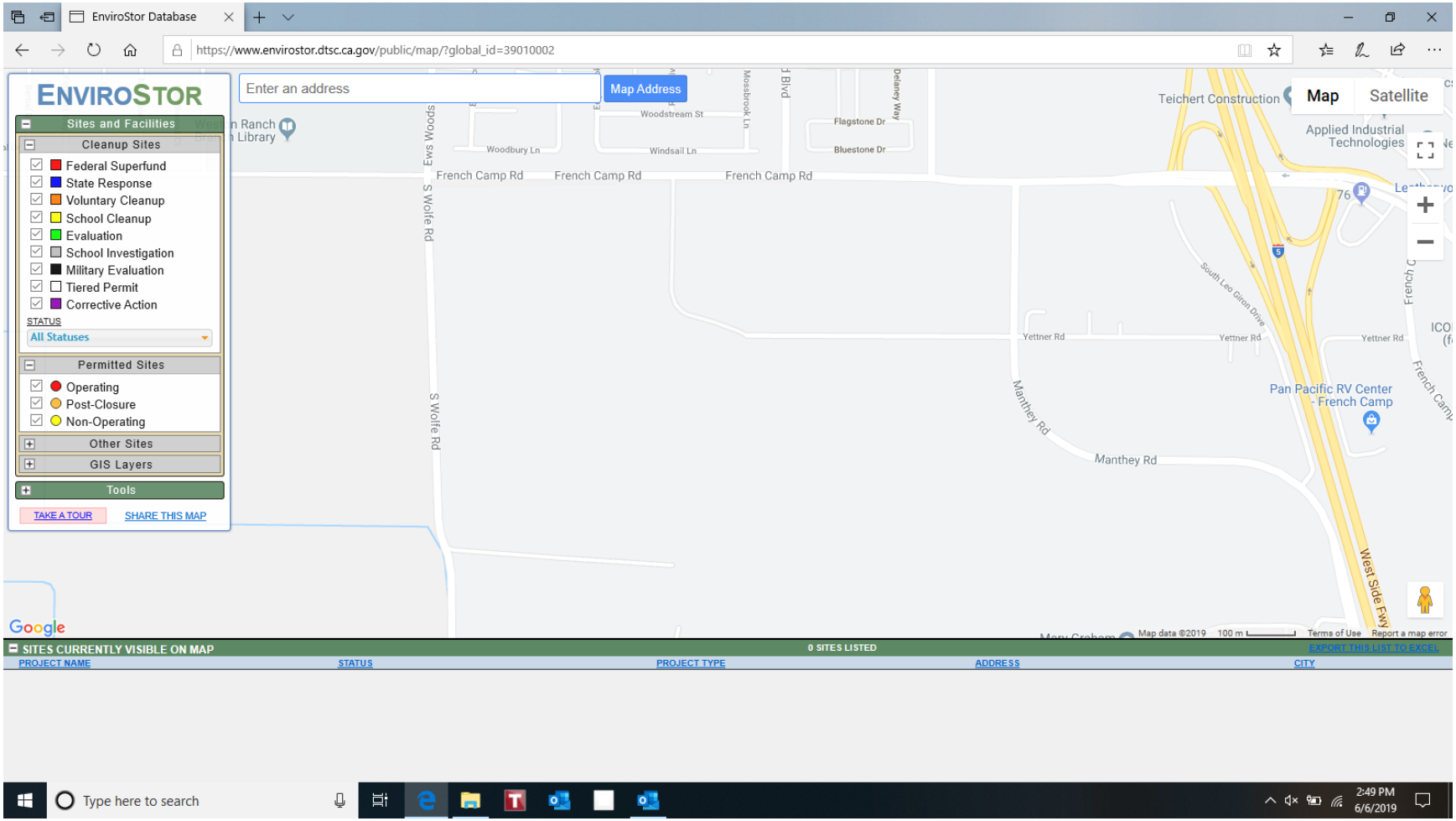
***Map Name:** Stockton West ***Scale:** 1:24,000 ***Date of Map:** 1978

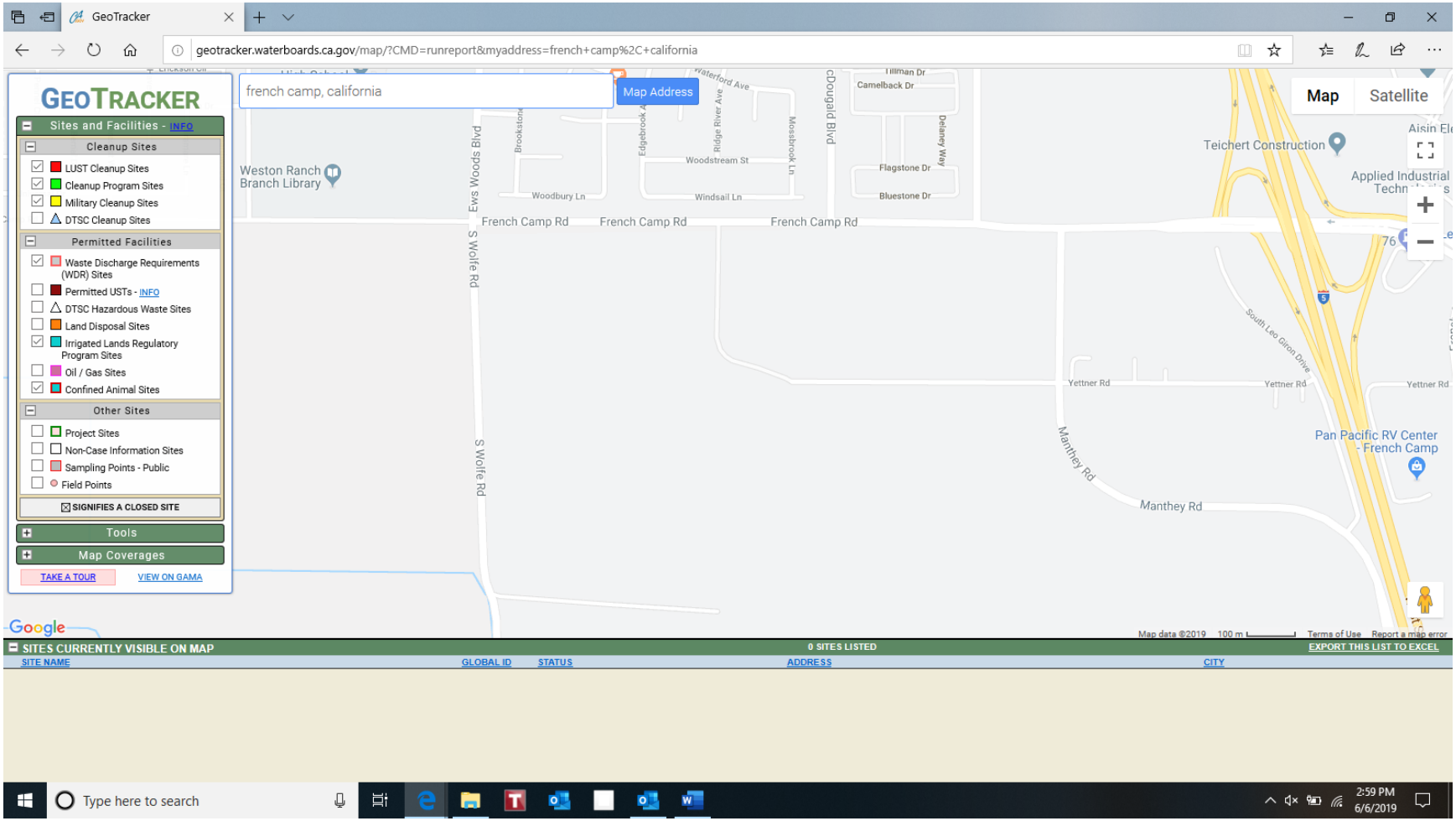


DPR 523J (1/95)

***Required information**

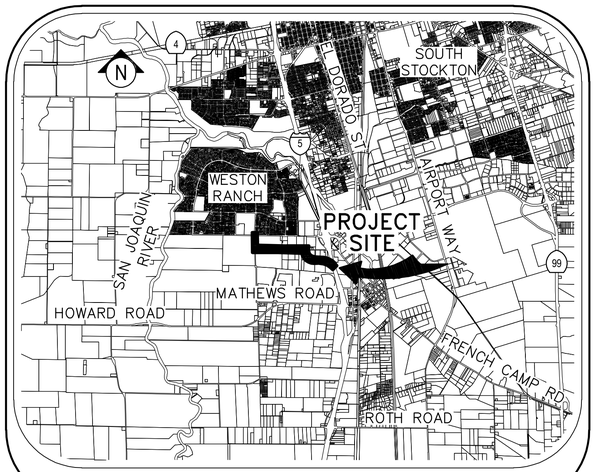
APPENDIX E
HAZARDOUS MATERIAL SITE RESULTS


EnviroStor Database
https://www.envirostor.dtsc.ca.gov/public/map/?global_id=39010002
ENVIROSTOR
Enter an address
Map Address
Sites and Facilities
Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
TAKE A TOUR
SHARE THIS MAP
Map
Satellite
Teichert Construction
Applied Industrial Technologies
French Camp Rd
S Wolfe Rd
Woodstream St
Woodbury Ln
Windsail Ln
Flagstone Dr
Bluestone Dr
Yettner Rd
Manthey Rd
Pan Pacific RV Center - French Camp
West Side Fwy
Google
Map data ©2019
Terms of Use
Report a map error
SITES CURRENTLY VISIBLE ON MAP
0 SITES LISTED
EXPORT THIS LIST TO EXCEL
PROJECT NAME
STATUS
PROJECT TYPE
ADDRESS
CITY
Type here to search
2:49 PM
6/6/2019

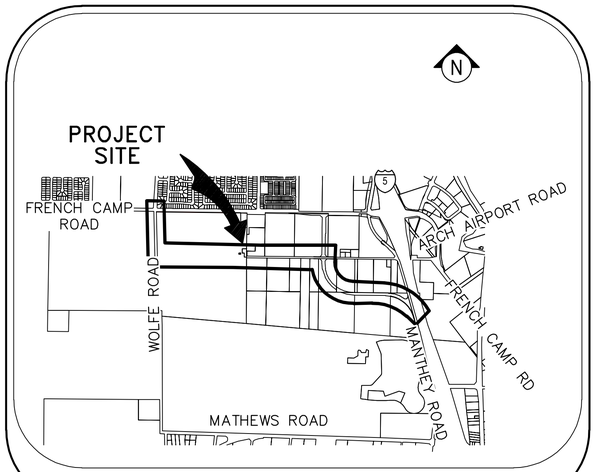

GeoTracker
geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=french+camp%2C+california
GEOTRACKER
french camp, california
Map Address
Sites and Facilities - INFO
Cleanup Sites
LUST Cleanup Sites
Cleanup Program Sites
Military Cleanup Sites
DTSC Cleanup Sites
Permitted Facilities
Waste Discharge Requirements (WDR) Sites
Permitted USTs - INFO
DTSC Hazardous Waste Sites
Land Disposal Sites
Irrigated Lands Regulatory Program Sites
Oil / Gas Sites
Confined Animal Sites
Other Sites
Project Sites
Non-Case Information Sites
Sampling Points - Public
Field Points
SIGNIFIES A CLOSED SITE
Tools
Map Coverages
TAKE A TOUR
VIEW ON GAMA
Weston Ranch Branch Library
French Camp Rd
S Wolfe Rd
Woodbury Ln
Woodstream St
Windsail Ln
Flagstone Dr
Bluestone Dr
Camelback Dr
Tillman Dr
Waterford Ave
Ridge River Ave
Edgebrook Ave
Brookstone
Mossbrook Ln
Delaney Way
McDougald Blvd
Teichert Construction
Applied Industrial
Yettner Rd
South Leo Giron Drive
Manthey Rd
Pan Pacific RV Center - French Camp
Map
Satellite
Google
Map data ©2019 100 m
Terms of Use
Report a map error
SITES CURRENTLY VISIBLE ON MAP
0 SITES LISTED
EXPORT THIS LIST TO EXCEL
SITE NAME
GLOBAL ID
STATUS
ADDRESS
CITY
Type here to search
2:59 PM
6/6/2019

APPENDIX F
CONSTRUCTION PLANS

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY
OFF-SITE UTILITIES IMPROVEMENTS
PROJECT NO. M20026
STOCKTON, CALIFORNIA



VICINITY MAP



PROJECT SITE MAP

CONVENTIONS

- BENCH MARK – VERTICAL & HORIZONTAL
- BENCH MARK – VERTICAL, ONLY
- TEMPORARY CONTROL POINT OR T.B.M.
- CERTER LINE AND MONUMENT WELL
- NOTE INDICATOR
  - DETAIL IDENTIFICATION NUMBER (5)
  - DRAWING OR SHEET NO. WHERE DETAIL IS SHOWN (C1.01)
- DETAIL INDICATOR
  - NOTE NUMBER AS INDICATED (5)
- REVISION
  - REVISION NUMBER (5)
- SECTION INDICATOR
  - DETAIL IDENTIFICATION NUMBER (5)
  - DRAWING OR SHEET NO. WHERE DETAIL IS DRAWN (C2.0)
- NOTE INDICATOR
  - NOTE NUMBER AS INDICATED [5]

SHEET INDEX

SHT ID	SHT NO	DESCRIPTION
G–001	1	TITLE SHEET
G–002	2	CIVIL NOTES & CONVENTIONS
CE401–CE413	3–16	EROSION CONTROL PLANS (PENDING)
CE501	17	EROSION CONTROL DETAILS (PENDING)
TC101	18	CONSTRUCTION AREA SIGNS (PENDING)
TC401–TC402	19–20	TRAFFIC CONTROL PLANS & NOTES (PENDING)
C–101	21	KEY SHEET
CU201–CU222	22–43	OFFSITE UTILITY PLANS & PROFILES
C–501–C–506	51–56	CONSTRUCTION DETAILS

ABBREVIATIONS

AB	ANCHOR BOLT/AGGREGATE BASE
AC	ASPHALTIC CONCRETE
BC	BEGINNING OF CURVE
BLDG	BUILDING
BM	BENCH MARK
BOC	BACK OF CURB
BOW, BW	BACK OF WALK
CB	CATCH BASIN
CC	CENTER TO CENTER
CDT	CONDUIT
CIP	CAST IRON PIPE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CP	CONTROL POINT
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTINUOUS
COTG	CLEANOUT TO GRADE
CR	CURB RETURN
CTR	CENTER
CY	CUBIC YARD
C	CURB
COMM	COMMERCIAL
COS	SAN JOAQUIN COUNTY
CONST	CONSTRUCT
D	STORM DRAIN
DI	DROP INLET
DIA	DIAMETER
DIM	DIMENSION
D/W	DRIVEWAY
DW	DOMESTIC WATER
DWG	DRAWING
DV	TOP OF DRIVEWAY
E, ELC	ELECTRICAL
EA	EACH
EB	ELECTRICAL BOX
EC	END OF CURVE
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ESCP	EXTRA STRENGTH CONCRETE PIPE
EV	ELECTRICAL VAULT
EW	EACH WAY
EX, EXIST	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FF	FINISHED FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FIBER	FIBER OPTIC
FIN	FINISH
FL	FLOW LINE
FLR	FLOOR
FM	FORCE MAIN
FO	FIBER OPTIC
FOC, FC	FACE OF CURB
FS	FIRE SPRINKLER SERVICE
FT	FEET
FW	FIRE WATER
GA	GAUGE
G	GAS, GUTTER
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GPM	GALLONS PER MINUTE
GR	GRATE
HG	HIGH PRESSURE GAS
HORIZ	HORIZONTAL
HP	HIGH POINT
ID	INSIDE DIAMETER (DIM)
IG	INTERRUPTABLE GAS
IN.	INCH
IN, INV	INVERT
IP	IRON PIPE
I, IRR	IRRIGATION
INTX	INTERSECTION
ITOF	INFILTRATION TRENCH OVER FLOW
JP	JOINT POLE
KV	KILOVOLT
LC	LIP OF CONCRETE
LF	LINEAL FEET
LIN	LINEAR
LP	LOW POINT
LT	LEFT
MAX	MAXIMUM
MB	MACHINE BOLT
MH	MAINTENANCE HOLE
MIN	MINIMUM
MON	MONUMENT
MTR	METER
N	NORTHING
NIC	NOT IN CONTRACT
NO	NUMBER
NP	NON–POTABLE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OG	ORIGINAL GROUND
PAV	PAVEMENT
PB	PULL BOX
PC	PRIMARY CONTROL
PCC	POINT OF COMPOUND CURVE
PIV	POST INDICATOR VALVE
PL	PROPERTY LINE OR PLATE
POC	POINT OF CONNECTION
PP	POWER POLE
PR	PAIR
PRC	POINT OF REVERSE CURVATURE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PUE	PUBLIC UTILITIES EASEMENT
PVCP	POLYVINYLCHLORIDE PIPE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REINF	REINFORCED
RGOF	RAIN GARDEN OVER FLOW
RGRCP	RUBBER GASKET REINFORCED CONCRETE PIPE
RL	ROOF LATERAL
RM	RIM / LID
RT	RIGHT
RWD	REDWOOD
R/W	RIGHT OF WAY
S	SLOPE
SD	STORM DRAIN
SDMH	STORM DRAIN MAINTENANCE HOLE
SPEC	SPECIFICATION
SQ	SQUARE
SQFT	SQUARE FEET
SQYD	SQUARE YARD
SS	SANITARY SEWER
SSMH	SANITARY SEWER MAINTENANCE HOLE
STA	STATION
STD	STANDARD
SW	SIDEWALK
T, TEL	TELEPHONE
TBM	TEMPORARY BENCH MARK
TEL	TELEPHONE
TC	TOP OF CURB
TOG	TOP OF GRATE
TOP	TOP / TOP OF PIPE
TOW	TOP OF WALK
TP	TELEPHONE POLE
TPB	TELEPHONE PULL BOX
TFR	TRANSFORMER
TW	TOP OF WALK
TYP	TYPICAL
UD	UNDER DRAIN
UG	UNDERGROUND
W	WATER
W/C	WHEEL CHAIR
YD	YARDS

(N)(S)(E)(W) CARDINAL DIRECTIONS

CALL BEFORE YOU DIG — 800 227 2600 — UNDERGROUND SERVICE ALERT

30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

DRAWING SCALE: SHOWN

ORIGINAL DRAWING SCALE 0 ½" 1"

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CIVIL ENGINEERS & LAND SURVEYORS
www.ksninc.com
711 N Pershing Avenue, Stockton, CA 95203, 209-946-0268
1550 Harbor Drive, Suite 212, West Sacramento, CA 95691, 916-403-5900

NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: G-001

DATE: JUL 2018

HORIZONTAL DATUM: CCS83, ZONE 3

VERTICAL DATUM: NAVD88

KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

INDEX, ABBREVIATIONS, VICINITY MAP

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

SCALE: SHOWN	APPROVED BY:	DATE:	SHEET NO. X
DESIGNED BY:			OF XX SHTS
DRAWN BY:			PROJECT NO.
CHECKED BY:			
RECORD DWG:	DIRECTOR OF MUD STOCKTON, CALIF.		

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\G-001.dwg
PLOT DATE: Jul 17, 2019 - 9:42am

GENERAL NOTES (CIVIL):

1. ALL NEW IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS, THE 2014 REVISION 4 CALIFORNIA MUTCD, THE LATEST EDITION OF CITY OF STOCKTON STANDARD SPECIFICATIONS AND PLANS, THE LATEST EDITION OF SAN JOAQUIN COUNTY STANDARD SPECIFICATIONS AND PLANS, AND THE 2006 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND PLANS.

2. PRIOR TO ANY WORK BEING PERFORMED, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES FOR A PRE-CONSTRUCTION CONFERENCE. CONTRACTOR SHALL ALSO NOTIFY THE BELOW LISTED PROJECT CONTACTS (72) HOURS IN ADVANCE OF SAID MEETING:

   REGULATORY AGENCY:

   WATER IMPROVEMENTS
   CITY OF STOCKTON
   MUNICIPAL UTILITIES
   2500 NAVY DRIVE
   STOCKTON, CA 95206
   (209) 937-8734
   (209) 937-8777 (FAX)
   GEMMA BISCOCHO

   ALL OTHER IMPROVEMENTS
   SAN JOAQUIN COUNTY
   PUBLIC WORKS DEPARTMENT
   1810 E. HAZELTON AVE.
   STOCKTON, CA 95201
   (209) 468-3023
   (209) 468-2999 (FAX)
   ALEX CHETLEY

3. THE INTENT IS THAT THESE PLANS REQUIRE ALL LABOR AND MATERIALS (EXCEPT AS SPECIFIED IN THE SPECIFICATIONS) NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE CITY/COUNTY ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE PHYSICAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES BY POTHOLING PRIOR TO CONSTRUCTION AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION, AND SHALL NOTIFY UTILITY COMPANIES FORTY-EIGHT HOURS IN ADVANCE OF ANY CONSTRUCTION (UNDERGROUND SERVICE ALERT 1-800-227-2600). UTILITY COMPANY(S) SHALL BE RESPONSIBLE TO ADJUST TO PROPOSED PAVEMENT OR CONCRETE GRADE ALL SURFACE FACILITIES, UNLESS OTHERWISE NOTED IN THESE PLANS.

5. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 1540 (A)(1) OF THE CONSTRUCTION SAFETY ORDERS (TITLE 8 CALIFORNIA ADMINISTRATION CODE SECTION 1540), ISSUED BY THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD PURSUANT TO THE CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT OF 1973, AS AMENDED, WHICH STATES:
   PRIOR TO OPENING AN EXCAVATION, EFFORT SHALL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATION: I.E., SEWER, WATER, FUEL, ELECTRIC LINES, ETC., WILL BE ENCOUNTERED AND, IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATION OF SUCH AN INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR AND DIGGING; AND WHEN IT IS UNCOVERED, ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED SHALL BE ADVISED OF PROPOSED WORK AT LEAST 48 HOURS PRIOR TO THE START OF ACTUAL EXCAVATION.

6. THE CONTRACTOR SHALL PROVIDE SHORING, BRACING, SLOPING OR PROVISIONS TO PROTECT WORKERS FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF FIVE FEET OR MORE. SAID PROTECTION TO BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL, STATE, AND FEDERAL REGULATIONS (CAL-OSHA, OSHA).

7. ASBESTOS CEMENT MATERIALS SHALL NOT BE USED IN THE CONSTRUCTION OF ANY FACILITIES WITHIN THIS PROJECT.

8. DURING CONSTRUCTION THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF EXISTING FACILITIES.

9. SAN JOAQUIN COUNTY IS RESPONSIBLE FOR REFERENCING EXISTING MONUMENTS AND/OR PROPERTY CORNER PRIOR TO COMMENCEMENT OF WORK.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF PROJECT.

11. ALL WORK IN THE PUBLIC RIGHT-OF-WAY IS SUBJECT TO THE APPROVAL AND ACCEPTANCE OF SAN JOAQUIN COUNTY PUBLIC WORKS DEPARTMENT AND CITY OF STOCKTON.

12. CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF ALL EXISTING UTILITIES IF NEEDED WITH RESPECTIVE UTILITY COMPANIES.

PACIFIC GAS & ELECTRIC	(209) 942-1418	JULIE DELCORSO (SERVICE)PACIFIC
GAS & ELECTRIC	(209) 932-6555	ROGER MORSHEAD (CONFLICTS)
AT&T	(209) 474-4110	JAMES JELLEY
C.O.S. MUD	(209) 937-8790	TONY TOVAR
ACSquare (COMCAST)	(209) 451-0629	ROBERTO GONZALEZ
MCI	(916) 373-7978	LEWIS THOMPSON

13. THE CONTRACTOR SHALL ADJUST TO GRADE ALL FACILITIES (INCLUDING, BUT NOT LIMITED TO VALVE BOXES, PULL BOXES, MAINTENANCE HOLE RIM AND COVERS, METER BOXES) WITHIN THE LIMITS OF WORK AND/OR AS DIRECTED BY ENGINEER. THE FACILITIES SHALL BE ADJUSTED AS SET FORTH IN SJCO STANDARD DRAWING NO. R-30 AND/OR AS DIRECTED BY ENGINEER.

14. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.

15. ALL STATIONS REFER TO DISTANCES ALONG STREET CENTERLINE, PERPENDICULAR TO OR RADIALLY OPPOSITE CENTERLINE STATIONS, UNLESS OTHERWISE NOTED.

16. CONTRACTOR SHALL DEMOLISH, EXCAVATE, REMOVE AND DISPOSE OF ANY EXISTING CONCRETE OR ASPHALT CONCRETE PAVING, CONCRETE CURB, GUTTER AND SIDEWALK AND DELETERIOUS MATERIAL AS REQUIRED TO CONSTRUCT THE CONTRACT WORK, ALL EXCESS MATERIAL GENERATED BY DEMOLITION, EXCAVATION AND GRADING SHALL BE DISPOSED OF BY THE CONTRACTOR.

17. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSES OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY, COUNTY AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE CITY OR THE ENGINEER.

WATER & SANITARY SEWER IMPROVEMENT NOTES:

1. THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT WHERE APPLICABLE FOR ANY WORK DONE ON CITY OF STOCKTON FACILITIES FROM CITY OF STOCKTON. CONTRACTOR SHALL NOTIFY CITY, 24 HOURS IN ADVANCE OF COMMENCING THE WORK OR AS REQUIRED BY SAID PERMIT.

2. THE CONTRACTOR SHALL CONTACT JASON ENDER (209) 937-8381 OF THE CITY OF STOCKTON FOR A PRE-CONSTRUCTION CONFERENCE A MINIMUM OF SEVENTY TWO (72) HOURS PRIOR TO THE COMMENCEMENT OF WORK.

3. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER AND THE CITY ENGINEER.

4. THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE CITY OF STOCKTON MUNICIPAL UTILITIES DEPARTMENT FOR USE OF WATER FROM FIRE HYDRANTS FOR CONSTRUCTION PURPOSES. THE PERMIT SHALL BE APPROVED BY THE CITY OF STOCKTON FIRE DEPARTMENT.

5. ACTUAL CONNECTIONS TO EXISTING WATER LINES WILL NOT BE PERMITTED PRIOR TO THE COMPLETION OF STERILIZATION AND TESTING OF NEW WATER MAINS. ALL WATER VALVES TO BE OPERATED UNDER THE DIRECTION OF THE WATER DIVISION OF THE REGULATORY AGENCY PERSONNEL ONLY.

6. THE CONTRACTOR SHALL PAINT FIRE HYDRANTS WITH ENAMEL SAFETY YELLOW PAINT. FIRE HYDRANT STEM BREAKAWAY MUST COINCIDE WITH BREAKAWAY SPOOL. ???

CATHODIC PROTECTION NOTES:

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL LAYOUT IMPROVEMENTS FROM THE DIMENSIONS SHOWN ON THE PLANS. ANY CLARIFICATION ON CONFLICTS, DISCREPANCIES OR AMBIGUITIES SHOULD BE DIRECTED TO THE ENGINEER PRIOR TO THE CONSTRUCTION OF THE IMPROVEMENTS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MATCHING EXISTING SURROUNDING LANDSCAPE AND OTHER IMPROVEMENTS WITH A TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, GRADES, ETC., AND TO AVOID ANY ABRUPT OR APPARENT CHANGES IN CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.

3. WHERE PAVEMENT IS TO BE EXTENDED OR REMOVED, EXISTING PAVEMENT SHALL BE SAW-CUT OR GRIND TO A NEAT LINE PRIOR TO PLACING NEW ASPHALT CONCRETE.

4. ALL NEW CONCRETE FLATWORK SHALL BE DRILLED AND DOWELED AND/OR KEYED INTO EXISTING FLATWORK IN ACCORDANCE WITH COUNTY STANDARD PLANS AND SPECIFICATIONS.

5. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY SIGNS FOR ALL REGULATORY TRAFFIC SIGNS REMOVED DURING THE CONSTRUCTION.

6. IT IS PROHIBITED TO DISCHARGE ANYTHING EXCEPT CLEAN WATER INTO THE STORM DRAIN SYSTEM.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS.

8. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZED AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.

9. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE.

10. THE DISCHARGE OF CHLORINATED AND DECHLORINATED WATER INTO THE STORM DRAIN SYSTEM IS PROHIBITED. THE DISCHARGE OF CHLORINATED OR DECHLORINATED WATER INTO SANITARY SEWER SYSTEM REQUIRES PRIOR APPROVAL FROM MUD. CONTACT RICHARD STIFFLER AT (209) 937-8740.

11. DUST CONTROL SHALL BE PROVIDED AT ALL TIMES, AT THE CONTRACTOR'S EXPENSE, TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH SECTION 10 OF CALTRANS STANDARD SPECIFICATIONS.

12. ALL METALLIC PIPE FITTING SHALL BE PROVIDED CATHODIC PROTECTION AS DETAILED HEREIN AND ACCORDING TO THE SPECIFICATIONS. AT LEAST ONE ANODE AND TEST STATION SHALL BE PROVIDED FOR EACH INDIVIDUAL ISOLATED FITTING OR GROUP OF FITTINGS SUCH AS EACH HYDRANT ASSEMBLY. ???

13. FINAL PAVEMENT WORK SHALL NOT OCCUR WITHIN THE ROAD RIGHT-OF-WAY PRIOR TO COMPLETION OF UTILITY RELOCATION WITHOUT SPECIFIC APPROVAL OF THE SJCO DIRECTOR OF PUBLIC WORKS.

14. ANY CHANGES TO THE APPROVED IMPROVEMENT PLANS AND SPECIFICATIONS MUST BE PREPARED AND CERTIFIED BY THE "CIVIL ENGINEER", AND SHALL BE SUBMITTED TO THE SJCO DIRECTOR OF PUBLIC WORKS FOR APPROVAL PRIOR TO IMPLEMENTATION.

15. WHENEVER PAVEMENT IS BROKEN OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THE SPECIFICATIONS, THE PAVEMENT SHALL BE REPLACED AFTER PROPER BACKFILLING WITH PAVEMENT MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL PAVING.

16. DRAINAGE FACILITIES SHALL BE MAINTAINED DURING PERIODS OF INCLEMENT WEATHER, AND RESTORED TO THEIR ORIGINAL CONDITIONS UPON COMPLETION OF THE WORK.

17. CONTRACTOR SHALL PROTECT ALL BENCHMARKS AND SURVEYED MONUMENTS DURING CONSTRUCTION. DAMAGED OR REMOVED MONUMENTS SHALL BE REPLACED, WITH THE SAME ORDER OF ACCURACY, AT THE CONTRACTOR'S EXPENSE.

STANDARD DRAWINGS

NEW IMPROVEMENTS ARE SUBJECT TO THE REQUIREMENTS OF SAN JOAQUIN COUNTY, CITY OF STOCKTON AND CALTRANS STANDARD DRAWINGS LISTED BELOW.

DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION
SAN JOAQUIN COUNTY		CALTRANS	
R-26	TRAFFIC SIGNS	A20A-D	PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS
R-28A	SURVEY MONUMENT FRAME & COVER	A24A	PAVEMENT MARKINGS ARROWS
R-29	TYPICAL TRENCH BACKFILL	A24D	PAVEMENT MARKINGS WORDS
R-30	ADJUSTING STREET FACILITIES TO GRADE	A24E	PAVEMENT MARKINGS WORDS & CROSSWALKS
		A87B	ASPHALT CONCRETE DIKES: TYPE A
CITY OF STOCKTON			
S-5	OUTSIDE SANITARY SEWER DROP		
S-8	MAINTENANCE HOLE FRAME & COVER		
S-9	MAINTENANCE HOLE FRAME & COVER ADJUSTMENT		
S-10	TYPE 1 MAINTENANCE HOLE FOR PIPES 33" DIAMETER OR SMALLER		
S-13	TYPE 3 MAINTENANCE HOLE FOR PIPES 36" DIAMETER AND LARGER		
W-10	BLOW-OFF		
W-13	FIRE HYDRANT		
W-18	AIR RELEASE VALVE WATER MAINS 12" - 36" DIAMETER		

LEGEND

NEW	EXISTING	DESCRIPTION
	TEL	COMMUNICATION LINE
E OH	E OH	ELECTRICAL LINE OVERHEAD
X X	x x x	FENCE
	G	GAS LINE
8"SS	8"SS	SANITARY SEWER LINE
12"SD	12"SD	STORM DRAIN LINE
10"W	W	WATER LINE
		BLOW-OFF
		CATCH BASIN
		CLEANOUT
		COMBINATION TRAFFIC SIGNAL WITH BACKPLATE & LUMINAIRE
		CURB & GUTTER
E		ELECTRICAL BOX OR TRANSFORMER PULLBOX
		ELECTROLIER
		FIRE HYDRANT ASSEMBLY
G	G	GAS METER
		GUY WIRE
		MAINTENANCE HOLE
		PG&E TRANSFORMER
	E	PG&E SUBSURFACE ENCLOSURE
		POST, BOLLARD, OR PARKING METER
		PULL BOX
		SIGN POST LOCATION
7.05 FL	+ 6.34	SPOT ELEVATION
		TRAFFIC SIGNAL
		UTILITY POLE
W	W	WATER METER
		WATER VALVE

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1550 Harbor Drive, Suite 212
West Sacramento, CA 95691
916-403-5900

NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: G-002
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

CIVIL NOTES & CONVENTIONS

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

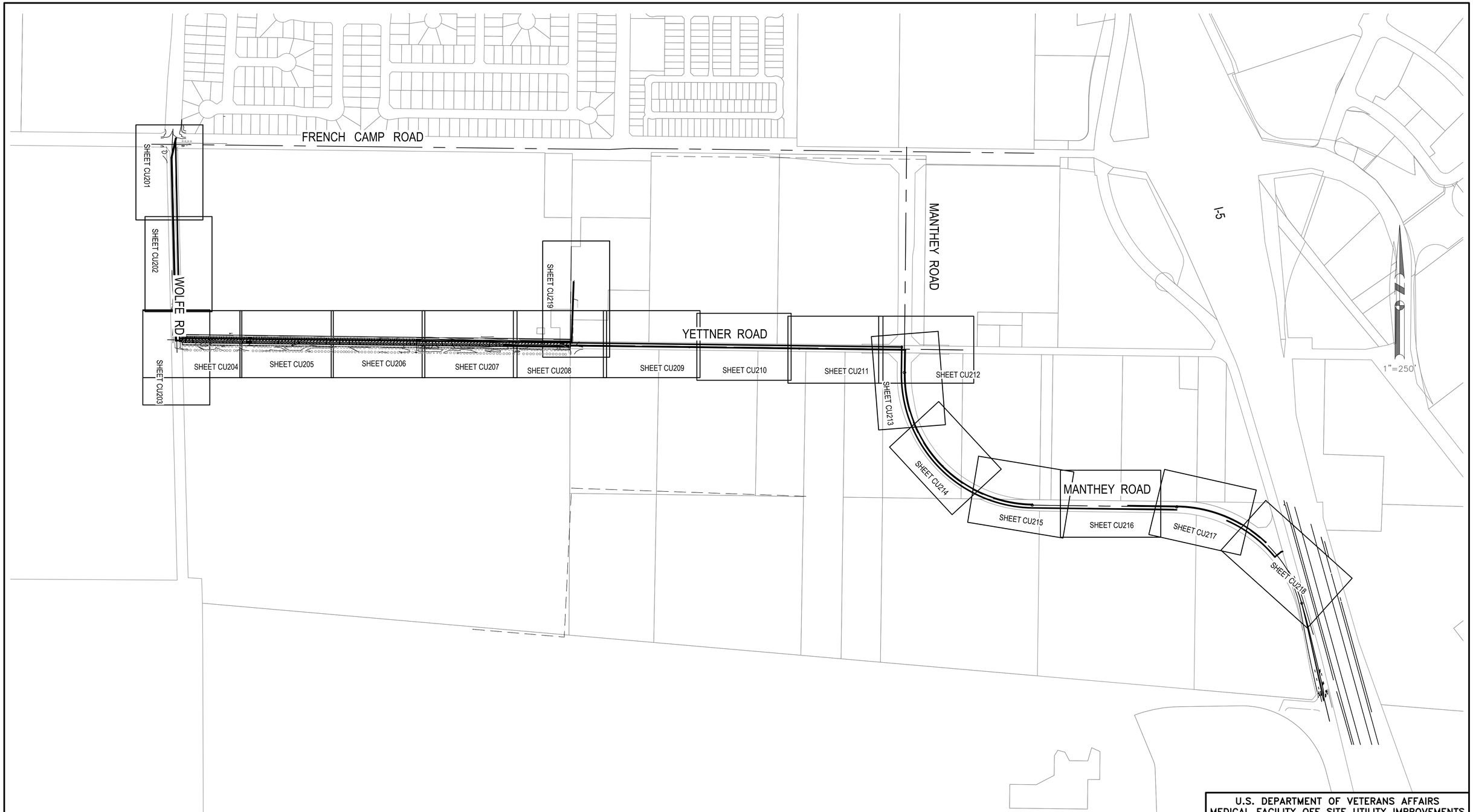
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APPROVED BY: DATE:

DIRECTOR OF MUD
STOCKTON, CALIF.

SHEET NO. X
OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\G-002.dwg
PLOT DATE: Jul 10, 2019 - 1:33pm



FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:48pm

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U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

SHEET IDENTIFICATION

DATE: JUL 2018

HORIZONTAL DATUM: CCS83, ZONE 3

VERTICAL DATUM: NAVD88

KSN PROJECT FILE NO.: 2420-0010

SCALE: SHOWN

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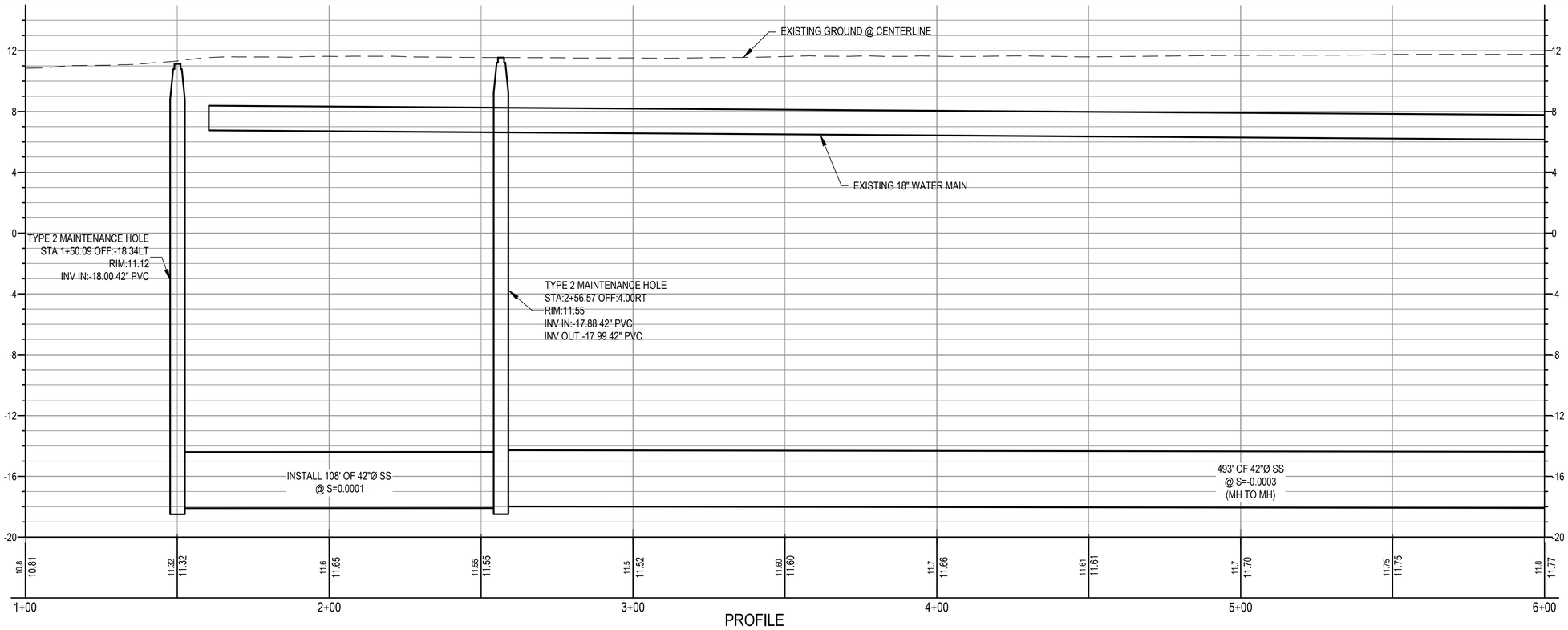
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DIRECTOR OF MUD
STOCKTON, CALIF.

SHEET NO. X

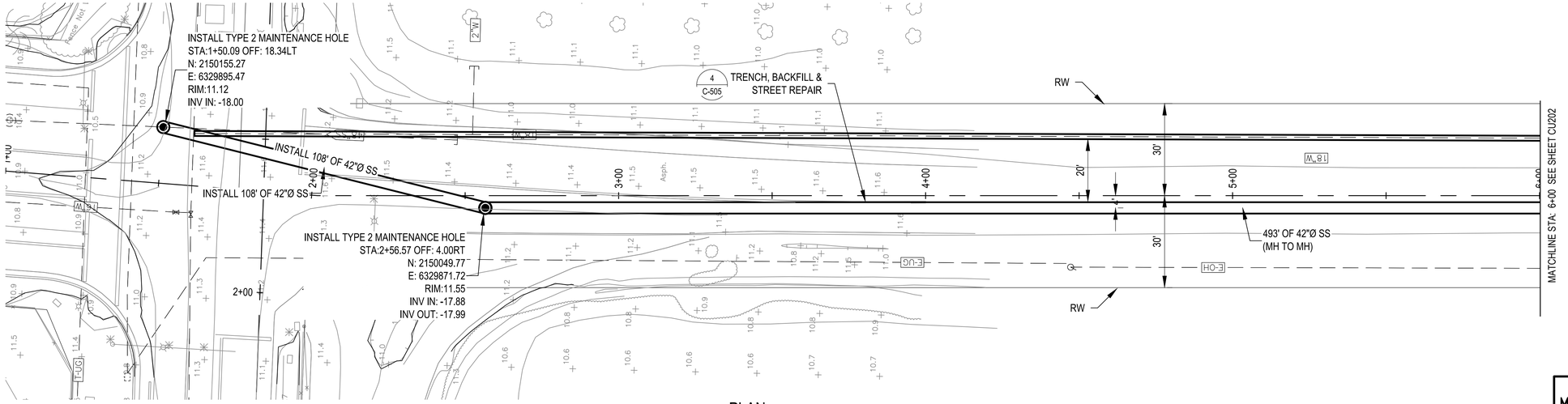
OF XX SHTS

PROJECT NO.



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

WOLFE ROAD

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU201
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

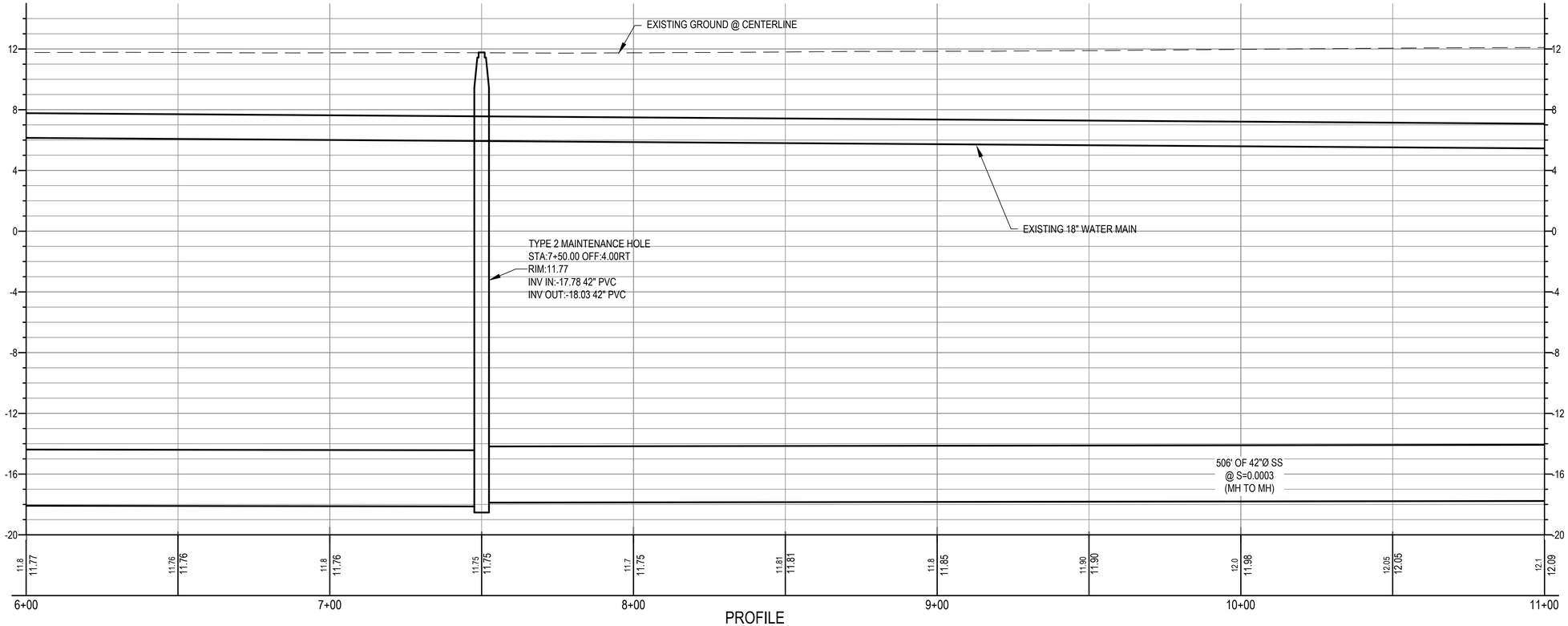
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CITY OF STOCKTON, CALIFORNIA

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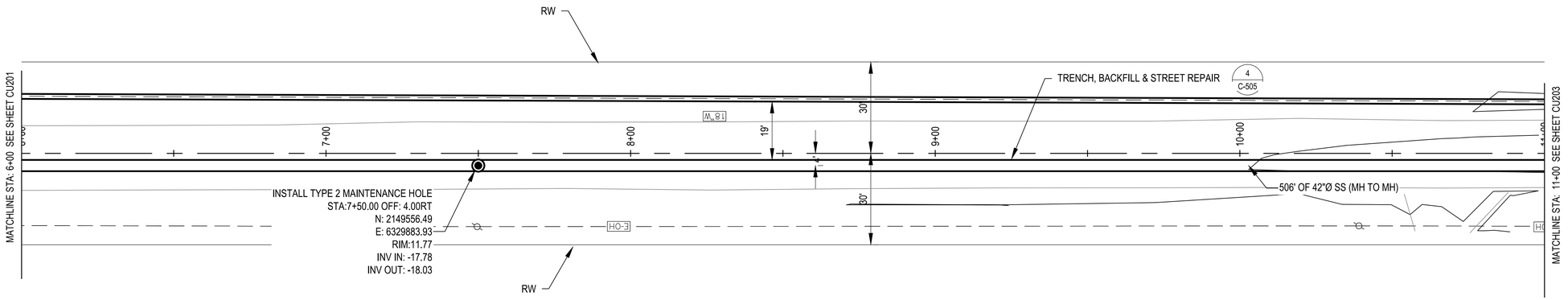
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STOCKTON, CALIF.

SHEET NO. X
OF XX SHTS
PROJECT NO.



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

WOLFE ROAD

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HORIZONTAL DATUM
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VERTICAL DATUM
NAVD88

KSN PROJECT FILE NO.
2420-0010

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MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

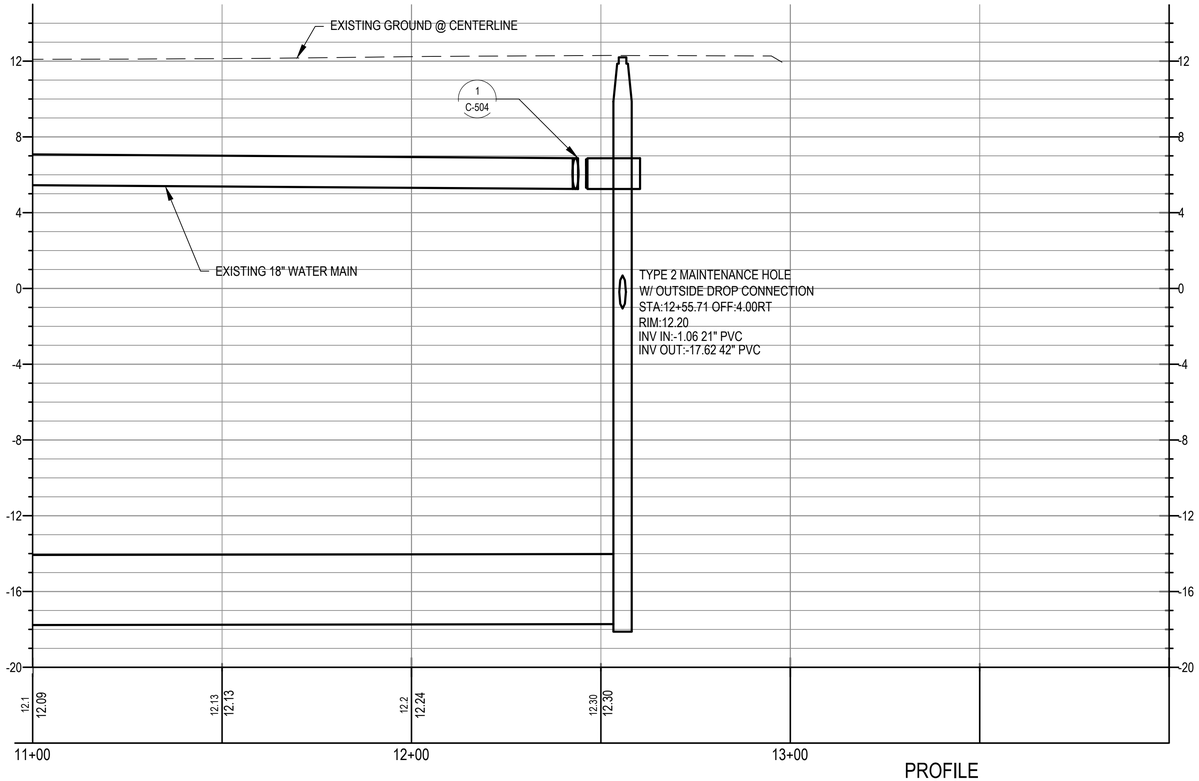
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DRAWN BY:
CHECKED BY:
RECORD DWG:

APPROVED BY: DATE:

DIRECTOR OF MUD
STOCKTON, CALIF.

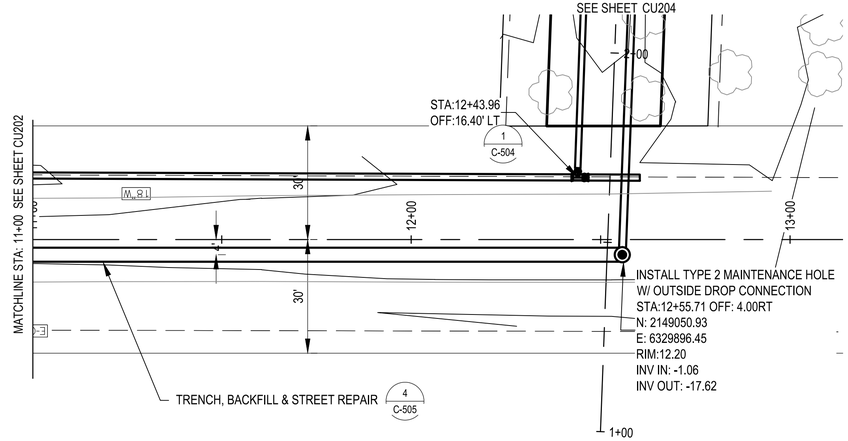
SHEET NO.
X
OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:49pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

WOLFE ROAD

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:49pm

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30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

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0 ½" 1"

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU203
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

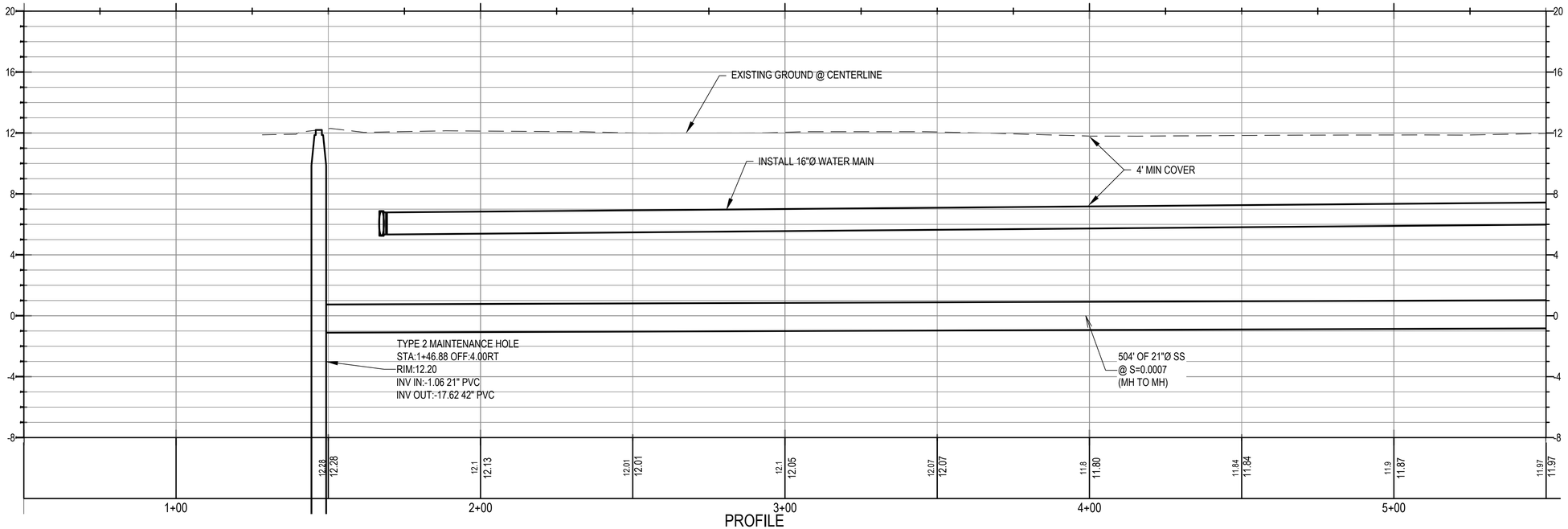
WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

SCALE: SHOWN
DESIGNED BY:
DRAWN BY:
CHECKED BY:
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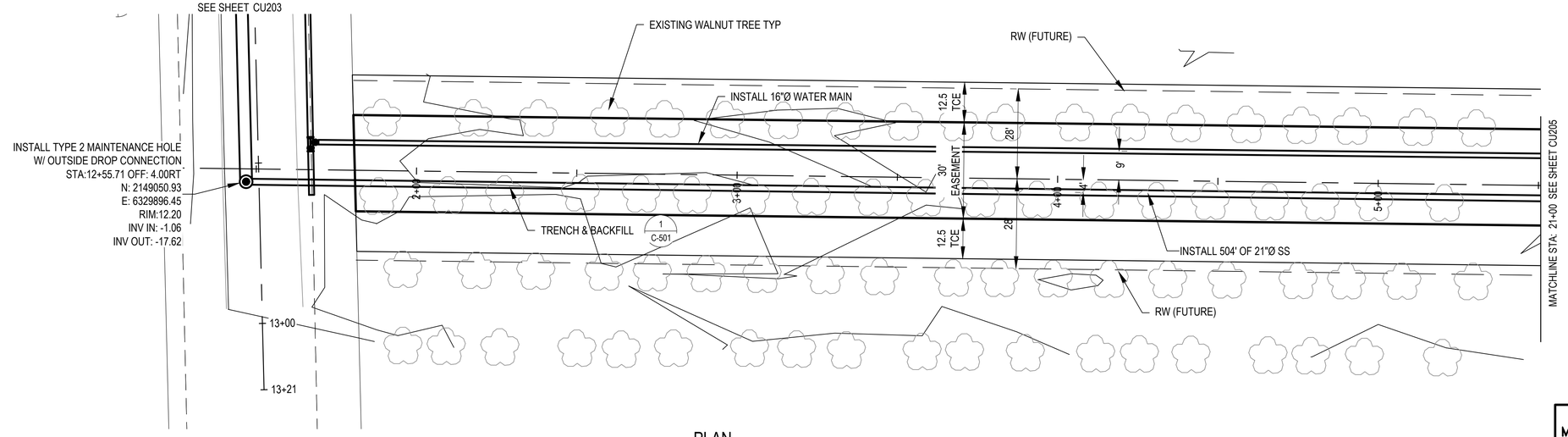
APPROVED BY: DATE:
DIRECTOR OF MUD
STOCKTON, CALIF.

SHEET NO. X
OF XX SHTS
PROJECT NO.



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

YETTNER ROAD

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:49pm

CALL BEFORE YOU DIG 800 227 2600 UNDERGROUND SERVICE ALERT

30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

DRAWING SCALE
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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU204
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

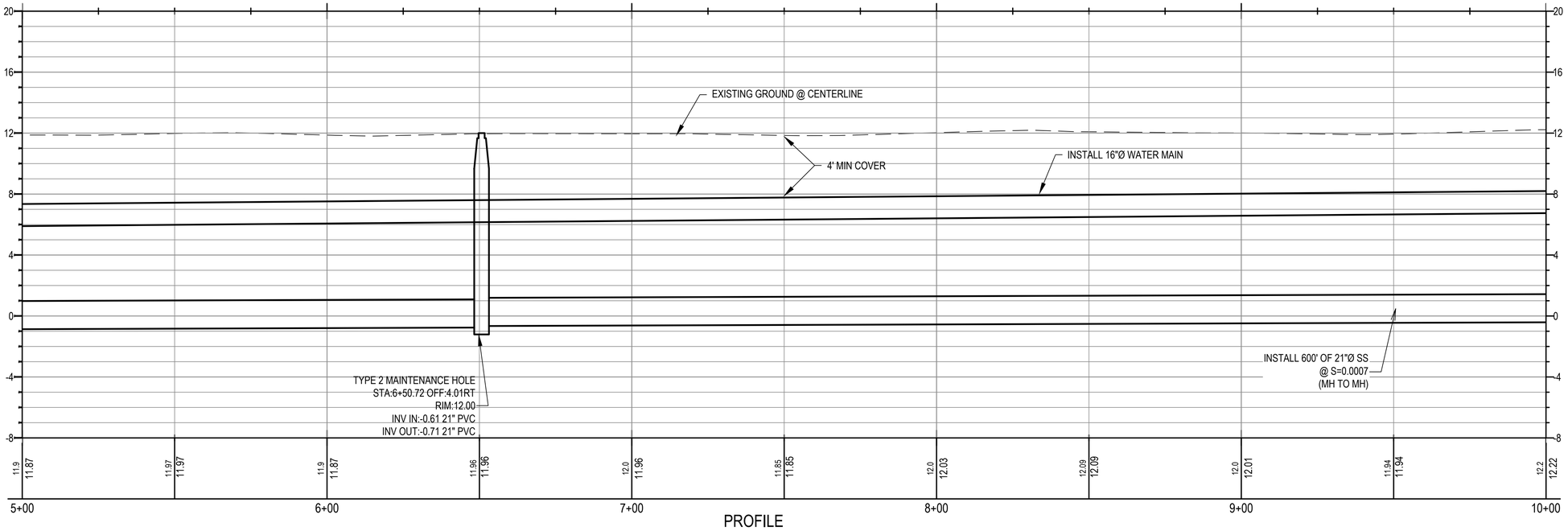
MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

SCALE: SHOWN
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APPROVED BY: DATE:

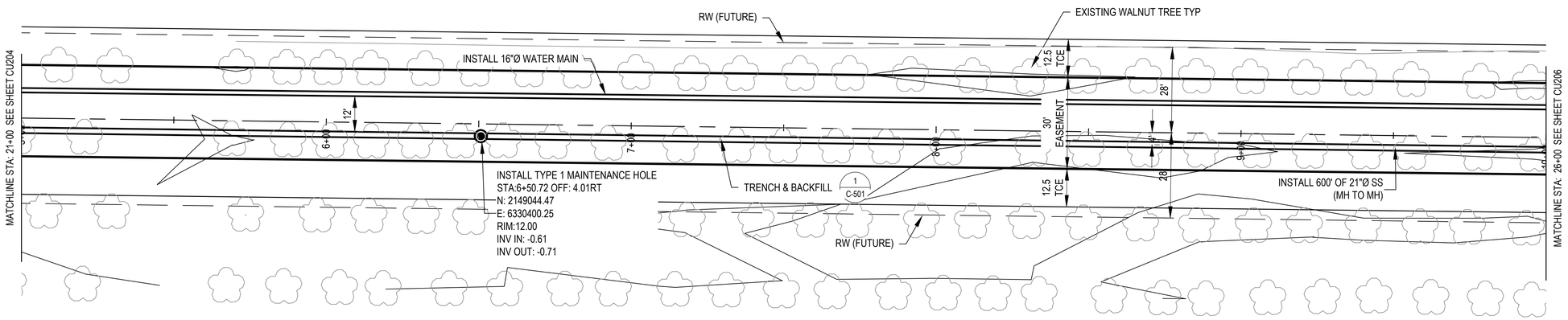
DIRECTOR OF MUD
STOCKTON, CALIF.

SHEET NO. X
OF XX SHTS
PROJECT NO.



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

YETTNER ROAD

CALL BEFORE YOU DIG 800 227 2600 UNDERGROUND SERVICE ALERT

30% PLAN SUBMITTAL

N

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

DRAWING SCALE
SHOWN
ORIGINAL DRAWING SCALE
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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION
CU205

DATE
JUL 2018

HORIZONTAL DATUM
CCS83, ZONE 3

VERTICAL DATUM
NAVD88

KSN PROJECT FILE NO.
2420-0010

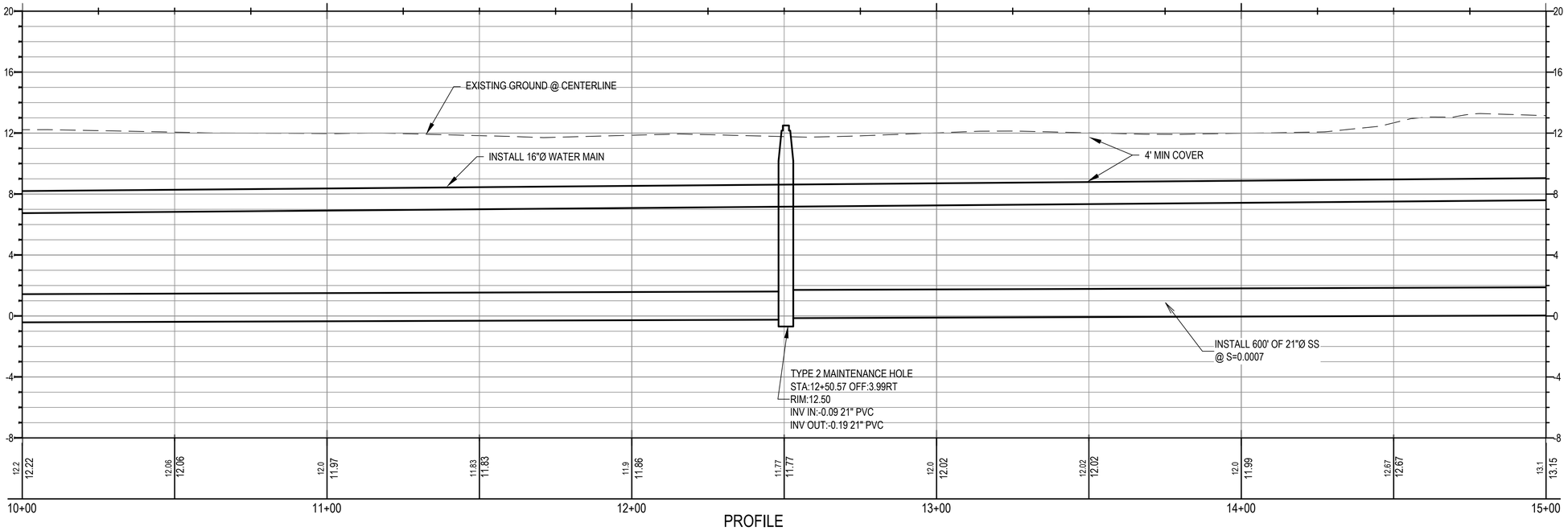
U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

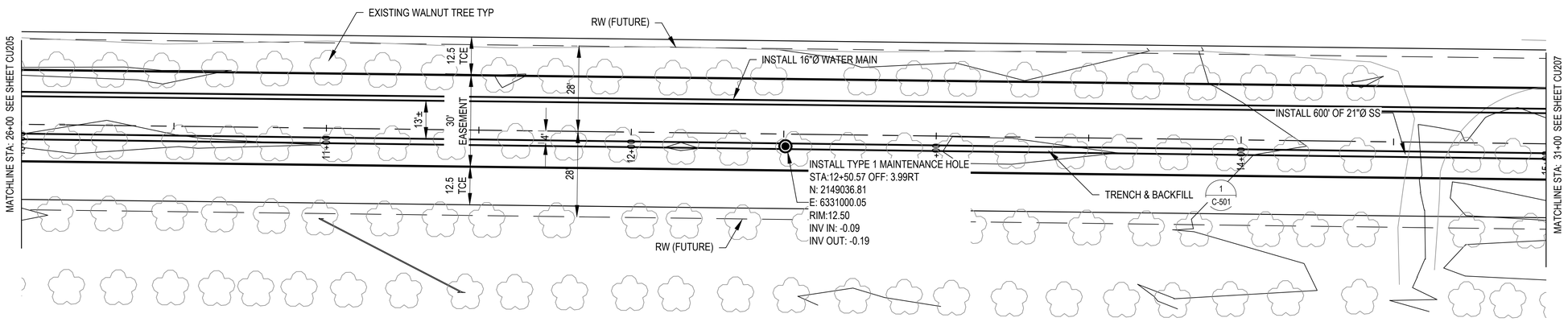
SCALE: SHOWN	APPROVED BY: DATE:	SHEET NO.	X
DESIGNED BY:		OF XX SHTS	
DRAWN BY:		PROJECT NO.	
CHECKED BY:	DIRECTOR OF MUD STOCKTON, CALIF.		
RECORD DWG:			

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:49pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

YETTNER ROAD

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30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU206
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

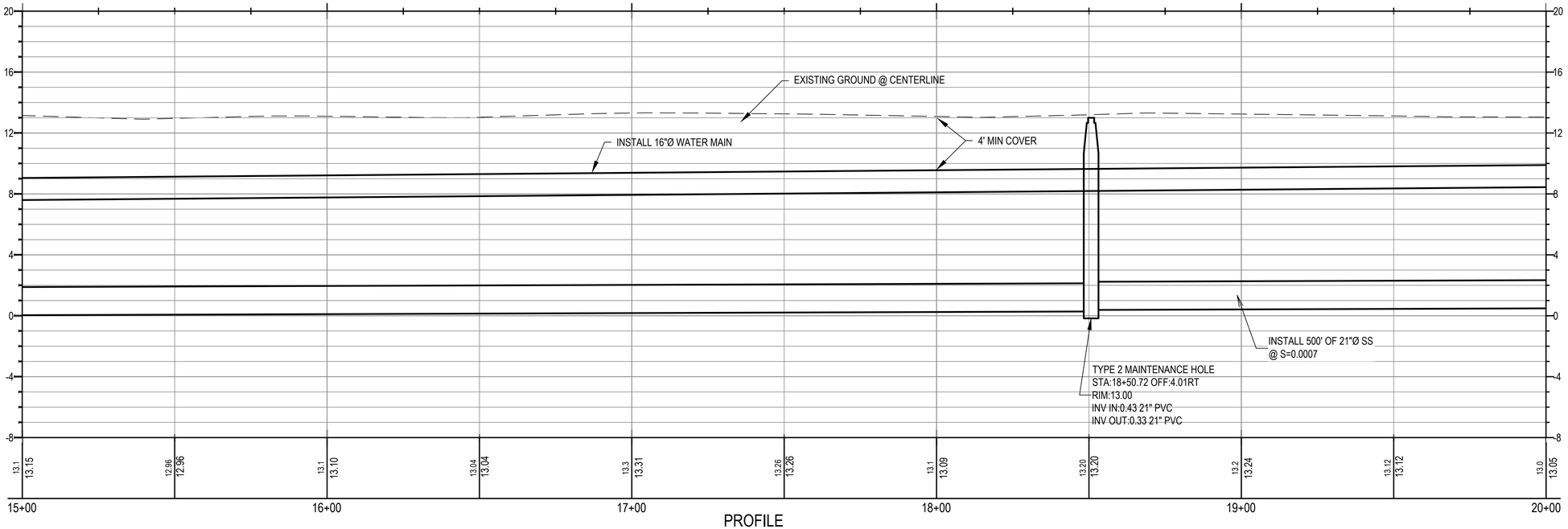
MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

SCALE: SHOWN
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DRAWN BY:
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RECORD DWG:

APPROVED BY: DATE:
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STOCKTON, CALIF.

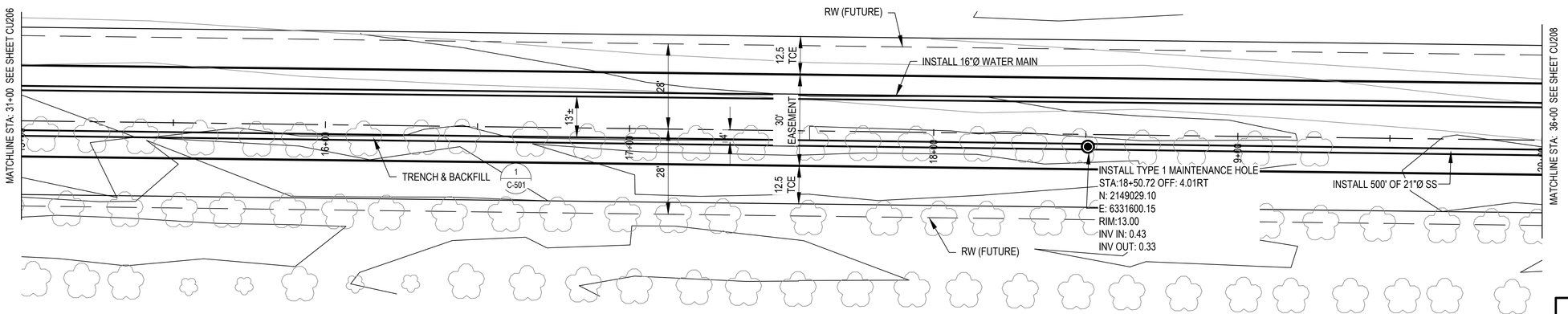
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OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:50pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

YETTNER ROAD

CALL BEFORE YOU DIG 1-800-227-2600 UNDERGROUND SERVICE ALERT

30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU207
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

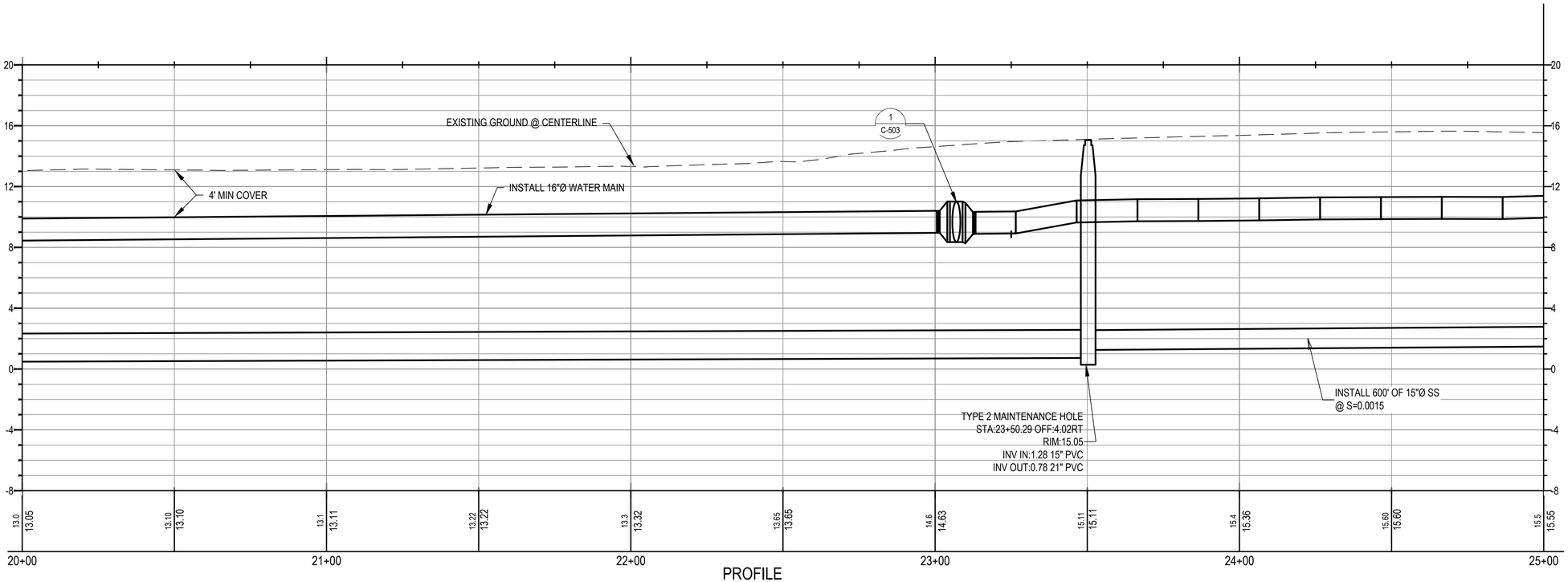
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APPROVED BY: DATE:

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OF XX SHTS
PROJECT NO.

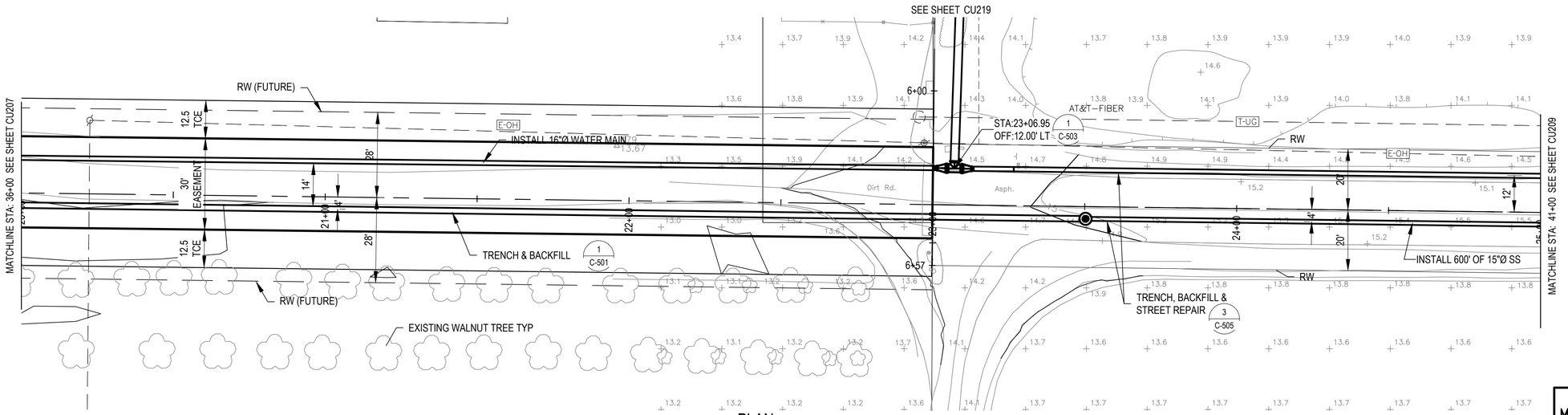
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PLOT DATE: Jul 10, 2019 - 1:50pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.

WATER TANK YARD



PLAN

SCALE: 1" = 20'

YETTNER ROAD

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:50pm

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30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION
CU208

DATE
JUL 2018

HORIZONTAL DATUM
CCS83, ZONE 3

VERTICAL DATUM
NAVD88

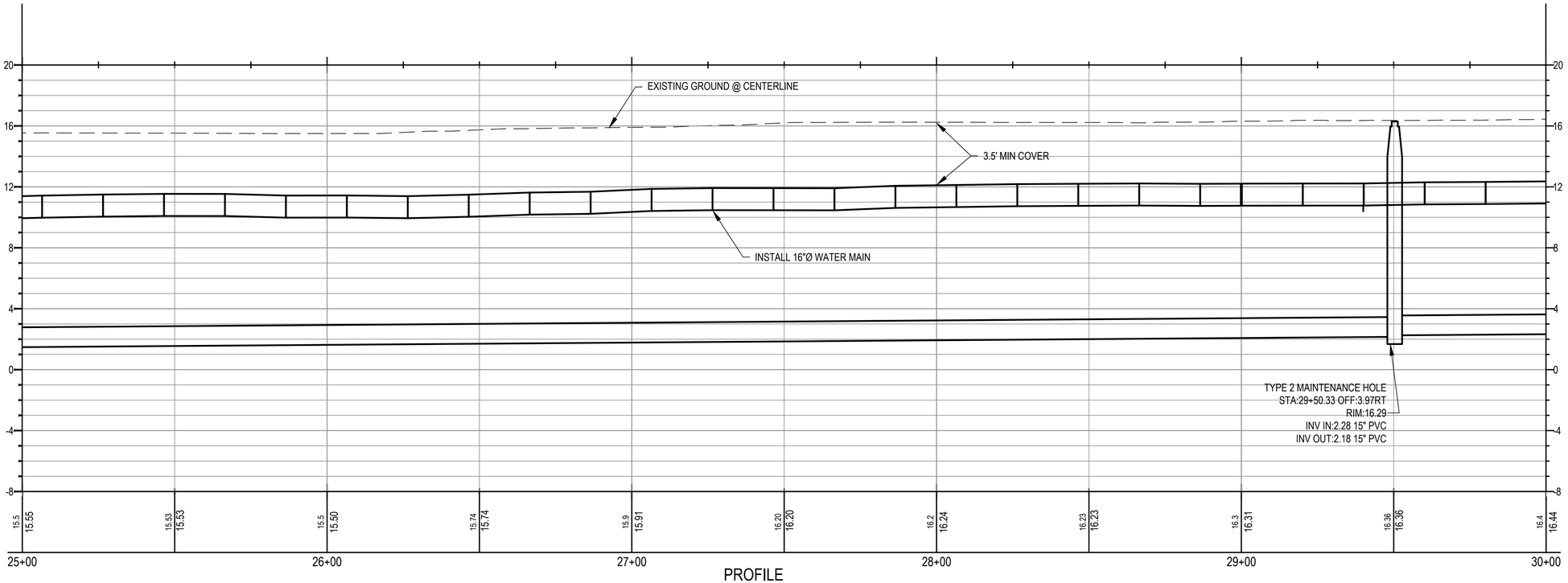
KSN PROJECT FILE NO.
2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

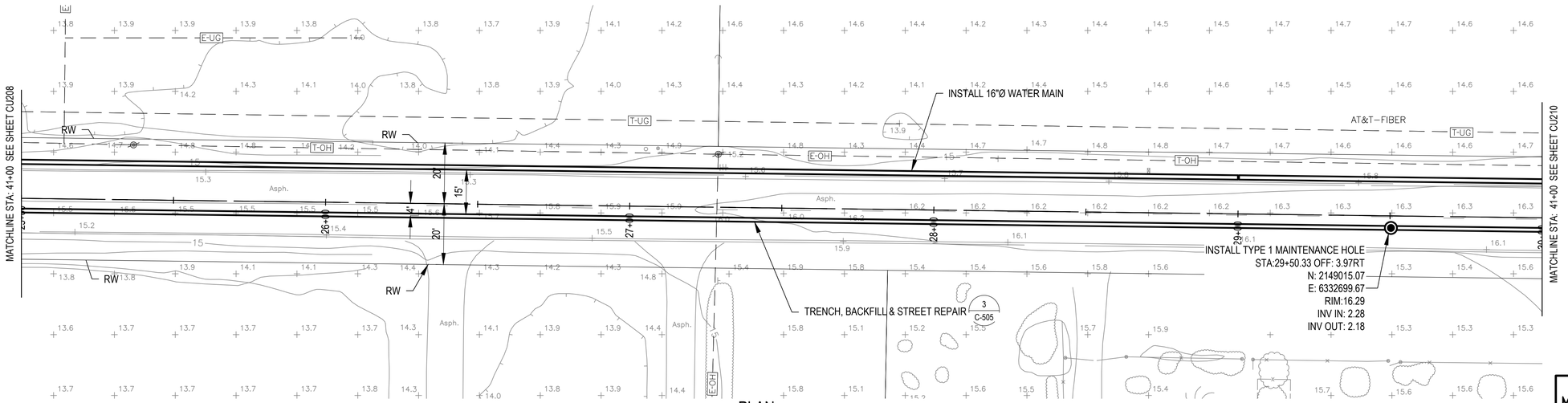
MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

SCALE: SHOWN	APPROVED BY: DATE:	SHEET NO.	X
DESIGNED BY:		OF XX SHTS	
DRAWN BY:		PROJECT NO.	
CHECKED BY:	DIRECTOR OF MUD		
RECORD DWG:	STOCKTON, CALIF.		



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

YETTNER ROAD

CALL BEFORE YOU DIG 800 227 2600 UNDERGROUND SERVICE ALERT

30% PLAN SUBMITTAL

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PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

DRAWING SCALE

SHOWN

ORIGINAL DRAWING SCALE

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU209

DATE: JUL 2018

HORIZONTAL DATUM: CCS83, ZONE 3

VERTICAL DATUM: NAVD88

KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

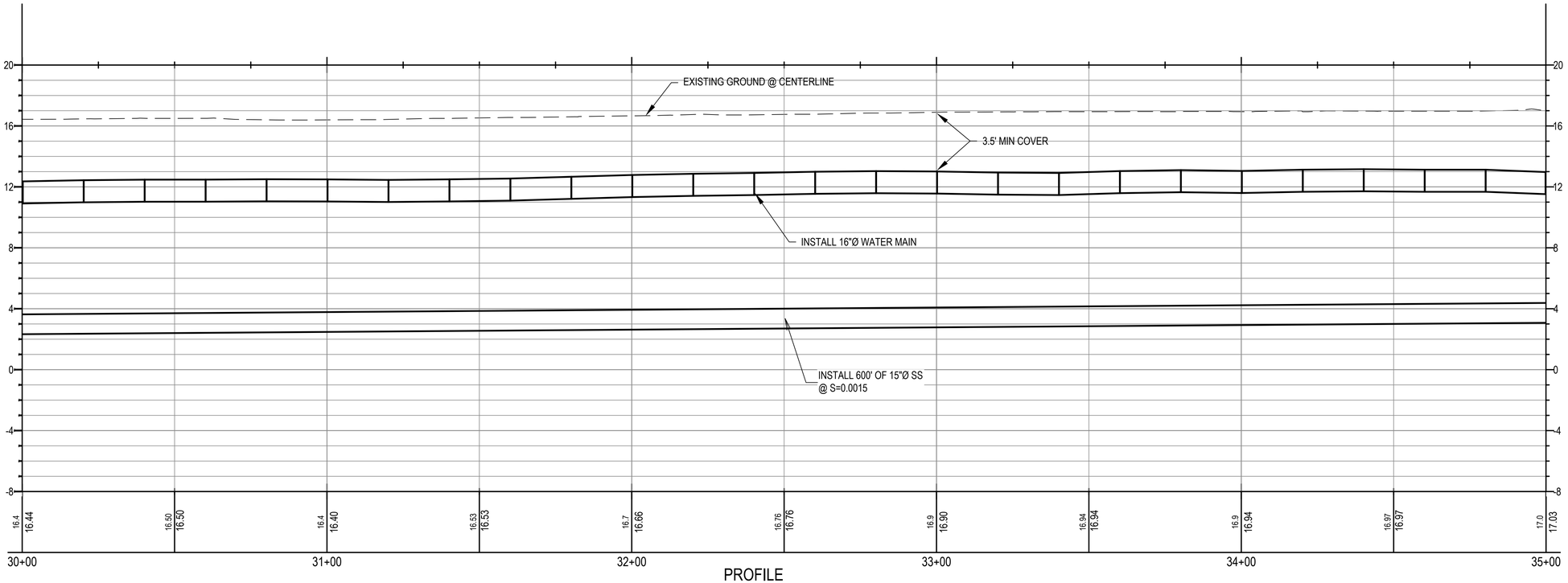
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DIRECTOR OF MUD
STOCKTON, CALIF.

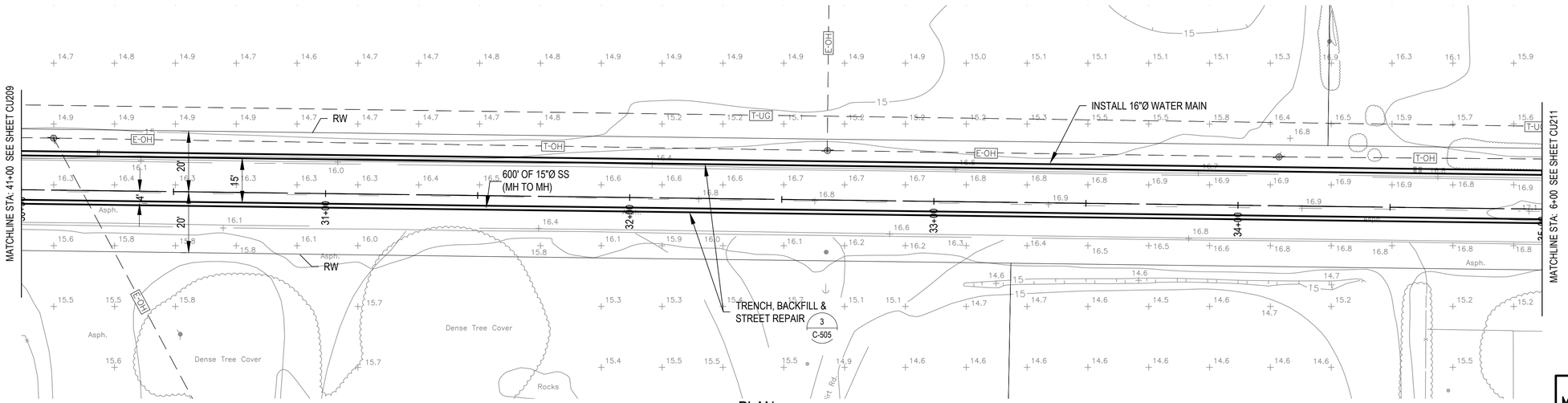
SHEET NO. X
OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:51pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

YETTNER ROAD

CALL BEFORE YOU DIG
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30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU210
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

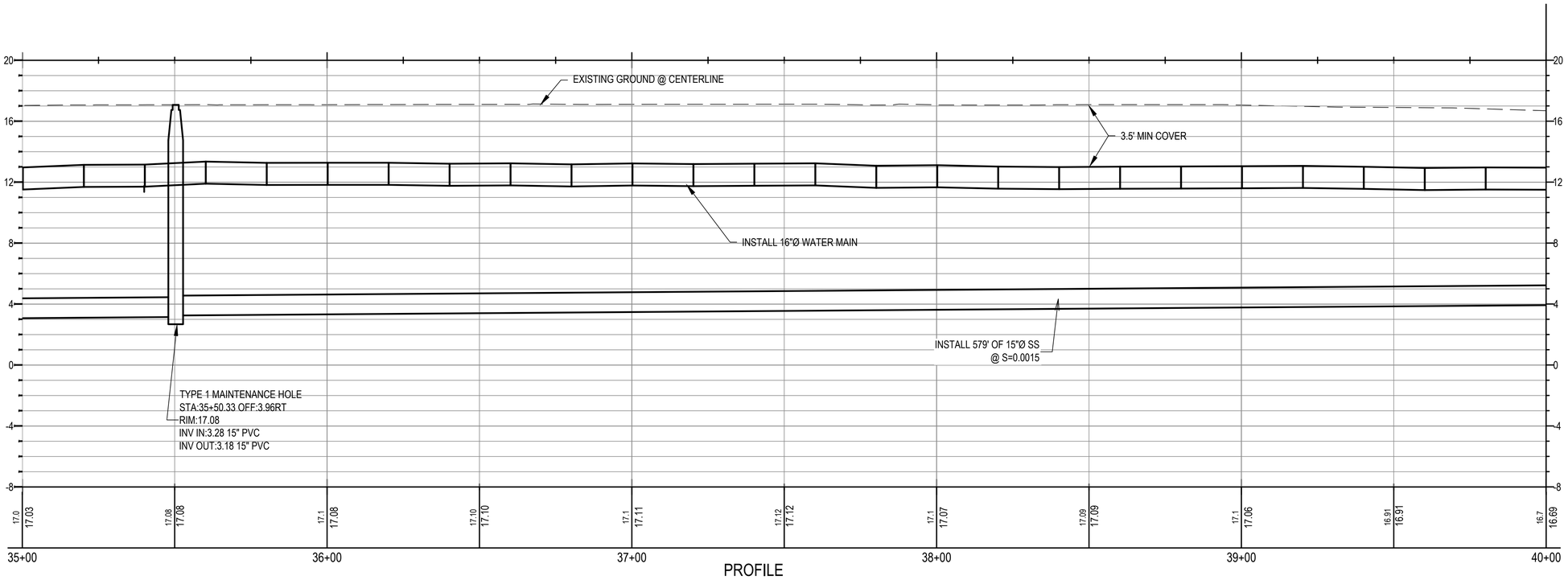
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CITY OF STOCKTON, CALIFORNIA

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DRAWN BY:
CHECKED BY:
RECORD DWG:

APPROVED BY: DATE:
DIRECTOR OF MUD
STOCKTON, CALIF.

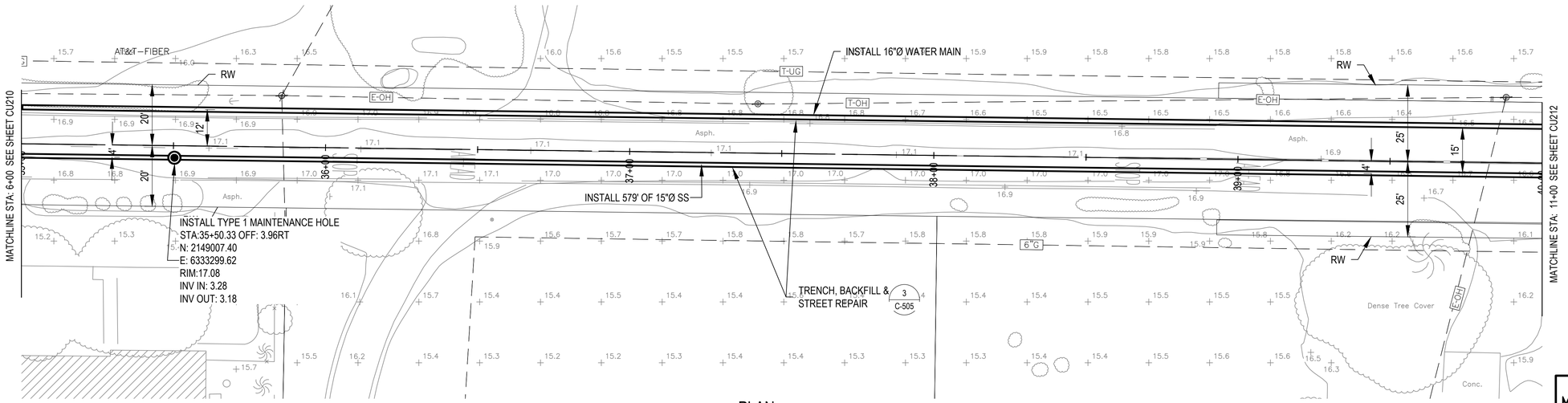
SHEET NO. X
OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:51pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

YETTNER ROAD

CALL BEFORE YOU DIG 1-800-227-2600 UNDERGROUND SERVICE ALERT

30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

DRAWING SCALE

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ORIGINAL DRAWING SCALE

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION	CU211
DATE	JUL 2018
HORIZONTAL DATUM	CCS83, ZONE 3
VERTICAL DATUM	NAVD88
KSN PROJECT FILE NO.	2420-0010

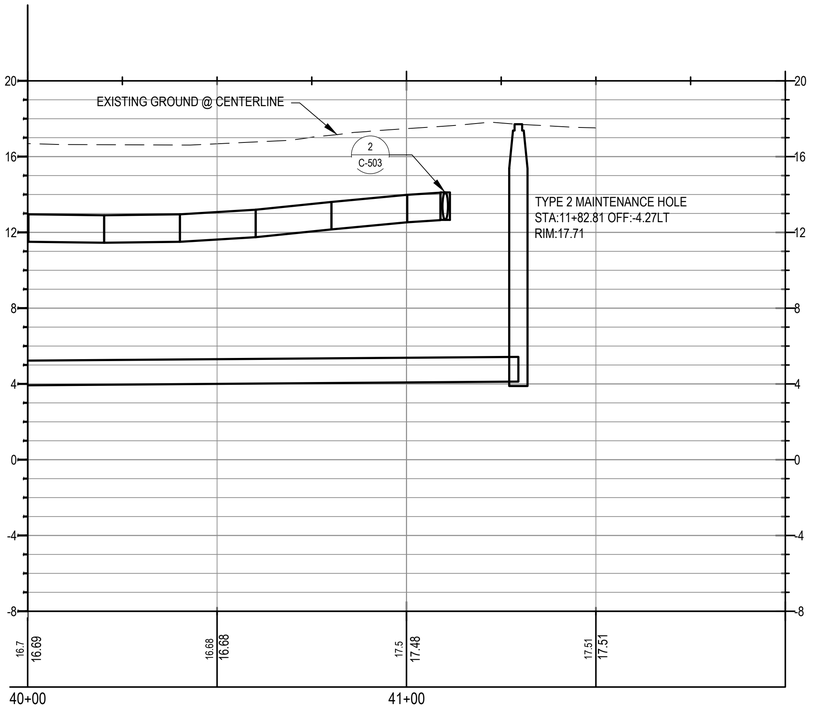
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MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

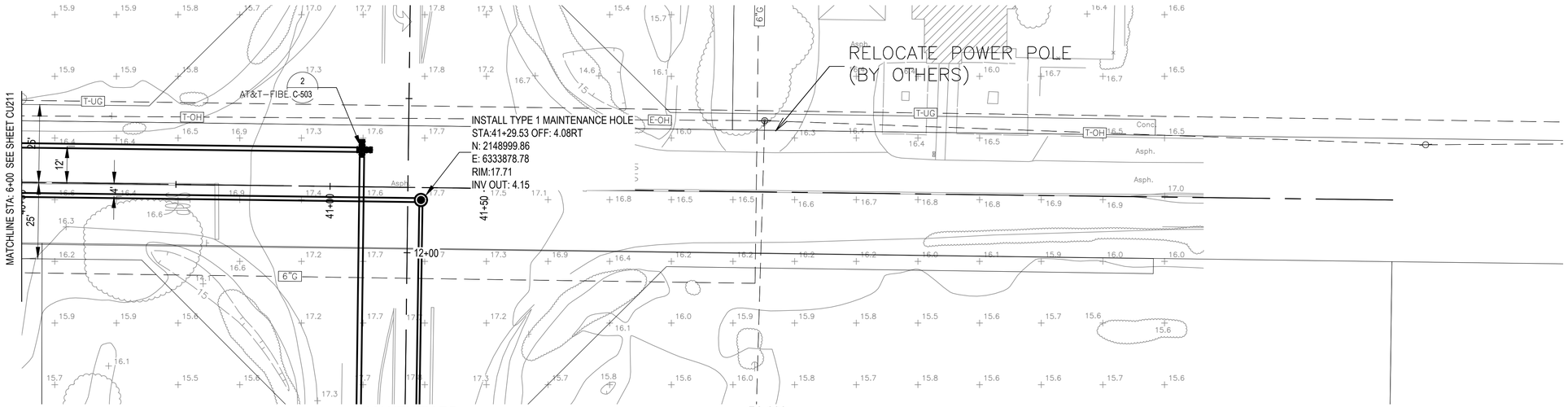
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DESIGNED BY:			OF XX SHTS
DRAWN BY:			PROJECT NO.
CHECKED BY:	DIRECTOR OF MUD		
RECORD DWG:	STOCKTON, CALIF.		

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:51pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



MANTHEY RD

SEE SHEET CU213

PLAN

SCALE: 1" = 20'

YETTNER ROAD

CALL BEFORE YOU DIG 800 227 2600 UNDERGROUND SERVICE ALERT

30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

DRAWING SCALE
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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU212
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

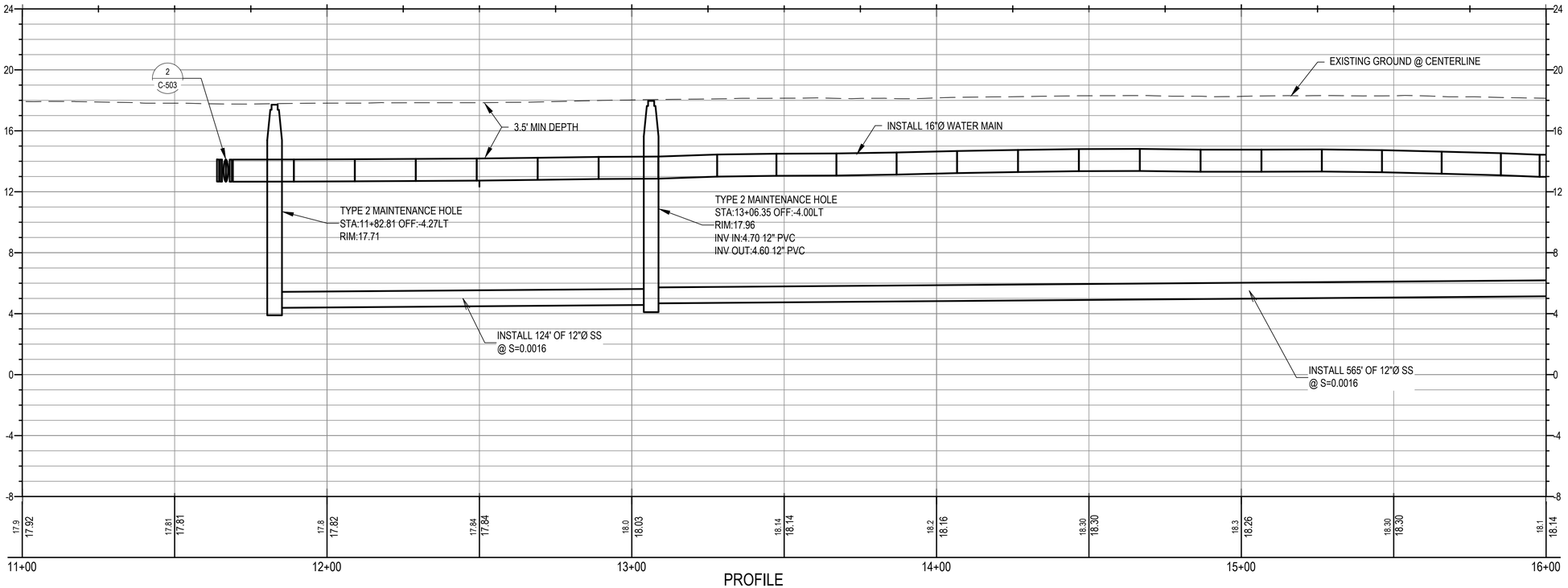
U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

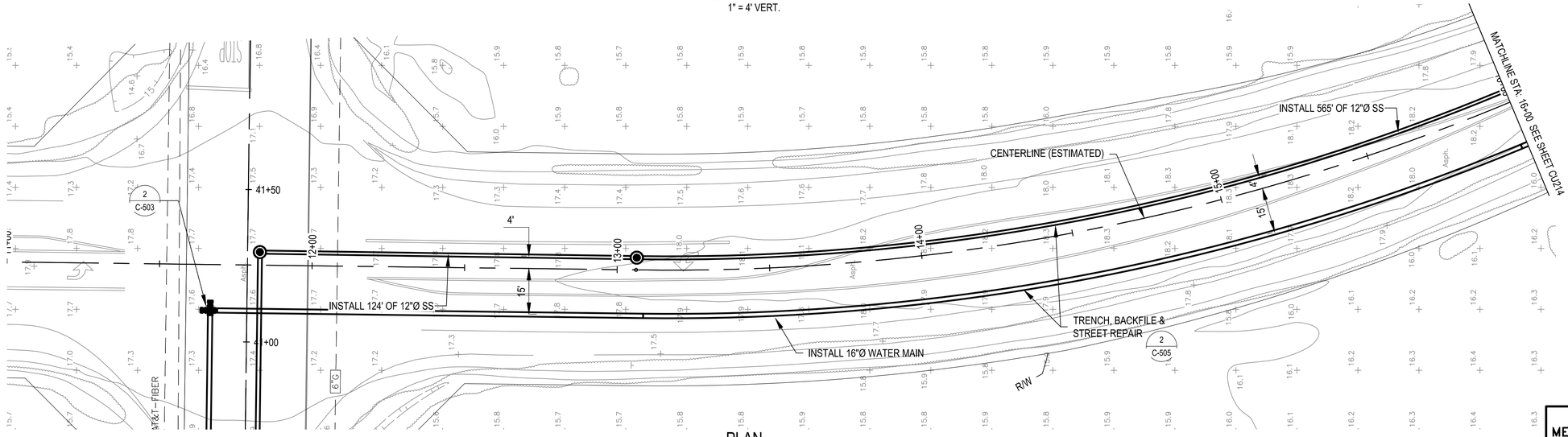
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DRAWN BY:
CHECKED BY:
RECORD DWG:
APPROVED BY: DATE:
DIRECTOR OF MUD
STOCKTON, CALIF.
SHEET NO. X
OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:52pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

YETTNER RD

SEE SHEET CU212

MANTHEY ROAD

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30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

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0 ½" 1"

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION
CU213

DATE
JUL 2018

HORIZONTAL DATUM
CCS83, ZONE 3

VERTICAL DATUM
NAVD88

KSN PROJECT FILE NO.
2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

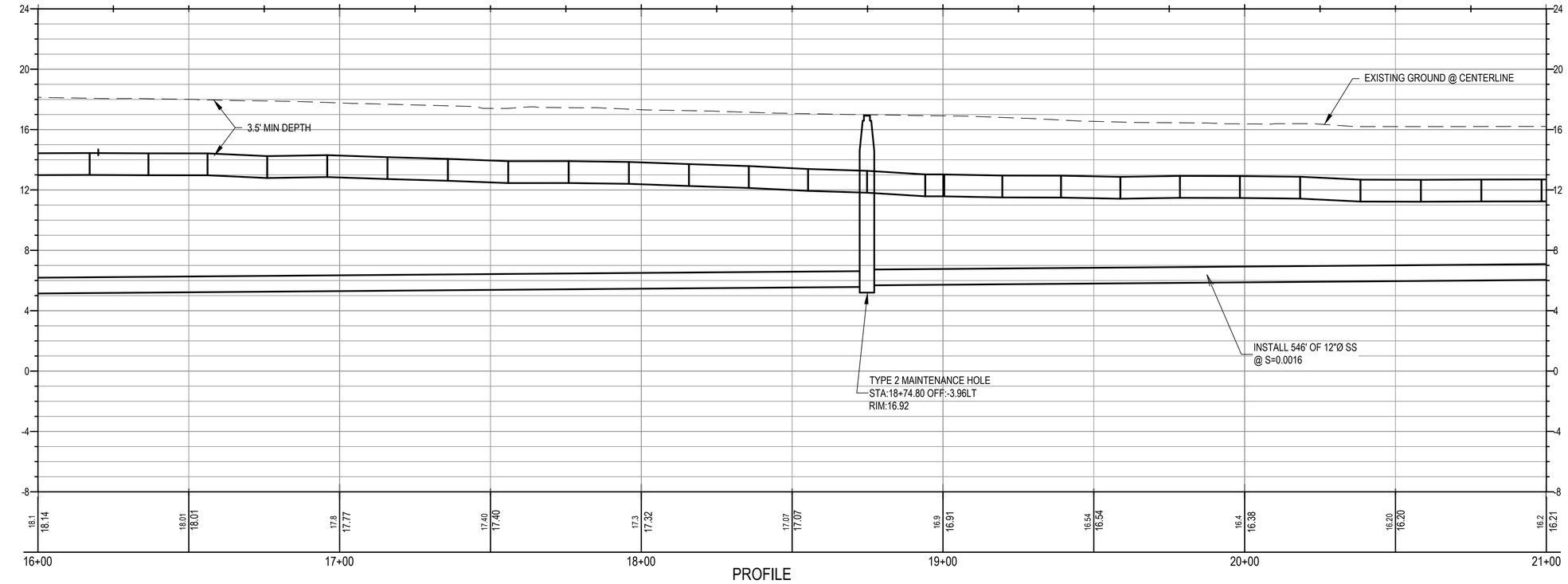
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RECORD DWG:

APPROVED BY: DATE:

DIRECTOR OF MUD
STOCKTON, CALIF.

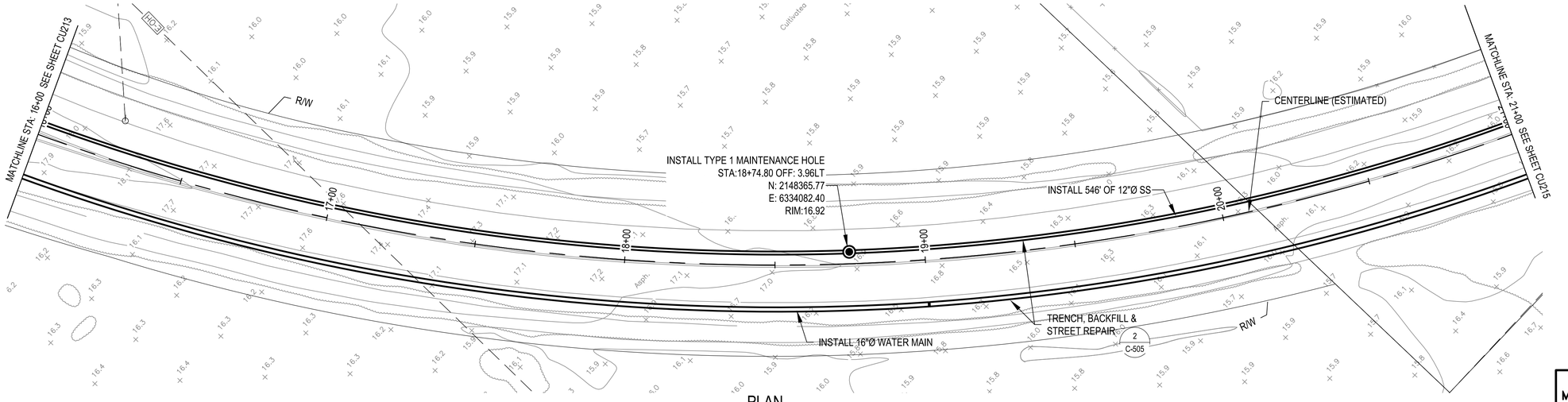
SHEET NO.
X
OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
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PROFILE

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1" = 4' VERT.



PLAN

SCALE: 1" = 20'

MANTHEY ROAD

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PRINCIPAL ENGINEER

PROJECT ENGINEER

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ORIGINAL DRAWING SCALE 0 ½" 1"

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU214
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

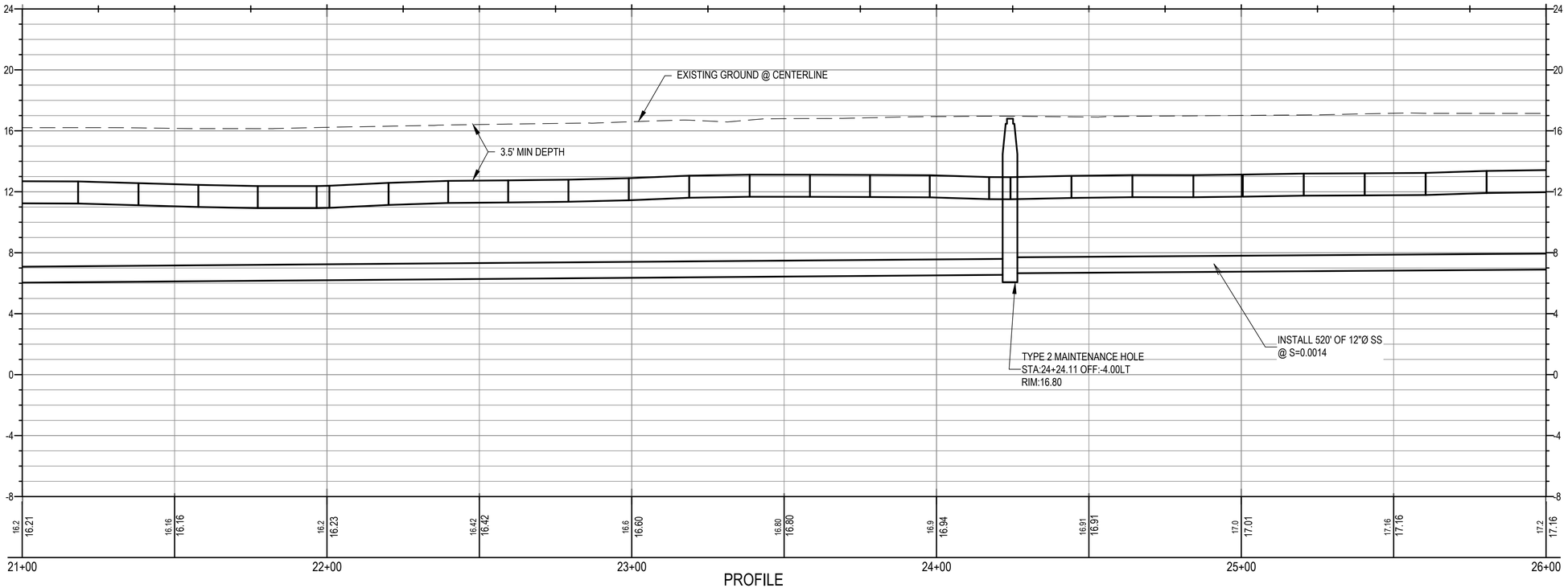
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STOCKTON, CALIF.

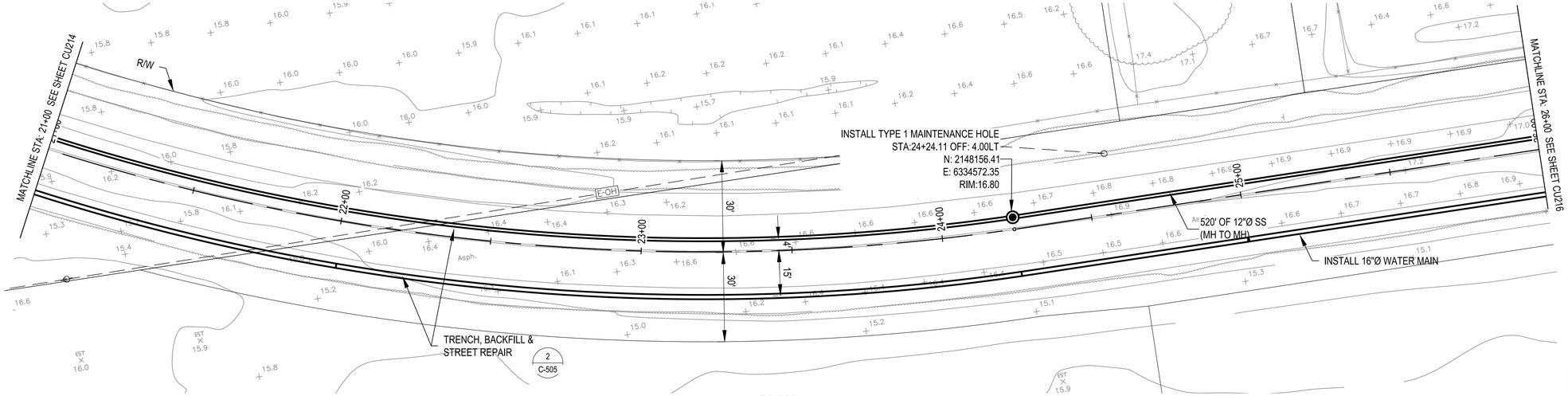
SHEET NO. X
OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:52pm



PROFILE

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1" = 4' VERT.



PLAN

SCALE: 1" = 20'

MANTHEY ROAD

30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

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SHEET IDENTIFICATION: CU215
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

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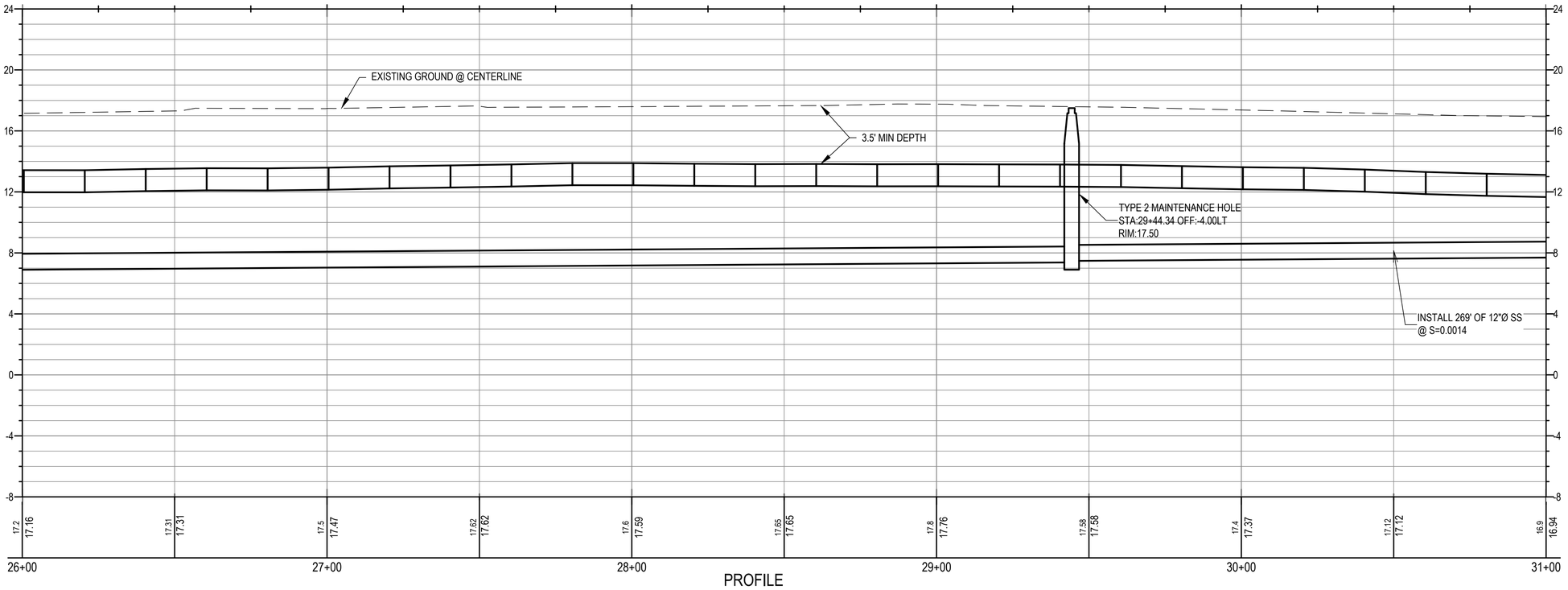
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CITY OF STOCKTON, CALIFORNIA

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APPROVED BY: DATE:
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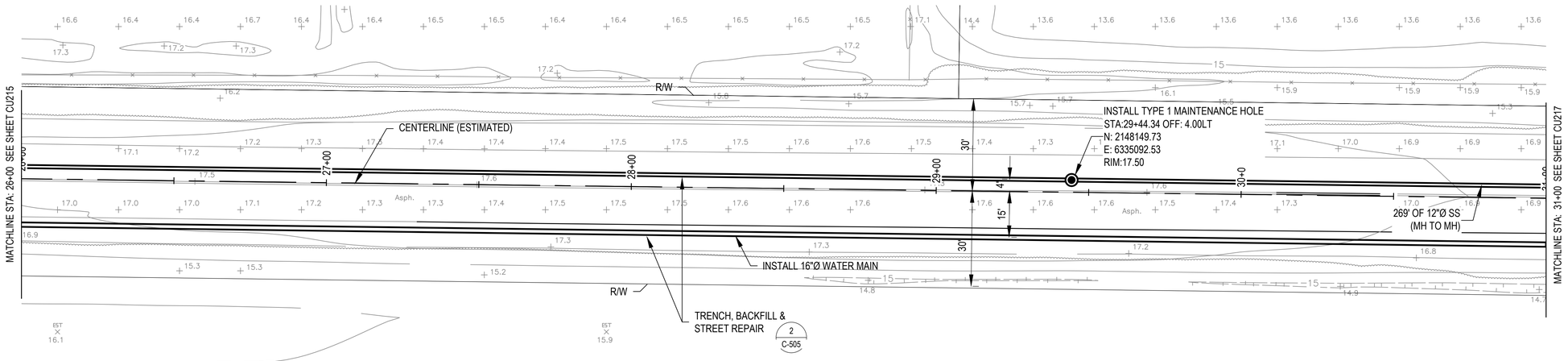
SHEET NO. X
OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:53pm



PROFILE

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1" = 4' VERT.



PLAN

SCALE: 1" = 20'

MANTHEY ROAD

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SHEET IDENTIFICATION
CU216

DATE
JUL 2018

HORIZONTAL DATUM
CCS83, ZONE 3

VERTICAL DATUM
NAVD88

KSN PROJECT FILE NO.
2420-0010

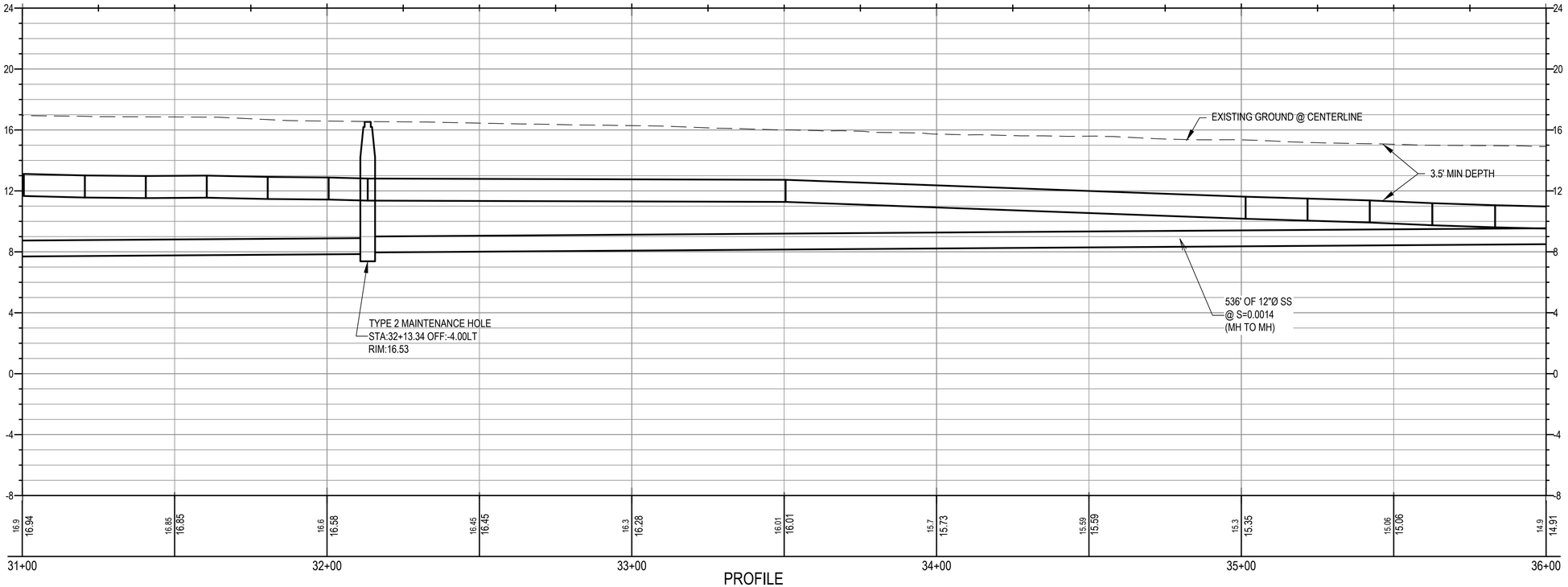
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WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

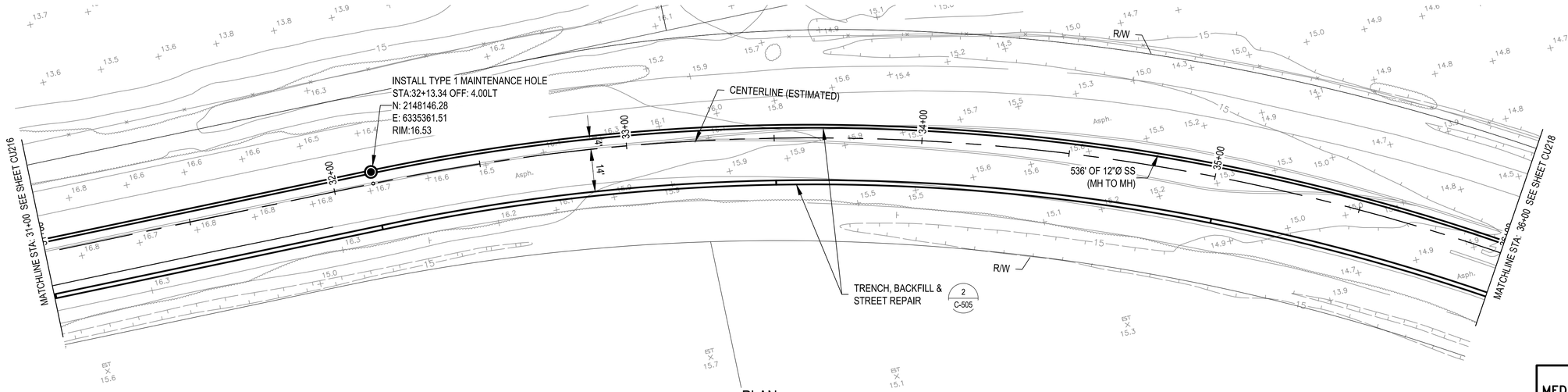
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DRAWN BY:		PROJECT NO.	
CHECKED BY:	DIRECTOR OF MUD		
RECORD DWG:	STOCKTON, CALIF.		

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:53pm



PROFILE

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1" = 4' VERT.



PLAN

SCALE: 1" = 20'

MANTHEY ROAD

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30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION
CU217

DATE
JUL 2018

HORIZONTAL DATUM
CCS83, ZONE 3

VERTICAL DATUM
NAVD88

KSN PROJECT FILE NO.
2420-0010

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MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

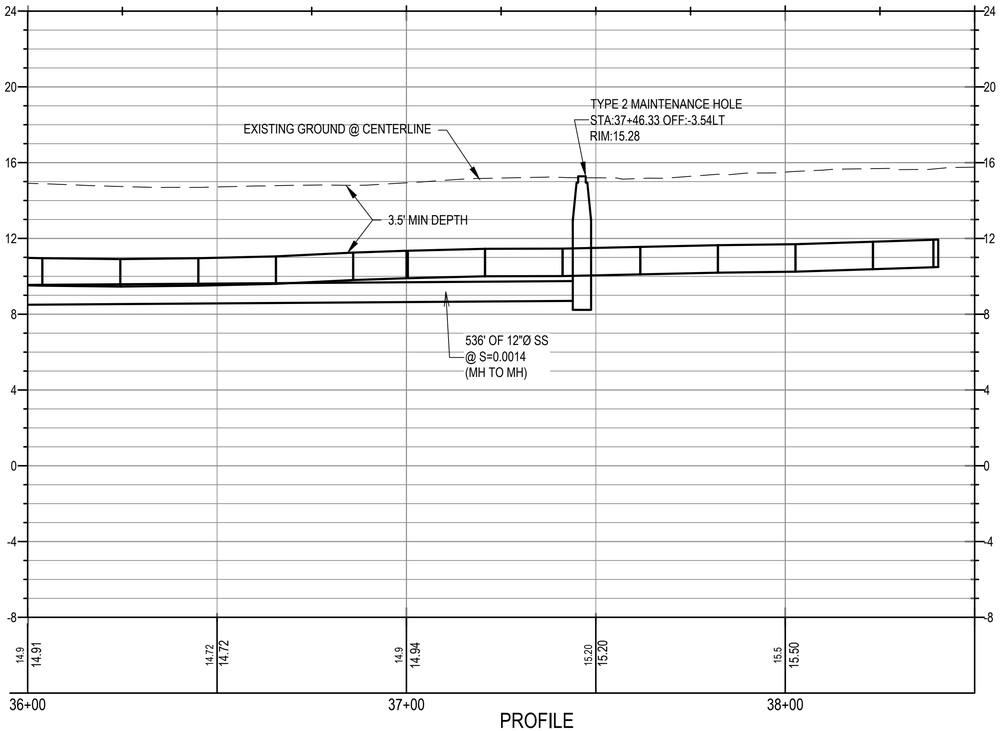
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APPROVED BY: DATE:

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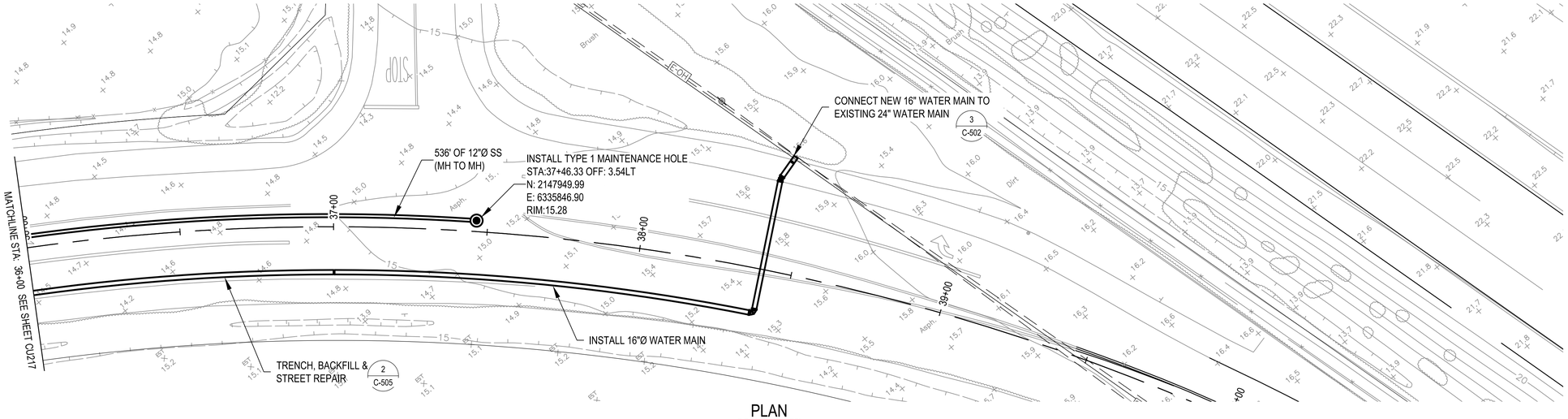
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X
OF XX SHTS
PROJECT NO.

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:53pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

MANTHEY ROAD

CALL BEFORE YOU DIG 1-800-227-2600 UNDERGROUND SERVICE ALERT

30% PLAN SUBMITTAL

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PROJECT ENGINEER

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION: CU218
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

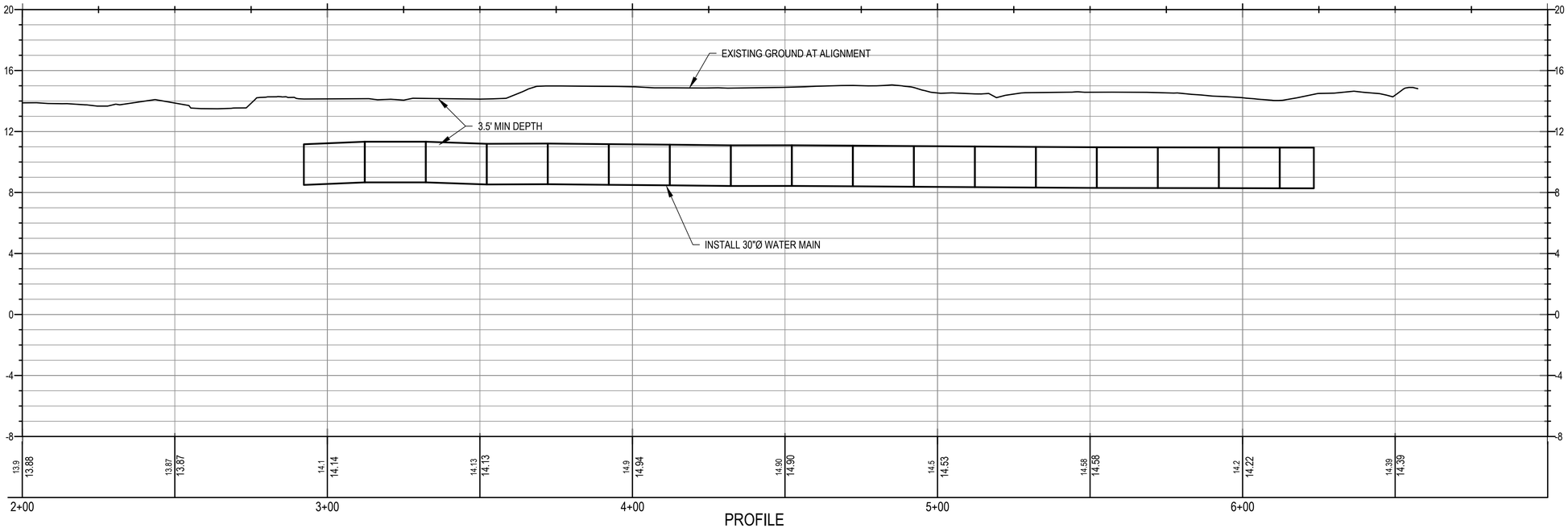
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CITY OF STOCKTON, CALIFORNIA

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APPROVED BY: DATE:
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STOCKTON, CALIF.

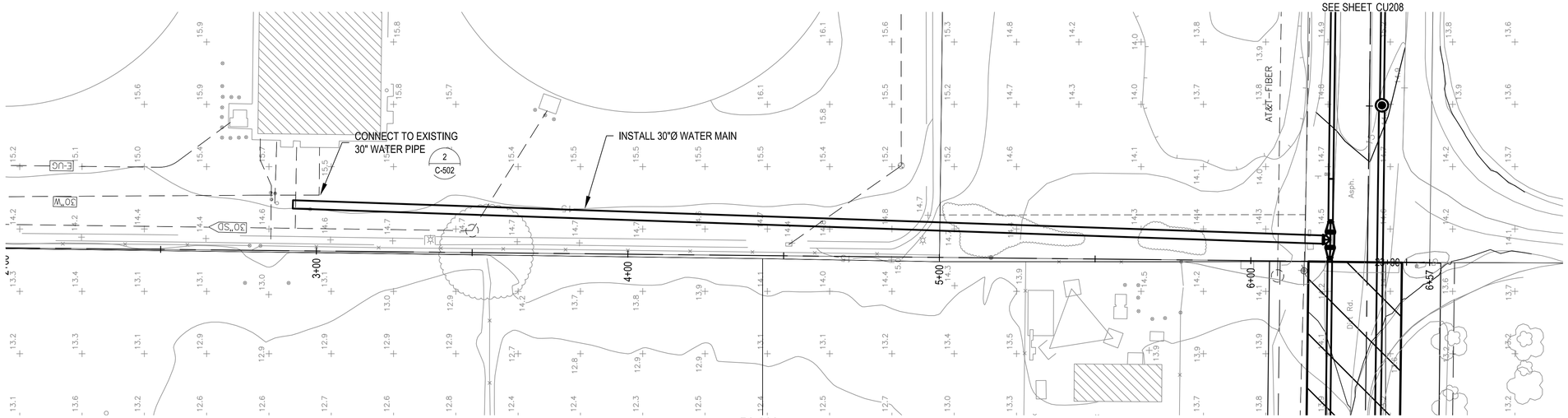
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PLOT DATE: Jul 10, 2019 - 1:54pm



PROFILE

SCALE: 1" =20' HORIZ.
1" = 4' VERT.



PLAN

SCALE: 1" = 20'

WATER TANK YARD
ROAD

FILE SPEC: P:\2420_COS_VA_Medical_Facility\0010_Off-Site_Utilities_Improvements\08_Civil\400_Plans\020_CAD\Sheets\Prelim-CU200-Alt-18.dwg
PLOT DATE: Jul 10, 2019 - 1:54pm

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PLAN
SUBMITTAL

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION
CU219

DATE
JUL 2018

HORIZONTAL DATUM
CCS83, ZONE 3

VERTICAL DATUM
NAVD88

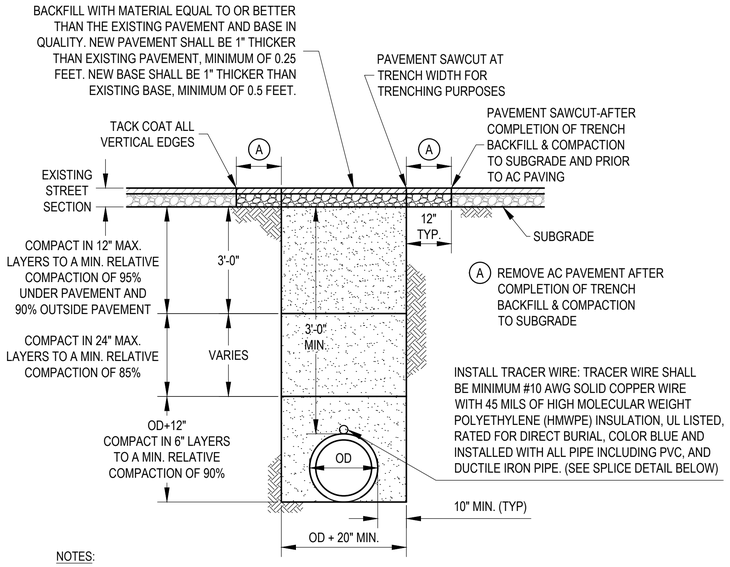
KSN PROJECT FILE NO.
2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

WOLFE/YETTNER ALIGNMENT

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

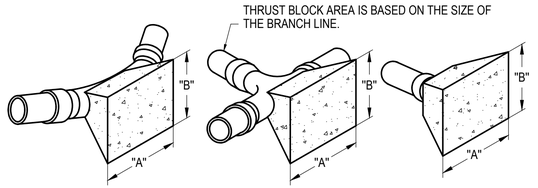
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RECORD DWG:	DIRECTOR OF MUD STOCKTON, CALIF.		

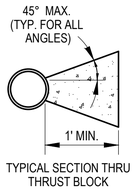


NOTES:

1. RELATIVE COMPACTION OF MATERIALS SHALL BE TESTED IN ACCORDANCE WITH THE STATE OF CALIFORNIA, DEPT. OF TRANSPORTATION TESTING MANUALS, TEST METHOD NO. CALIFORNIA 216 OR 231.
2. ALL EXISTING PAVEMENT SHALL BE NEATLY CUT TO LINE PRIOR TO TRENCH EXCAVATION.
3. WHEN SHOWN BY SOIL COMPOSITION AND COMPACTABILITY, NINETY PERCENT (90%) COMPACTION MAY BE USED, WHEN APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
4. SHOULDERS SHALL BE AS SHOWN ON THE PLANS OR SPECIFIED IN THE SPECIAL PROVISIONS BUT IN NO CASE SHALL THE SHOULDER BE LESS THAN THREE FEET WIDE AS MEASURED FROM THE EDGE OF PAVEMENT.
5. THIS PIPE BEDDING DETAIL IS APPLICABLE TO STABLE SOIL CONDITIONS ONLY.
6. BEDDING AROUND PIPE SHALL CONFORM TO SAN JOAQUIN CO. STD PLAN R-29.
7. THIS TRENCH SECTION MAY ALSO BE USED FOR NEW STREET RIGHT OF WAY OR EASEMENT.

1 TRENCH CROSS SECTION - SJCo
N.T.S.



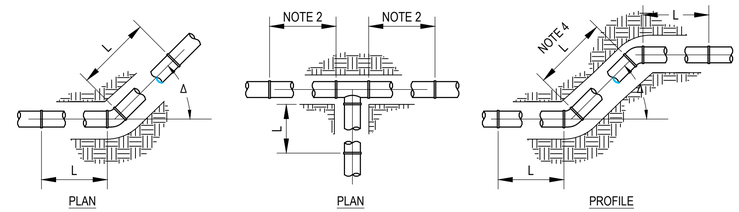


THRUST BLOCK AREA REQUIRED		
FITTINGS	ALLOWABLE SOIL BEARING 1000 LBS. PER SQ. FT.	
12" LINE	"A"	"B"
22 1/2°	2'-0"	2'-0"
45°	3'-0"	3'-0"
90°	4'-0"	4'-0"
TEE OUTLET	3'-6"	3'-0"
DEAD END	3'-6"	3'-0"
16" LINE		
22 1/2°	3'-0"	2'-6"
45°	4'-0"	3'-6"
90°	6'-0"	4'-6"
TEE OUTLET	5'-0"	4'-0"
DEAD END	5'-0"	4'-0"

NOTES:

1. ALL THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
2. CONSRETE SHALL BE CLASS B.
3. ASSUMED SOIL HORIZONTAL BEARING CAPACITY OF 2500 LBS./SQFT.
4. FOR PIPES LESS THAN 12" SEE COS STD. DWG. NO. 100.

2 12" & 16" THRUST BLOCK DETAILS
N.T.S.



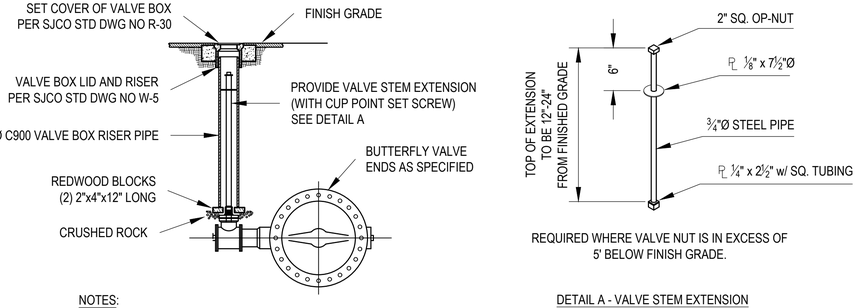
RESTRAINED LENGTH SCHEDULE

PIPE DIA. (IN)	TEST PRESSURE (P.S.I.)	LENGTH OF RESTRAINED JOINTS ON EACH SIDE OF THE BEND OR ELBOW (L, FT)								
		HORIZONTAL ANGLES (DEG)						VERTICAL ANGLES (DEG)		
		Δ 11.25°	Δ 22.5°	Δ 45°	Δ 90°	TEE	DEAD END	Δ 11.25°	Δ 22.5°	Δ 45°
30	200	10.0	19.0	38.0	92.0	130.0	236.0	34.0	68.0	141.0
16	200	6.0	19.0	23.0	54.0	232.0	133.0	20.0	39.0	81.0

NOTES:

1. WHERE THRUST BLOCKS ARE NOT USED, PIPE JOINTS AND FITTINGS SHALL BE RESTRAINED A MINIMUM LENGTH AS SHOWN IN THE ABOVE TABLE.
2. CONTRACTOR SHALL INSTALL ONE FULL LENGTH PIPE EITHER SIDE OF TEE RUN.
3. VALVES SHALL BE RESTRAINED BOTH SIDES AS REQUIRED FOR A TEE & DEAD END.
4. IF VERTICAL DEFLECTION LENGTH EXCEED 2-TIMES THE RESTRAINT LENGTH SHOWN, UPPER AND LOWER HORIZONTAL SECTIONS SHALL EACH BE RESTRAINED PER TABLE'S "L".

3 PIPE RESTRIANED LENGTH SCHEDULE
N.T.S.



NOTES:

1. EXTENSION SHALL BE PREMANUFACTURED WITH POSITION INDICATOR.
2. ALL LIDS AND GRADE RINGS SHALL HAVE MACHINED SEATING SURFACES.

DETAIL A - VALVE STEM EXTENSION

4 BURIED BUTTERFLY VALVE
N.T.S.

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PRINCIPAL ENGINEER

PROJECT ENGINEER

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DRAWING SCALE: SHOWN

ORIGINAL DRAWING SCALE 0 ½" 1"

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NO.	DESCRIPTION	DATE	APPR.

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

CIVIL DETAILS

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

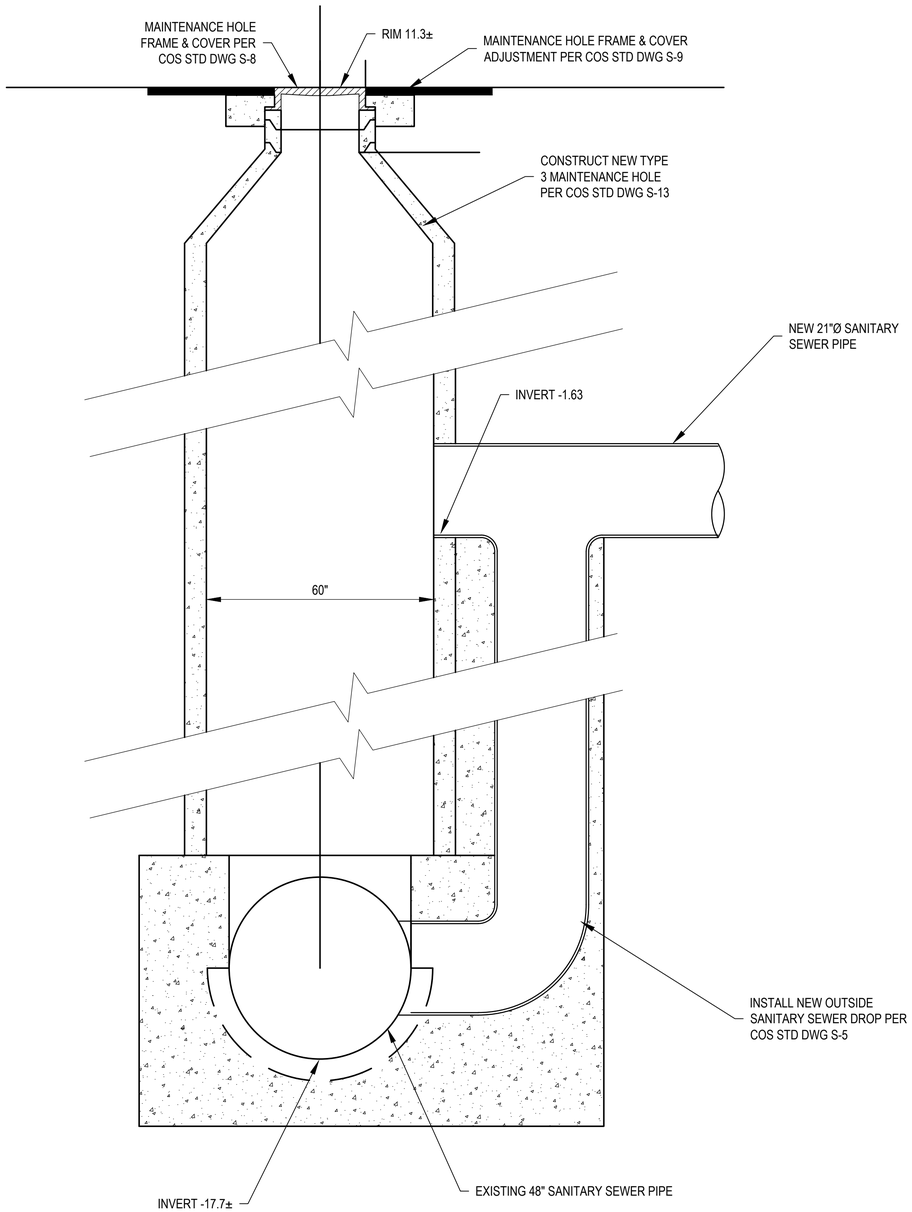
SHEET IDENTIFICATION: C-501
DATE: JUL 2018
HORIZONTAL DATUM: CCS83, ZONE 3
VERTICAL DATUM: NAVD88
KSN PROJECT FILE NO.: 2420-0010

SCALE: SHOWN
DESIGNED BY:
DRAWN BY:
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RECORD DWG:

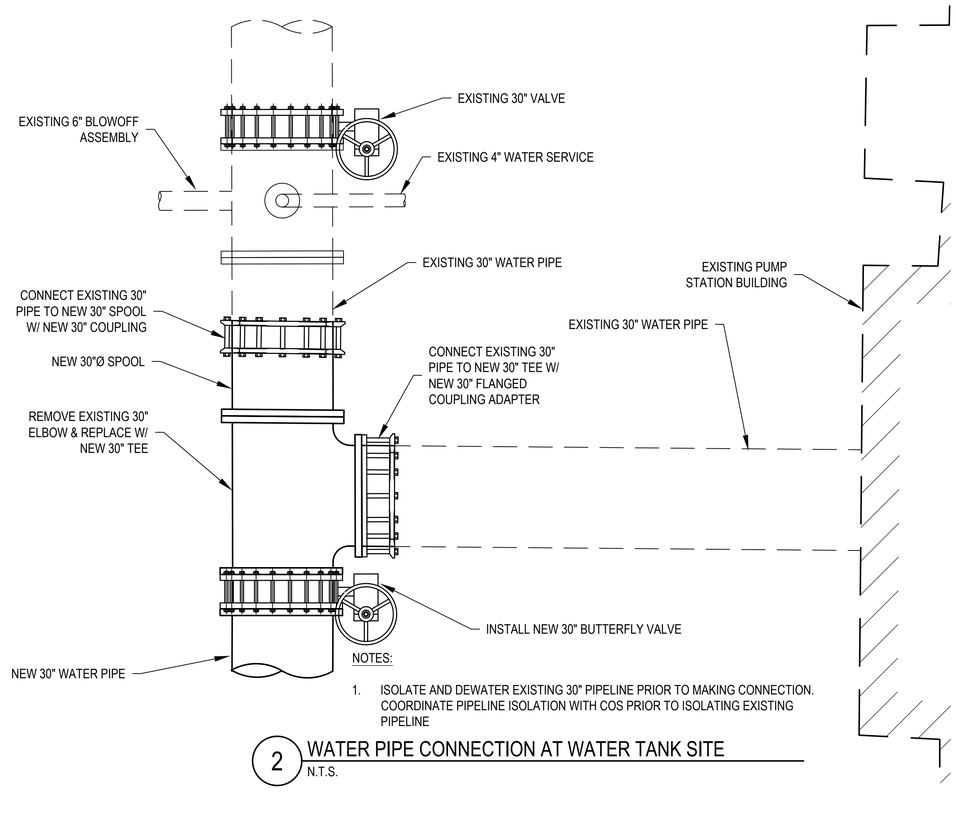
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SHEET NO. X
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FILE SPEC: C:\Users\mconrad\Desktop\Temp\AcPublish_10756\CX500.dwg
PLOT DATE: Jul 10, 2019 - 1:34pm



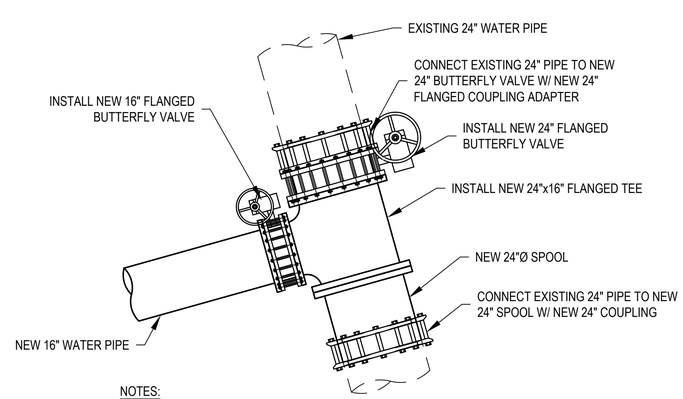
1 OUTSIDE DROP CONNECTION AT STATION 12+55.71 WOLFE RD
N.T.S.



NOTES:

1. ISOLATE AND DEWATER EXISTING 30" PIPELINE PRIOR TO MAKING CONNECTION. COORDINATE PIPELINE ISOLATION WITH COS PRIOR TO ISOLATING EXISTING PIPELINE

2 WATER PIPE CONNECTION AT WATER TANK SITE
N.T.S.



NOTES:

1. ISOLATE AND DEWATER EXISTING 24" PIPELINE PRIOR TO MAKING CONNECTION. COORDINATE PIPELINE ISOLATION WITH COS PRIOR TO ISOLATING EXISTING PIPELINE

3 WATER PIPE CONNECTION AT MANTHEY RD & SOUTH LEO GIRON DR
N.T.S.

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PLOT DATE: Jul 10, 2019 - 1:34pm

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30% PLAN SUBMITTAL

PRINCIPAL ENGINEER

PROJECT ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

DRAWING SCALE
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0 ½" 1"

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NO.	DESCRIPTION	DATE	APPR.

SHEET IDENTIFICATION C-502
DATE JUL 2018
HORIZONTAL DATUM CCS83, ZONE 3
VERTICAL DATUM NAVD88
KSN PROJECT FILE NO. 2420-0010

U.S. DEPARTMENT OF VETERANS AFFAIRS
MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

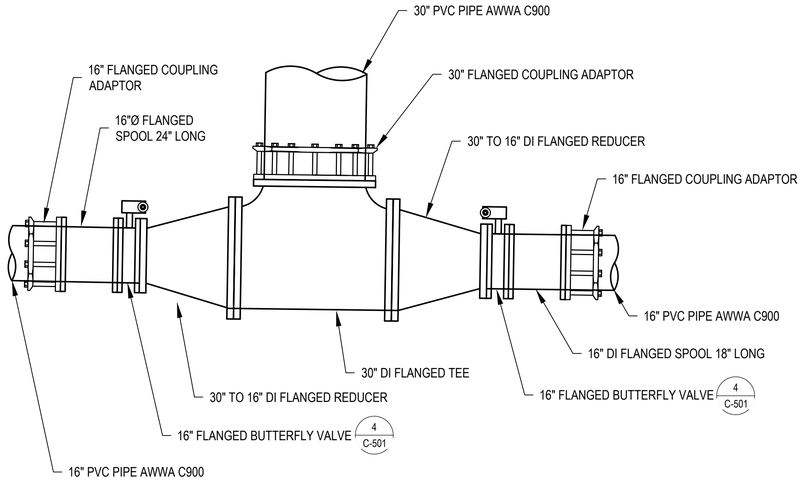
CIVIL DETAILS

MUNICIPAL UTILITIES DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

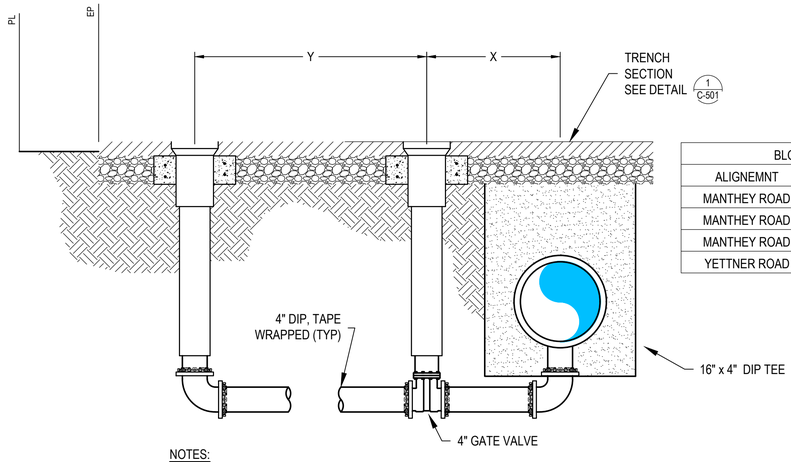
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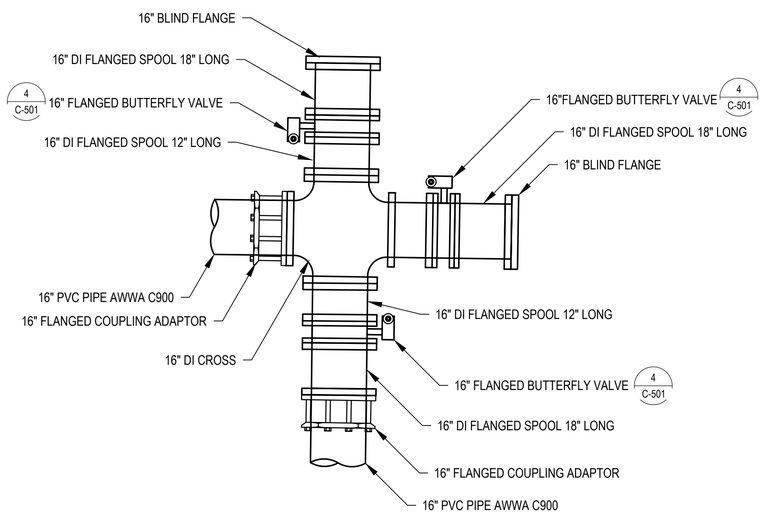
1 30" TEE W/ REDUCERS
N.T.S.



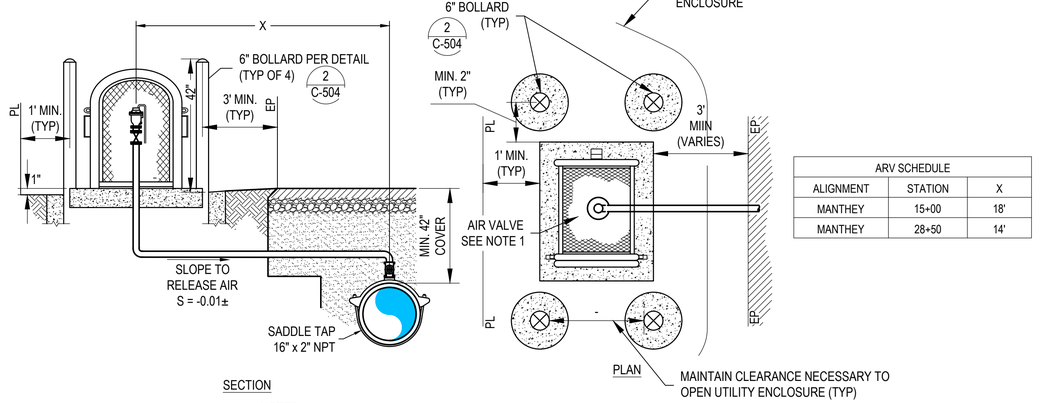
BLOW OFF VALVE SCHEDULE			
ALIGNEMNT	STATION	X	Y
MANTHEY ROAD	12+50	5.5'	10.5'
MANTHEY ROAD	21+50	4'	3'
MANTHEY ROAD	36+50	5'	4'
YETTNER ROAD	1+00.2	6'	10'

NOTES:
1. ALL JOINTS ARE TO BE RESTRAINED.
2. REFER TO COS STD DWG W-10 FOR ADDITIONAL REQUIREMENTS

3 BLOW-OFF ASSEMBLY
N.T.S.



2 16" DUCTILE IRON CROSS
N.T.S.



ARV SCHEDULE		
ALIGNMENT	STATION	X
MANTHEY	15+00	18'
MANTHEY	28+50	14'

NOTES:
1. REFER TO COS STD DWG W-18 FOR ADDITIONAL REQUIREMENTS FOR AIR RELEASE VALVE.
2. ALL JOINTS ARE TO BE RESTRAINED MECHANICAL JOINTS.

4 AIR RELEASE VALVE ASSEMBLY
N.T.S.

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PRINCIPAL ENGINEER

PROJECT ENGINEER

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SHEET IDENTIFICATION C-503
DATE JUL 2018
HORIZONTAL DATUM CCS83, ZONE 3
VERTICAL DATUM NAVD88
KSN PROJECT FILE NO. 2420-0010

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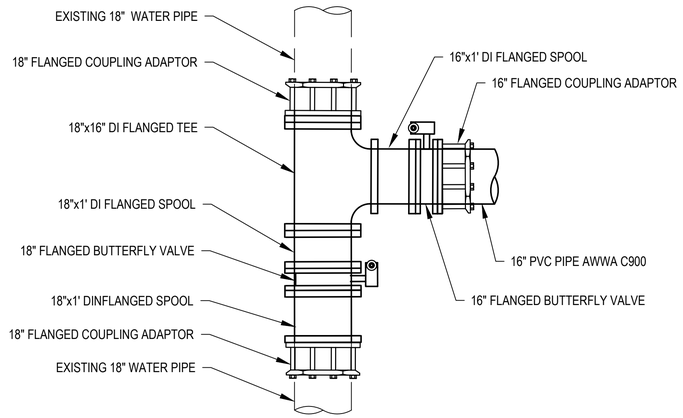
CIVIL DETAILS

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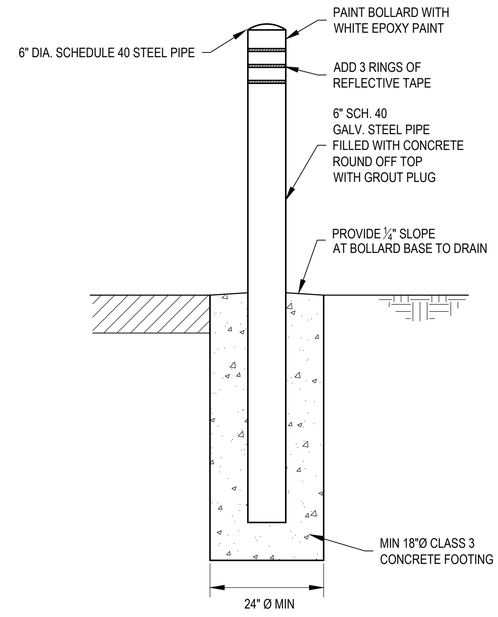
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1 18" TO 16" TEE CONNECTION, WOLFE ROAD
N.T.S.



2 6" BOLLARD
N.T.S.

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PROJECT ENGINEER

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SHEET IDENTIFICATION C-504
DATE JUL 2018
HORIZONTAL DATUM CCS83, ZONE 3
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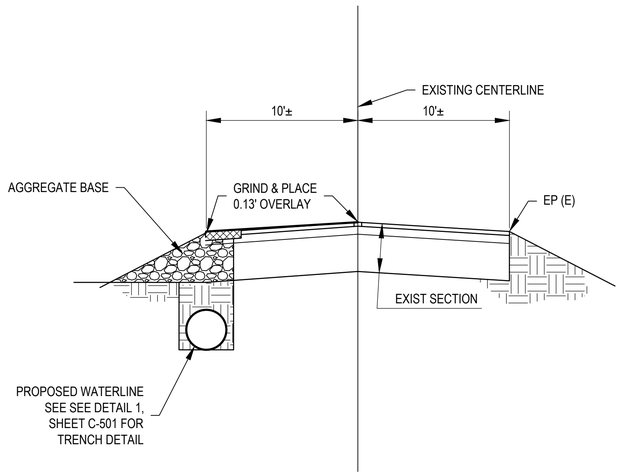
CIVIL DETAILS

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CITY OF STOCKTON, CALIFORNIA

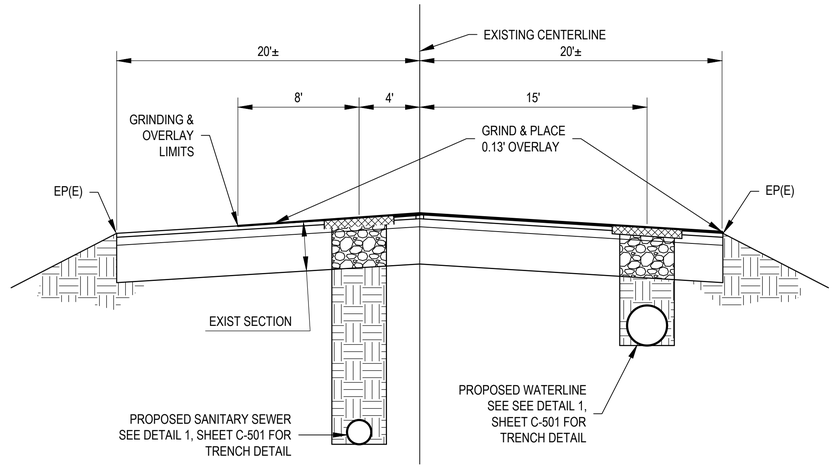
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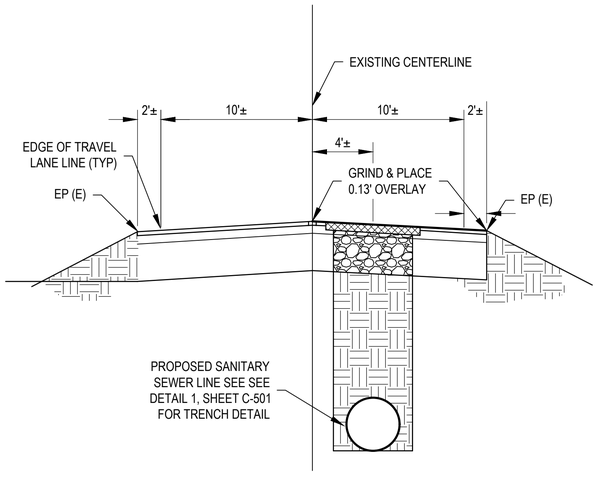
SHEET NO. X
OF XX SHTS
PROJECT NO.



1 TYPICAL SECTION YETTNER RD STATION 1+00 TO 19+10
N.T.S.



2 TYPICAL SECTION MANTHEY ROAD STATION 11+67 TO 38+45
N.T.S.



3 TYPICAL SECTION WOLFE ROAD
N.T.S.

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C-505

DATE
JUL 2018

HORIZONTAL DATUM
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VERTICAL DATUM
NAVD88

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MEDICAL FACILITY OFF SITE UTILITY IMPROVEMENTS

CIVIL DETAILS

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CITY OF STOCKTON, CALIFORNIA

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OF XX SHTS
PROJECT NO.