

**Initial Study and Proposed Negative Declaration
Health Care Facility Improvement Projects
for the
California Medical Facility
and
California State Prison, Solano
City of Vacaville, Solano County, California**

Prepared for:



California Department of Corrections and Rehabilitation
Facility Planning, Construction and Management Division
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May 15, 2013

FACILITY PLANNING, CONSTRUCTION AND MANAGEMENT

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California Department of Corrections and Rehabilitation
Public Notice Announcement
Release of an Initial Study and Proposed Negative Declaration
for the
Health Care Facility Improvement Projects at the
California Medical Facility and California
State Prison, Solano

What's Being Planned: The California Department of Corrections and Rehabilitation (CDCR) has released for public review the Initial Study and Proposed Negative Declaration (IS/Proposed ND) for the Health Care Facility Improvement Projects at the California Medical Facility (CMF) and California State Prison, Solano (SOL). The proposed project at each institution includes renovations and additions to existing health care facilities, the construction of small new facilities, and associated infrastructure improvements, all within the developed areas of CMF and SOL. Specifically, the project at CMF includes construction of a new primary care clinic, emergency room, and medication distribution room totaling approximately 9,900 square feet of new building space, and interior renovations. The project at SOL includes construction of a new facility care clinic, and four medication distribution rooms totaling approximately 17,000 square feet of new building space and interior renovations. In addition, minor upgrades would be implemented to the existing emergency electrical system at CMF to serve the new and expanded buildings. All construction would be consistent in character, design, and height with other existing buildings and would not exceed one story. No high-mast lighting would be installed as part of the projects. The projects do not include any new beds and would not increase inmate capacity. One additional employee would be hired at each institution, primarily for maintenance. The projects would not result in expansion of the existing secure perimeters.

The CMF and SOL projects would remedy deficiencies in health care delivery at these institutions through renovation of existing health care facilities and construction of new health care facilities. CDCR anticipates construction of the proposed projects would begin in fall 2014, with an estimated completion date of spring 2016.

Project Location: The proposed projects would be built entirely within existing CMF and SOL boundaries. CMF and SOL are located adjacent to each other within the southwestern corner of the incorporated limits of the City of Vacaville. CMF is located at 1600 California Drive and SOL is located at 2100 Peabody Road. The institutions are both located within a single parcel totaling approximately 385 acres. The project sites are bounded by the former Sacramento Northern Railroad right-of-way, Al Patch Park, a small water treatment plant, Peabody Road, and residential land uses (east); an inactive orchard, Keating Park, California Drive, and commercial and residential land uses (north); undeveloped hillsides (west); and undeveloped land and hillsides (south).

Environmental Effects: CDCR has prepared an IS/Proposed ND pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15063. CDCR has studied the effects that the proposed projects may have on the environment. The studies show that the project

would have less than significant effects on the quality of the environment and no mitigation is required.

Where You Come In: As lead agency under CEQA, CDCR is releasing the IS/Proposed ND for public review and comments. The IS/Proposed ND is available for a 20-day public review period from **May 17, 2013** to **June 5, 2013**.

Where to Review the Environmental Document and Provide Comments: Formal comments regarding the IS/Proposed ND may be submitted in writing via mail, e-mail, or fax any time during the public review period. The IS/Proposed ND is available for a 20-day public review period from **May 17, 2013** to **June 5, 2013**. Written comments regarding the scope and content of information in the IS/Proposed ND or any questions regarding the document should be postmarked no later than **June 5, 2013**. Comments may be sent to:

Roxanne Henriquez, Senior Environmental Planner
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Copies of the IS/Proposed ND and all documents referenced in the IS/Proposed ND are available for public review during regular business hours at the office of CDCR identified above.

Digital copies of the IS/Proposed ND are available on the internet at:
<http://www.cdcr.ca.gov/FPCM/Environmental.html>.

Paper copies of the IS/Proposed ND are available for public review at the following locations:

Vacaville Public Library
Town Square
1 Town Square Place
Vacaville, CA 95688

Vacaville Public Library
Cultural Center
1020 Ulatis Drive
Vacaville, CA 95687

NEGATIVE DECLARATION

Project: Health Care Facility Improvement Projects for the California Medical Facility (CMF) and California State Prison, Solano (SOL), Vacaville, California (SCH No. *to be determined*)

Lead Agency: California Department of Corrections and Rehabilitation

Project Description: The proposed project at each institution includes renovations and additions to existing health care facilities, the construction of small new facilities, and associated infrastructure improvements, all within the developed areas of CMF and SOL. Specifically, the project at CMF includes construction of a new primary care clinic, emergency room, and medication distribution room totaling approximately 9,900 square feet of new building space. The CMF project also includes interior renovations (approximately 13,000 square feet) and additional exterior impervious surfaces (approximately 3,800 square feet). The project at SOL includes construction of a new facility care clinic, and four medication distribution rooms totaling approximately 17,000 square feet of new building space. The SOL project also includes interior renovations (approximately 8,500 square feet) and additional exterior impervious surfaces (approximately 18,000 square feet). In addition, minor upgrades would be implemented to the existing emergency electrical system at CMF to serve the new and expanded buildings. All construction would be consistent in character, design, and height with other existing buildings and would not exceed one story. No high-mast lighting would be installed as part of the projects. The projects do not include any new beds and would not increase inmate capacity. One additional employee would be hired at each institution, primarily for maintenance. The projects would not result in expansion of the existing secure perimeters.

The CMF and SOL projects would remedy deficiencies in health care delivery at these institutions through renovation of existing health care facilities and construction of new health care facilities. These improvements would provide the necessary facility infrastructure to support a timely, competent, and effective medical care delivery system at CMF and SOL.

Environmental Findings: An Initial Study was prepared to assess the significance of the projects' potential impacts on the environment. Based on the Initial Study, and due to environmental protection features that CDCR has committed to before release of the proposed ND and IS for public review, in light of the whole record, CDCR finds that the projects will not have substantial adverse effects on the environment and no mitigation is necessary. This conclusion is supported by the following findings:

- The proposed projects would have no impact to agricultural and forest resources, land use and planning, mineral resources, or recreation.
- The proposed projects would have less-than-significant impacts on aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, transportation/traffic, and utilities and service systems.

Questions or comments regarding this ND and IS may be addressed to:

Roxanne Henriquez, Senior Environmental Planner
Environmental Planning Section
Facility Planning, Construction and Management
California Department of Corrections and Rehabilitation
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Phone: 916-255-3010

California Department of Corrections and Rehabilitation

After comments are received from the public and reviewing agencies, CDCR may (1) adopt the ND and approve the proposed projects, (2) undertake additional environmental studies, or (3) disapprove the projects. If the projects are approved, CDCR may proceed with implementation of the projects.

Pursuant to Section 21082.1 of the California Environmental Quality Act, CDCR has independently reviewed and analyzed the IS and ND for the proposed projects and finds that the IS and ND reflect the independent judgment of CDCR.

I hereby approve these projects:

Signature Pending Close of Public Comment Period _____

DEBORAH HYSEN

Deputy Director

Facility Planning, Construction, and Management

California Department of Corrections and Rehabilitation

Date

TABLE OF CONTENTS

Acronyms and Abbreviations	v
Section 1: Introduction	1
Section 2: Project Description and Background.....	5
Section 3: Environmental Checklist and Environmental Evaluation	29
Project Information	29
Environmental Factors Potentially Affected.....	29
Environmental Determination	30
1. Aesthetics	31
2. Agriculture and Forestry Resources	47
3. Air Quality	50
4. Biological Resources	61
5. Cultural Resources	69
6. Geology and Soils	72
7. Greenhouse Gas Emissions	78
8. Hazards and Hazardous Materials	86
9. Hydrology and Water Quality.....	93
10. Land Use and Planning	97
11. Mineral Resources.....	99
12. Noise	100
13. Population and Housing	108
14. Public Services	110
15. Recreation	113
16. Transportation/Traffic	114
17. Utilities and Service Systems	119
18. Mandatory Findings of Significance.....	126
Section 4: References.....	129
Section 5: List of Preparers	133

LIST OF APPENDICES

Appendix A: Air Quality Modeling Output

Appendix B: Biological Resources Information

The digital version of this IS/proposed ND and its Appendices
are available on the CD affixed to the back cover.

LIST OF TABLES

Table 1: CMF New Building and Renovation Square Footage	14
Table 2: SOL New Building and Renovation Square Footage	21
Table 3: Ambient Air Quality Monitoring Summary	52
Table 4: CMF/SOL Construction Criteria Pollutant Emissions	55
Table 5: Yolo Solano Air Quality Management District Operational Screening Criteria.....	56
Table 6: Project Construction Greenhouse Gas Emissions	81
Table 7: Project Operational Greenhouse Gas Emissions	81
Table 8: Applicable Scoping Plan Reduction Measures	83
Table 9: Summary of Ambient Noise Measurements	101
Table 10: Typical Construction Equipment Noise Levels.....	102
Table 11: Representative Vibration Source Levels for Construction Equipment	104
Table 12: CMF and SOL Historical Water Demand	120

LIST OF EXHIBITS

Exhibit 1: Regional Location Map	9
Exhibit 2: Local Vicinity Map - Aerial Base, CMF and SOL Project Site	11
Exhibit 3a: Site Plan for CMF Site.....	15
Exhibit 3b: Site Plan for SOL Site	19
Exhibit 4a: Photograph Vantage Points for CMF Site	37
Exhibit 4b: Photograph Vantage Points for SOL Site.....	39
Exhibit 4c: Site Photographs.....	41
Exhibit 4d: Site Photographs.....	43
Exhibit 4e: Site Photographs.....	45
Exhibit 5: CNDDDB-Recorded Occurrences of Special-Status Species within Five Miles of CMF and SOL	65

ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
AB	Assembly Bill
ADA	Americans with Disabilities Act
AQAP	Air Quality Attainment Plan
ARB	California Air Resources Board
BTEX	benzene, toluene, ethylbenzene and total xylenes
Cal OSHA	California Division of Occupational Safety and Health Administration
CBC	California Building Code
CCHCS	California Correctional Health Care Services
CCR	California Code of Regulations
CDCR	California Department of Corrections and Rehabilitation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Emergency Services Act
CFG	California Fish and Game
CHS	Central Health Services
CMF	California Medical Facility
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
DPP	Disability Placement Program
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
FMMP	Farmland and Mapping Monitoring Program
GHG	greenhouse gas
gpd	gallons per day
HCFIP	Health Care Facility Improvement Project(s)
HCP	Habitat Conservation Plan
HMP	Six-Prison Electrified Fence Project Habitat Management Plan
HSA	Hydrologic Subarea

Acronyms and Abbreviations

I	Interstate
IS	Initial Study
ITE	Institute of Transportation Engineers
kVA	kilovolt-ampere
LEED	Leadership in Energy and Environmental Design
L _{eq}	equivalent sound level
L _{max}	Maximum sound level
L _{min}	minimum sound level
LOS	level of service
LUST	Leaking Underground Storage Tank
MBA	Michael Brandman Associates
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MRZ	Mineral Resource Zone
MTCO _{2e}	metric tons of carbon dioxide equivalents
ND	Negative Declaration
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
PM	particulate matter
PM ₁₀	particulate matter with a diameter between 10 micrometers and 2.5 micrometers
PM _{2.5}	particulate matter with a diameter of less than 2.5 micrometers
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
R&R	Receiving and Release
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SID	Solano Irrigation District
SJVAPCD	San Joaquin Valley Air Pollution Control District
SOL	California Station Prison, Solano
SR	State Route
SVAB	Sacramento Valley Air Basin
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant

USFWS	United States Fish and Wildlife Service
USGBC	United States Green Building Council
UST	Underground Storage Tank
VFD	Vacaville Fire Department
VMT	vehicle miles traveled
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

SECTION 1: INTRODUCTION

1.1 - Introduction and Regulatory Guidance

This Initial Study/Proposed Negative Declaration (IS/Proposed ND) has been prepared by the California Department of Corrections and Rehabilitation (CDCR) to evaluate the potential environmental effects associated with implementing health care facility improvements as part of CDCR’s Health Care Facility Improvement Program (HCFIP) at the California Medical Facility (CMF) and California State Prison, Solano (SOL), located adjacent to each other in the City of Vacaville in Solano County. The proposed project at each institution includes renovations and additions to existing health care facilities, the construction of small new facilities, and associated infrastructure improvements, all within the existing CMF and SOL footprints. Combined, improvements at both facilities would include a total of 21,487 square feet of renovation, 26,759 square feet of new building space, and 21,834 square feet of exterior impervious surface. All construction would be consistent in character, design, and height with other existing buildings and would not exceed one story. No high-mast lighting would be installed as part of the projects. The projects do not include any new beds and would not increase inmate capacity. One additional employee would be hired at each facility, primarily for maintenance. The projects would not result in expansion of the existing secure perimeter.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Under CEQA, an Initial Study (IS) can be prepared by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063(a)) and, thus, to determine the appropriate environmental document. In accordance with CEQA Guidelines Section 15070, a “public agency shall prepare . . . a proposed negative declaration or mitigated negative declaration . . . when: (a) The initial study shows that there is no substantial evidence . . . that the project may have a significant impact on the environment, or (b) The initial study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level.” In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed projects would not have a significant effect on the environment and, therefore, do not require the preparation of an Environmental Impact Report (EIR).

As described in Section 3 of this IS/Proposed ND, CDCR has found no substantial evidence that the projects may have a significant effect on the environment. Based on the IS/Proposed ND, and because of environmental protection features that CDCR has committed to before release of the IS/Proposed ND for public review, the proposed projects would avoid environmental effects to a point where, clearly, no significant effects would occur. Therefore, an IS/Proposed ND is the

appropriate document for compliance with the requirements of CEQA. This IS/Proposed ND conforms to these requirements and to the content requirements of CEQA Guidelines Section 15071.

1.2 - Purpose of this Document

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the proposed projects. CDCR is the lead agency for the proposed projects. CDCR has directed the preparation of an analysis that complies with CEQA. At the direction of CDCR, Michael Brandman Associates (MBA) has prepared this document. The purpose of this document is to present to decision-makers and the public the environmental consequences of implementing the proposed projects. This disclosure document is being made available to the public for review and comment. The IS/Proposed ND is available for a 20-day public review period from May 17, 2013 to June 5, 2013. Section 15073 of the CEQA Guidelines requires a minimum 20-day review period for proposed ND documents. When submittal of the ND to the State Clearinghouse (SCH) is required, the public review period is required to be at least 30 days unless a shorter period has been approved by the SCH. Because CDCR is a state agency, it is required to submit the ND to the SCH, pursuant to Section 15073(b) and (d). The SCH has granted a 20-day review to CDCR for this proposed ND.

If you wish to send written comments (including via e-mail), they must be postmarked by June 5, 2013. Written comments should be addressed to:

Roxanne Henriquez, Senior Environmental Planner
Environmental Planning Section
Facility Planning, Construction and Management
California Department of Corrections and Rehabilitation
9838 Old Placerville Road, Suite B
Sacramento, CA 95827
Roxanne.Henriquez@cdcr.ca.gov

If you have questions regarding the IS/Proposed ND, please call Roxanne Henriquez at (916) 255-3010.

After comments are received from the public and reviewing agencies, CDCR may (1) adopt the ND and approve the proposed projects; (2) undertake additional environmental studies; or (3) abandon the projects. If the projects are approved and funded, CDCR could proceed with all or part of the projects.

A copy of the IS/Proposed ND is available for public review online at <http://www.cdcr.ca.gov/FPCM/Environmental.html> and at the following public libraries:

Vacaville Public Library
Town Square
1 Town Square Place
Vacaville, CA 95688

Vacaville Public Library
Cultural Center
1020 Ulatis Drive
Vacaville, CA 95687

1.3 - Summary of Findings

Section 3, Environmental Checklist of this document contains the analysis and discussion of potential environmental impacts of the proposed projects.

Based on the issues evaluated in that section, it was determined that the proposed projects would have no impacts requiring the incorporation of mitigation.

The projects were determined to have no impacts related to the following issue areas:

- Agricultural and Forest Resources
- Land Use and Planning
- Mineral Resources
- Recreation

Impacts of the proposed projects were determined to be less than significant for the following issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Population and Housing
- Public Services
- Transportation/Traffic
- Utilities and Service Systems

1.4 - Document Organization

This IS/Proposed ND is organized as described below.

Section 1: Introduction. This section provides an introduction to the environmental review process. It describes the purpose and organization of this document and presents a summary of findings.

Section 2: Project Description and Background. This section describes the purpose of and need for the proposed projects, including their place within the Health Care Facility Improvement Program, and provides a detailed description of the proposed projects.

Section 3: Environmental Checklist. This section presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if each of a range of impacts would result in no impact, a less than significant impact, a less than significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be potentially

Introduction

significant, an EIR would be required. However, for these two projects, CDCR has committed to and incorporated environmental protection features before release of the IS/Proposed ND for public review. Therefore, the proposed projects would avoid the effects to a point where, clearly, no significant effects would occur and no mitigation is required.

Section 4: References. The section lists the references used in preparation of this IS/Proposed ND.

Section 5: List of Preparers. This section identifies report preparers.

SECTION 2: PROJECT DESCRIPTION AND BACKGROUND

2.1 - Introduction

The CDCR plans to implement various health care facility improvements at the CMF and SOL institutions located in Vacaville, California. The improvements include the addition and renovation of existing facilities, utility upgrades, and small new health care facilities, all of which would be located within the existing CMF and SOL footprints. The proposed improvements to existing facilities would add health care treatment space, clinical support space, and office space to support the existing health care program. The proposed projects would also support CMF's and SOL's existing operations as "Intermediate" institutions within the CDCR HCFIP strategy to address statewide prison health care deficiencies in its facilities. Intermediate inmate-patients are those identified as having multiple chronic and/or terminal illnesses requiring a high level of care such that tertiary care consultation and specialized services must be available. Intermediate institutions are those designed with the capability of providing specialized medical services and consultation, including those that utilize advanced technologies such as cardiology for inmate-patients with chronic illnesses (see Health Care Facility Improvement Program, Program Overview [April 2012]).

Recently, Governor Edmund G. Brown Jr. signed Assembly Bill (AB) 109 which is one of the bills facilitating California's "Realignment." Realignment generally refers to the shift in the assignment of program and fiscal responsibilities between the state and local governments. In the context of the CDCR, Realignment is the cornerstone of California's solution for reducing overcrowding in the State's prisons. CMF and SOL's inmate population has been decreased by 2,647 inmates, or 29 percent of their 2004 population, as of 2012. CDCR's long-term plan of operations, as detailed in the Future of California Corrections ("Blueprint"), calls for further decreases in the population at CMF and SOL. Contextually, CMF and SOL have seen not only the population reduction benefits of Realignment (because many lower-level offenders are now being managed locally rather than by the State), but also the corresponding reduction of the prison's impacts on such environmental and infrastructure resources as water, sewer, solid waste, and energy.

The proposed projects do not include any new inmate beds and would not increase inmate capacity, thereby maintaining the lower inmate population that is the result of Realignment efforts. One additional staff member would be added to CMF and to SOL to oversee plant operations and maintenance under the proposed projects. The concentration of inmate-patients requiring an Intermediate level of care, at 11 facilities statewide, allows the specialized services required to be delivered more effectively in areas where they are available locally and inside the institution, reducing the need to transport inmates to other institutions or community settings to receive services. This approach focuses facility improvements and upgrades at locations where health care services can most effectively be provided and results in savings to capital and transportation costs. This approach is also aimed at reducing inmate-patient community treatment expenses. Furthermore, providing

Project Description and Background

these services in hubs is more effective than attempting to include such services at all CDCR institutions.

The proposed projects at CMF and SOL are two of several that are being funded through AB 900, the Public Safety and Offender Rehabilitation Services Act of 2007 as amended by Chapter 22, Statutes of 2010 and Senate Bill (SB) 1022 approved in June 2012. These acts authorize the design and construction of health care facilities, support space, and program space—and improvements to existing spaces—within existing prison facilities.

This IS prepared for the CMF and SOL improvements concludes that there is no substantial evidence, in light of the whole record, that the improvements would have a significant effect on the environment. Thus, CDCR has determined that preparation of an ND is appropriate.

2.2 - Background

In April 2001, a class action lawsuit, *Plata v. Schwarzenegger*, was filed by a group of prison inmates against the State of California contending that CDCR provided inadequate medical care to prison inmates in violation of the Eighth Amendment (prohibiting cruel and unusual punishment) and the Fourteenth Amendment (providing the right to due process and equal protection) of the United States Constitution. In 2006, the U.S. District Court for the Northern District of California placed California’s prison health care system in receivership in response to the April 2001 *Plata v. Schwarzenegger* lawsuit, as well as in response to subsequent cases (the *Coleman v. Schwarzenegger* case regarding mental health care, the *Perez v. Tilton* case regarding dental care, and the *Armstrong v. Schwarzenegger* case regarding disabled inmates).

The main goal of the HCFIP is to sufficiently improve the infrastructure at various existing CDCR facilities, including CMF and SOL, to provide a timely, competent, and effective health care delivery system with appropriate health care diagnostics and treatment, medication distribution, and access to care for inmates. Implementation of the various HCFIP projects will ensure the overall delivery of constitutionally adequate medical health care to the existing inmate population.

To this end, facility assessments have been performed at each of CDCR’s adult institutions to determine the infrastructure deficiencies requiring improvement that exist within the prison system. The existing conditions and capabilities of the health care facilities were evaluated for conformance to the health care components established by the California Correctional Health Care Services (CCHCS) division of CDCR. Based on the facility assessments, CDCR found that the existing health care facilities constructed between 1852 and the 1990s are deficient. Site constraints have also been exacerbated by advances in medical equipment used for various diagnostic, treatment, and medical technologies. These factors have resulted in the need for increased health care space.

2.3 - Need for the CMF and SOL Projects

As noted above, CMF and SOL are two of 11 existing institutions designated as Intermediate institutions, based on an institution's ability to recruit and retain clinicians and its access to medical specialists and community medical centers of care. CMF currently houses Custody Levels I, II, and III adult male inmates. SOL currently houses Custody Levels II and III adult male inmates.

CMF and SOL were constructed in 1955 and 1984, respectively, and were built from the design standards in place at the time. Improvements are therefore needed to efficiently provide an Intermediate level of inmate care services to a largely aging population. Code requirements and nationally accepted standards for health care spaces such as those developed by the United States Department of Veterans Affairs have more clearly defined health care space requirements.

Health care facility assessments were performed at CMF in February 2009 and at SOL in December 2008 to identify and document the existing conditions. The existing conditions and capabilities of the health care facilities were evaluated for conformance with the Medical Health Care Facility Components established by the CCHCS. The assessment included an inventory of existing health care spaces, including room size, availability of sinks, data and power connectivity, general features, and notable variations from generally accepted clinical standards. The type and number of inventoried spaces were compared with the CCHCS Health Care Components and related clinical utilization models to determine the infrastructure deficiencies that existed within the institutions. Through this assessment process, existing facilities at CMF and SOL were determined as either meeting the requirements and objectives of each health care component or being deficient.

Deficiencies were identified at CMF in the following six health care components and their related objectives:

- Medication Distribution
- Primary Care
- Specialty Care
- Health Care Records
- Pharmacy
- Health Care Administration

Deficiencies were identified at SOL in the following seven health care components and their related objectives:

- Medication Distribution
- Primary Care
- Specialty Care
- Pharmacy

Project Description and Background

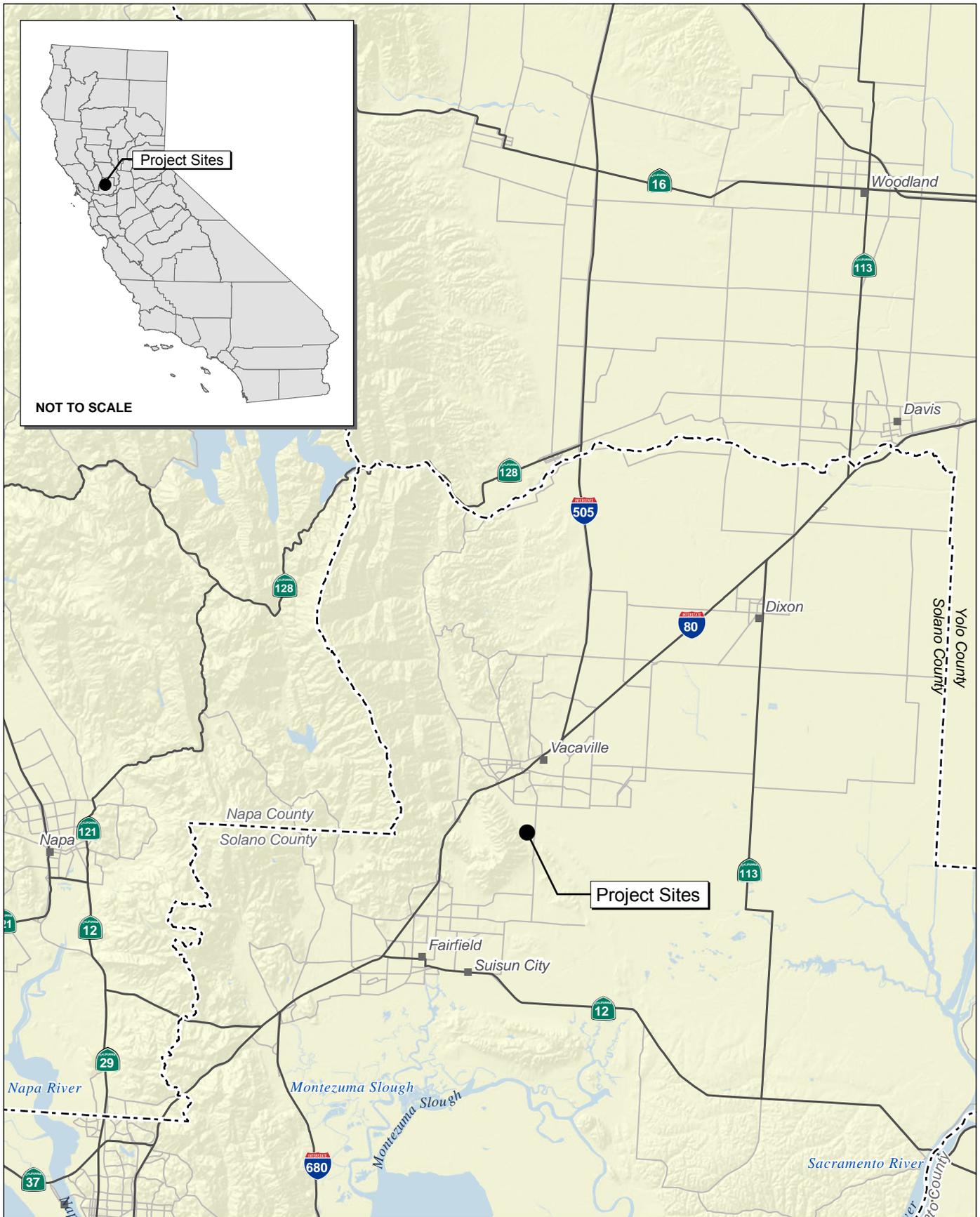
- Laboratory
- Health Care Records
- Accessibility Housing Modifications and Upgrades

The inadequacy of CMF’s and SOL’s existing facilities results in health service providers having to deliver services to inmates under inappropriate conditions, including conditions that have the potential to compromise both proper infectious control protocols and the confidentiality of inmate health care information and treatment. Specifically, CMF and SOL lack sufficient outpatient space to accommodate inmates’ health care needs. Clinical support space is also ineffective at ensuring effective infection control practices. As the volume and frequency of use for medical diagnostics, treatments, and technologies have increased and evolved, the staff at CMF and SOL have attempted to remedy their need for additional space by utilizing janitor closets and small supply rooms as makeshift exam rooms. These makeshift areas typically lack basic sanitation and infection controls such as sinks or the ability to separate waste from sterile supplies. Direct Observation Therapy, which involves a caregiver observing and verifying that medication has been taken correctly, was also not practiced or designed for when CMF and SOL were constructed.

To address the identified inadequacies, the proposed projects include seven sub-projects at CMF and five sub-projects at SOL (described in detail in Section 2.5, Project Description). These projects have been designed to remedy the health care deficiencies identified at CMF and SOL and would enable the institutions to operate at an Intermediate level of care, supporting the CDCR health care system. Renovation of the existing facilities and the construction of new facilities would be in accordance with the CDCR Institution Support Space Standards. These Space Standards were developed in 2010 based on the nationally accepted standards of the United States Department of Veterans Affairs, state and federal regulatory standards and codes, the Department of Public Health, the Department of Health and Human Services Centers of Disease Control and Prevention, Prevention Guidelines for Infection Control, the National Commission on Correctional Health Care, and the American Correctional Association.

2.4 - Project Location and Existing Conditions

CMF and SOL are located adjacent to each other within the southwestern corner of the incorporated limits of the City of Vacaville (Exhibit 1). CMF is located at 1600 California Drive and SOL is located at 2100 Peabody Road (Exhibit 2). Both facilities are located on a single parcel totaling approximately 385 acres. The project sites are bounded by the former Sacramento Northern Railroad right-of-way, Al Patch Park, a small water treatment plant, Peabody Road, and residential land uses (east); an inactive orchard, Keating Park, California Drive, and commercial and residential land uses (north); undeveloped hillsides (west); and undeveloped land and hillsides (south).



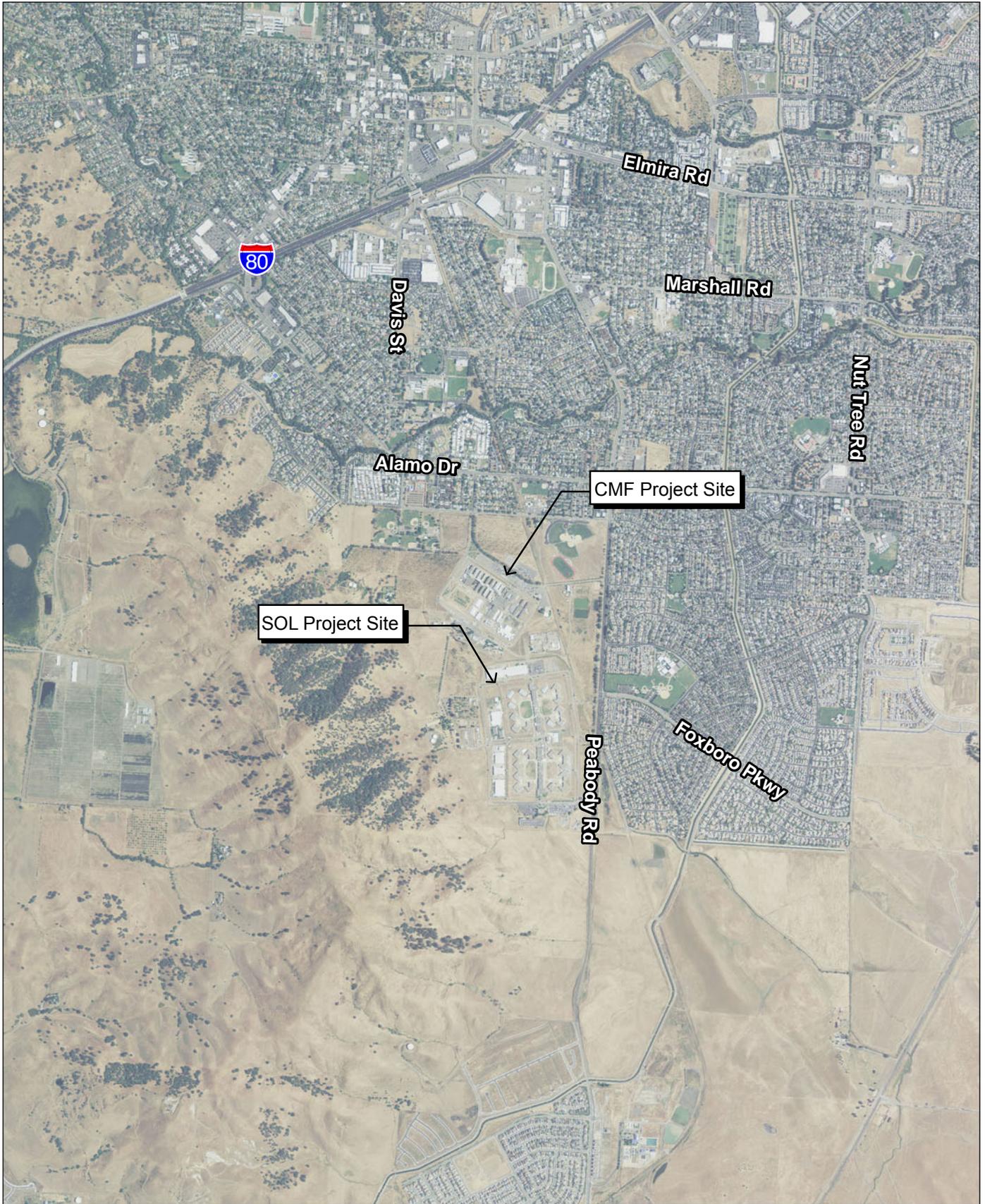
Source: Census 2000 Data, The CaSIL, MBA GIS 2013.



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Exhibit 1 Regional Location Map

HEALTH CARE FACILITY IMPROVEMENT PROJECTS FOR CMF AND SOL
 INITIAL STUDY AND PROPOSED NEGATIVE DECLARATION



Source: ESRI Aerial Imagery, MBA GIS 2012.



Michael Brandman Associates

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Exhibit 2
 Local Vicinity Map - Aerial Base
 CMF and SOL Project Site

2.5 - Project Description

The proposed projects would remedy the identified deficiencies in the health care facility components at CMF and SOL through renovation of existing health care facilities and construction of new health care facilities. These improvements would provide the necessary facility infrastructure to support timely, competent, and effective medical care delivery systems at CMF and SOL. The proposed projects are expected to reduce the need for escorted inmate-patient vehicle trips to offsite specialty care treatment due to the installation of telemedicine capabilities to enable remote diagnostics and treatment and additional specialty care exam rooms which would allow additional specialty care treatment to take place onsite.

The proposed projects include seven sub-projects at CMF and five sub-projects at SOL including the construction of new buildings, additions to existing buildings, infrastructure improvements and utility upgrades. Combined, improvements at both facilities would include a total of 21,487 square feet of renovation, 26,759 square feet of new building space and 21,834 square feet of exterior impervious surface. Total disturbed area would be 48,345 square feet or 1.1 acres plus temporarily disturbed construction staging areas at each facility. Note that square footage amounts provided in this document are approximate and based on conceptual plans. Improvements at each institution are explained below.

2.5.1 - California Medical Facility

Improvements at CMF consist of seven sub-projects that include new buildings, renovations to existing buildings, additions to existing buildings and utility upgrades (Exhibit 3a). New buildings and/or renovations are summarized below in Table 1. The proposed project at CMF would result in 12,943 square feet of building renovations, 9,904 square feet of new building space, and 3,796 square feet of additional impervious surfaces. Total exterior disturbed area would consist of 13,700 square feet or 0.3 acre (9,904 square feet of new building space plus 3,796 square feet of additional impervious surface). Because many of the new buildings would be constructed in locations that currently contain impervious surfaces, the total impervious surfaces added to the institution would be only 8,090 square feet. Approximate existing impervious surface area at CMF is 2,100,000 square feet (Wong pers. comm.).

Table 1: CMF New Building and Renovation Square Footage

Sub-project	Building Renovations	Building Additions	Additional Impervious Areas ¹
Central Health Services (CHS) Specialty Clinic	0	5,610	736
Stand-by Emergency Room	1,040	3,926	2,560
Medication Distribution Building – C and D Dormitories	0	368	500
B-Wing Renovation	8,044	0	0
X-Wing Renovation – Health Care Records	3,299	0	0
Unit IV Renovation – Medication Distribution Rooms	560	0	0
Infrastructure Upgrades	N/A	N/A	N/A
Total	12,943	9,904	3,796
Note: ¹ Accounts for additional roadways and walkways constructed outside of building footprints. Source: Vanir Construction Management 2013.			

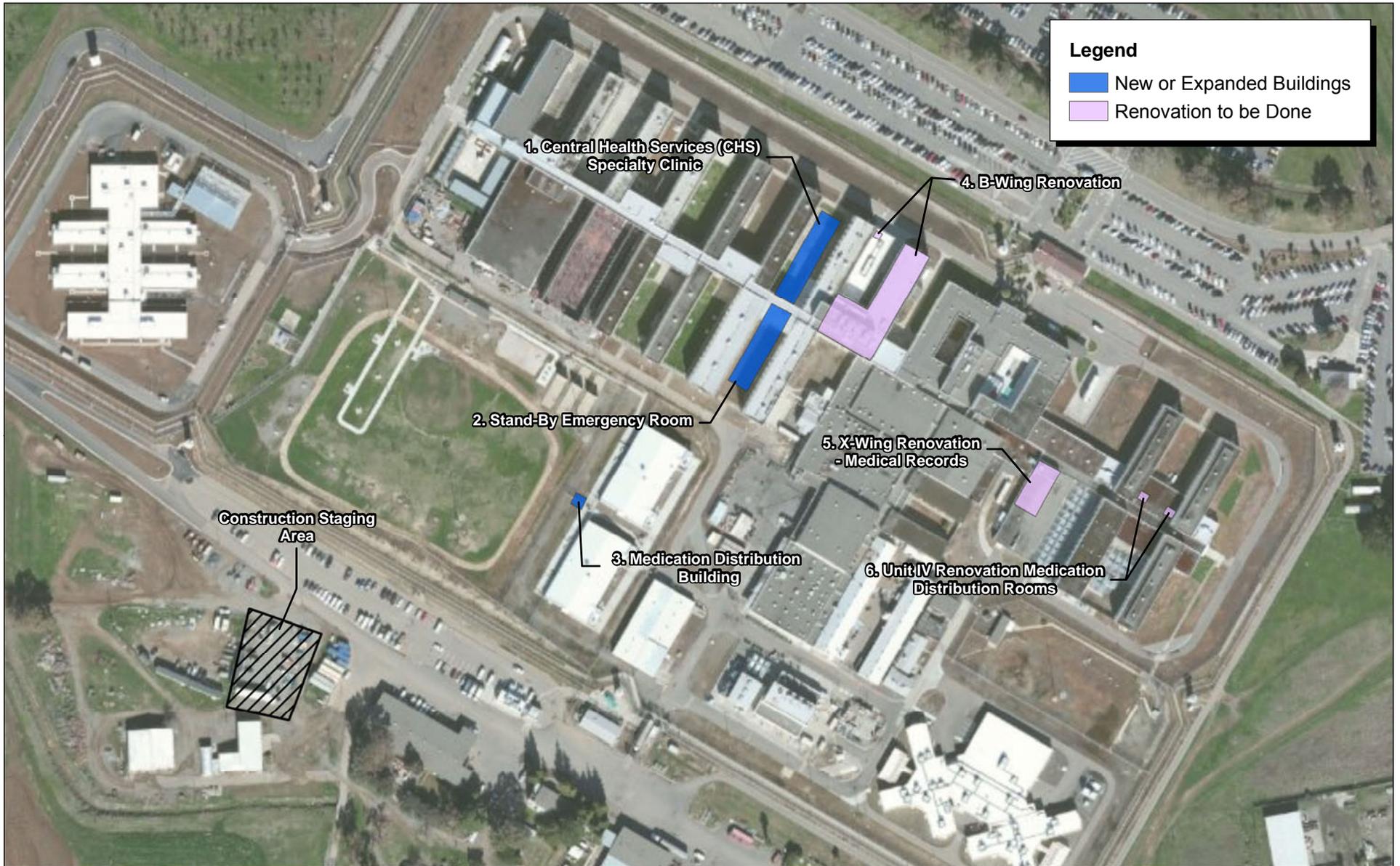
Each CMF sub-project, as shown in Table 1, is described below.

2.5.2 - CMF Sub-project 1: New Central Health Services (CHS) Specialty Clinic

The proposed single-story, 5,610-square-foot CHS Specialty Clinic building would be constructed between the existing I-Wing and G-Wing, connected to CMF’s main corridor (Exhibit 3a). The CHS Specialty Clinic would provide 11 specialty exam rooms, office and clinic support space, and medication and supply storage rooms. A new emergency egress platform and ramp totaling approximately 736 square feet would be constructed along the northeastern portion of the building.

2.5.3 - CMF Sub-project 2: New Stand-by Emergency Room

The proposed single-story, 3,926-square-foot Stand-by Emergency Room would be constructed between the existing J-Wing and H-Wing, connected to CMF’s main corridor (Exhibit 3a). In addition, 1,040 square feet of renovation would occur in the main corridor. The Stand-by Emergency Room would include three standard bays, one trauma bay, one observation room, a mental health crisis room, a workstation, office space, workroom, and medic-on-duty room. Clinic support areas would include equipment storage, clean and soiled utility rooms, a breakout pharmacy, staff restrooms, and inmate-patient waiting and holding areas. Improvements also include a new paved emergency vehicle access area tied into the existing roadway at the Stand-by Emergency Room. An eight-foot-wide concrete walkway would be constructed along the southeast side of the Stand-by Emergency Room totaling 1,440 square feet. An additional walkway totaling 1,120 square feet would be constructed to connect the new building to the existing walkway at the C Dormitory entrance.



Source: Ersi World Imagery, MBA GIS Data, California Department of Corrections and Rehabilitation 2013.



Exhibit 3a Site Plan for CMF Site

2.5.4 - CMF Sub-project 3: Medication Distribution Building – C and D Dormitories

The proposed single-story, 368-square-foot Medication Distribution Room would be constructed between the C and D Dormitory yards adjacent to an existing concrete walkway (Exhibit 3a). The Medication Distribution Room would be free-standing, have two pill windows (one per yard), injection room, countertop, sink, and drinking fountain. Additional paving adjacent to the Medication Distribution Room would total 500 square feet.

2.5.5 - CMF Sub-project 4: B-Wing Renovation

Renovations to 8,044 square feet of the existing B-Wing would include work on three floors and would provide exam rooms, laboratory, injection room, office and staff support space, enlarged x-ray room, and pharmacy space (Exhibit 3a).

2.5.6 - CMF Sub-project 5: X-Wing Renovation – Health Care Records

Renovations to 3,299 square feet of the existing X-Wing would provide adequate health care records storage space (Exhibit 3a).

2.5.7 - CMF Sub-project 6: Unit IV Renovation – Medication Distribution Rooms

Renovations to Unit IV would include the construction of a 280-square-foot medication distribution room inside each of the U-Wing and V-Wing housing units in Unit IV (Exhibit 3a). Each Medication Distribution Room would provide two medication distribution windows, countertops, sink, drinking fountain, and injection room.

2.5.8 - CMF Sub-project 7: Infrastructure Upgrades

This sub-project would construct a new high voltage circuit to provide electrical service from the institution substation to the new buildings, procure and install a new 480-volt transformer, and would coordinate with the Emergency Generator Capacity Upgrade Project¹ to ensure that sufficient emergency power generation will be available at each new building.

Staffing

The proposed project would remedy existing space deficiencies for the provision of health care services already provided at CMF. As such, existing staff would utilize the new and renovated spaces. Only one additional employee would be required to meet the staffing needs of the new facilities at CMF.

Inmate Population

The proposed project at CMF would not increase the existing inmate population.

¹ The Emergency Generator Upgrade Project is a separate project being implemented by CDCR that consists of minor alternations to existing electrical infrastructure at CMF. The project is categorically exempt from preparing a CEQA document according to CEQA Guidelines Section 15301, and a Notice of Exemption was filled on May 25, 2012 with the Office of Planning and Research.

Visitation

Visitation procedures for the institution would remain the same as existing visitation protocols. Because the proposed project at CMF would not increase the existing inmate population, visitation levels would not be expected to change.

Parking

Additional staff and visitor parking is not required for the new facilities. Parking for construction workers would be provided at the existing CMF visitor parking area.

Lighting

New buildings would include exterior lighting fixtures mounted on building facades. Exterior lighting would illuminate all recesses formed by the building shape and would be consistent with CDCR Design Criteria Guidelines. All lighting would be consistent with the existing lighting of the facility, and no new high-mast lighting would be installed.

Utilities

Utility service—including water, wastewater, stormwater, electricity, natural gas, telephone, and data communications—would be extended to new and renovated building spaces as necessary. Because the proposed project at CMF would not result in an increase in the existing inmate population and would require the addition of only one employee, additional water and wastewater needs are expected to be minimal. As described under Sub-project 7, the project would include electrical upgrades.

2.5.9 - California State Prison, Solano

Improvements at SOL consist of five sub-projects that include new buildings, renovations to existing buildings, and additions to existing buildings (Exhibit 3b). New buildings and/or renovations are summarized below in Table 2. The proposed project at SOL would result in 8,544 square feet of building renovations, 16,855 square feet of new building space, and 18,038 square feet of additional impervious surfaces. Total exterior disturbed area would consist of 34,893 square feet or 0.8 acre (16,855 square feet of new building space plus 18,038 square feet of additional impervious surface). All building additions and impervious surface area would be constructed in areas that currently contain pervious surfaces. Therefore, new impervious surface area would total 34,893 square feet. Approximate existing impervious surface at SOL is 3,200,000 square feet (Wong pers. comm.).



Source: Ersi World Imagery, MBA GIS Data, California Department of Corrections and Rehabilitation 2013.



Michael Brandman Associates

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Exhibit 3b Site Plan for SOL Site

Table 2: SOL New Building and Renovation Square Footage

Sub-project	Building Renovations	Building Additions	Additional Impervious Areas
New Complex Facility Clinic	0	13,711	16,000
Central Health Services (CHS) Renovation	8,449	1,240	248
Receiving and Release (R&R) Health Care Renovation	95	0	0
Medication Distribution Room Upgrades	0	1,904	1,790
Disability Placement Program (DPP) Accessibility Improvements	N/A	N/A	N/A
Total	8,544	16,855	18,038
Source: Vanir Construction Management 2013.			

Each SOL sub-project, as shown in Table 2, is described below.

SOL Sub-project 1: New Complex Facility Clinic

The proposed single story, 13,711-square-foot Complex Facility Clinic would be constructed between Facilities B and D (Exhibit 3b). The Complex Facility Clinic would include a total of 16 primary care exam rooms, two multipurpose exam rooms, staff workstations and offices, pharmacy, laboratory, radiology services and health care records space. Clinic support spaces include clean and soiled utility rooms and clinical support spaces. Additional impervious surface adjacent to the new Complex Facility Clinic would include 16,000 square feet of walkways and drive aisles. This new building would be Leadership in Energy and Environmental Design (LEED) Silver certified.

SOL Sub-project 2: Central Health Services (CHS) Renovation

Renovations to 8,449 square feet and the addition of 1,240 square feet to the existing CHS building would provide dedicated and appropriately sized clinical space for triage, treatment, radiology, pharmacy, laboratory, and health care records (Exhibit 3b). Renovations and additions would also include staff offices and workstations, clean and soiled utility rooms, and clinic support spaces. New impervious surfaces for emergency vehicle parking and charging stations and would be constructed adjacent to the CHS building totaling 248 square feet.

SOL Sub-project 3: Receiving and Release (R&R) Health Renovation

Renovations to 95 square feet of the existing Receiving and Release (R&R) area would provide an enclosed, clinically appropriate, and confidential R&R exam room that would include a sink, exam table, and work desk (Exhibit 3b).

SOL Sub-project 4: New Medication Distribution Rooms

Four new, 476-square-foot medication distribution rooms would be constructed to serve inmate-patients housed at Facilities A, B, C, and D within SOL (Exhibit 3b). The medication distribution rooms would each contain four medication distribution windows, countertops, sinks, and two drinking fountains. Additional impervious surface space adjacent to each new medication distribution room would include 488 square feet.

SOL Sub-project 5: Disability Placement Program (DPP) Accessibility Improvements

A portion of the existing inmate housing would be renovated to provide accessibility accommodations for inmates with disabilities. In addition, accessibility improvements would be made to inmate program and service areas, site areas, and paths-of-travel at various areas of the institution in accordance with the 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design and the California Building Code (CBC), Title 24, and Title 22. No additional impervious surfaces would result from improvements. All improvements would be minor and completed at existing paths-of-travel.

Staffing

The proposed project would remedy existing space deficiencies for the provision of health care services already provided at SOL. As such, existing staff would utilize the new and renovated spaces. Only one additional employee would be required to meet the staffing needs of the new facilities at SOL.

Inmate Population

The proposed project at SOL would not increase the existing inmate population.

Visitation

Visitation procedures for the institution would remain the same as existing visitation protocols. Because the proposed project at SOL would not increase the existing inmate population, visitation levels would not be expected to change.

Parking

Additional staff and visitor parking is not required for the new facilities. Parking for construction workers would be provided at the existing SOL visitor parking area.

Lighting

New buildings would include exterior lighting fixtures mounted on building facades. Exterior lighting would illuminate all recesses formed by the building shape and be consistent with CDCR Design Criteria Guidelines. All lighting would be consistent with the existing lighting of the facility, and no new high-mast lighting would be installed.

Utilities

Utility service—including water, wastewater, stormwater, electricity, natural gas, telephone, and data communications—would be extended to new and renovated building spaces as necessary. Because the proposed project at SOL would not result in an increase in the existing inmate population and would require the addition of only one employee, additional water and wastewater needs are expected to be minimal. No upgrades to the existing electrical system at SOL would be required to serve the new and renovated buildings.

2.5.10 - CMF and SOL Project Construction

CDCR anticipates the construction of the proposed CMF project to begin in fall 2014. For the purposes of this IS/Proposed ND, it has been assumed that construction would take approximately 18 months and is scheduled to be completed in spring 2016. CDCR anticipates that construction at SOL would also begin in fall 2014, last approximately 20 months, and would also be completed in spring 2016.

Primary phases of construction would include site mobilization and security, site preparation, and building construction. Construction of the sub-projects would be sequenced based on phasing requirements. Not all sub-projects would start construction at the same time.

Construction Equipment

Construction equipment types and numbers would vary, based on the phasing of project components and the sequencing of construction activities. The following construction equipment is anticipated for use in the site preparation and development of the projects:

- Excavator
- Backhoe
- Jack hammer
- Front-end loader
- Tractor
- Dump truck
- Truck
- Grader
- Crane
- Fork lift
- Bobcat
- Air compressor
- Pneumatic lift
- Pneumatic tools

Earth-moving equipment, including backhoes, front-end loaders, and dump trucks, would be used during excavation for utilities and building foundations. Concrete trucks and pumpers would be onsite during concrete pours for foundations and slabs. Forklifts would be used during erection of walls and delivery of material from storage areas. Cranes would be operated for installation of precast panels, structural steel framing members, metal decking, and rooftop mechanical systems. On average, a maximum of 50 site workers would be involved in the CMF project construction and a maximum of 40 site workers would be involved in the SOL project construction at any given time.

Construction Hours

Construction would occur between the hours of 6:00 a.m. and 3:30 p.m., Monday through Friday. CDCR's contractor may request to work additional hours on weekdays and weekends with prior approval by the construction manager and institutional directors.

Site Demolition and Preparation

All proposed onsite buildings would be located within CMF and SOL on previously disturbed and developed land. Building areas would be graded and soil engineered as necessary. A site-specific geotechnical engineering study would be completed for the projects, and recommended soil preparation and construction methods would be incorporated into project plans and implemented onsite.

Construction Staging Areas

Construction staging for all renovations or improvements at each institution would occur both within the secure perimeter fences at a location approximate to the actual construction work areas and outside the secure perimeter fences. At CMF, a construction staging area would be established outside the secure perimeter fence southwest of the institution adjacent to the existing Fire House (Exhibit 3a). At SOL, a construction staging area would be established adjacent to the southern parking lot (Exhibit 3b).

All staging areas would be located in previously disturbed and developed areas. The staging areas would be used for approximately 20 months during project construction. Staging areas would be used for construction vehicles, equipment, and material storage. A small amount of fuels, lubricants, and solvents may be stored in these areas. Parking for construction workers would be provided at the existing CMF and SOL visitor parking areas.

Construction Traffic Trips

It is anticipated that all construction traffic would enter the CMF grounds from either Mariposa Avenue or California Drive via California Medical Facility Drive. SOL construction traffic would be expected to enter the institution from Peabody Road.

Construction trips, including construction workers, soil hauling, demolition material removal, and building material delivery are estimated at an average of 109 one-way trips or approximately 55 vehicles traveling to and from the project sites per day (Vanir Construction Management 2013; MBA 2013). This average assumes soil hauling and demolition would occur at the same time as building construction and is therefore a conservative estimate.

2.5.11 - Hazardous Materials

CMF was constructed in 1955. As such, it is anticipated that hazardous materials may exist within the B-Wing, X-Wing, U-Wing, and V-Wing where renovations are proposed to occur. Similarly, hazardous materials may exist within the exterior of CMF's central corridor building where Sub-

projects 1 and 2 building additions would be constructed. SOL was constructed in 1985, after many hazardous materials were banned from construction materials. Nonetheless, prior to project construction, an industrial hygienist would perform a complete hazardous materials assessment of structures to be disturbed by the proposed projects at both CMF and SOL. The assessments would include sampling and testing of any suspect materials or coating for asbestos and lead. Any friable materials (material likely to emit asbestos if disturbed) and noted hazardous materials within the project area would be identified for appropriate removal and disposal during construction. All required notifications, equipment, handling, disposal, and clearance testing related to hazardous material removal would be performed in accordance with applicable regulations to ensure worker safety and best management practices are established and followed.

2.6 - Environmental Protection Design Features

The following section describes features of the proposed projects that would reduce potential environmental impacts.

2.6.1 - Air Quality

CDCR and its contractors would implement the applicable best management practices for dust, as provided in Section 6.1 of the Yolo-Solano Air Quality Management District Handbook for Assessing and Mitigating Air Quality Impacts.

2.6.2 - Nesting Bird Avoidance

With the exception of the staging areas and minor utility connections at CMF, all project disturbance areas would be implemented within the secure perimeter fences of CMF and SOL. There is no nesting habitat suitable for raptors or other migratory birds within the secure perimeter or within 300 feet of project sites within the secure perimeter fence. As such, impacts to avian species would not occur. While it is unlikely that raptors or other migratory birds would nest outside of the perimeter fence near the construction staging areas or utility connection areas because of the existing level of noise and routine activities in the area, the trees near these project disturbance areas could provide limited nesting habitat. To avoid any direct and indirect impacts to nesting raptors and other migratory birds, activities at the staging and utility connection areas would begin no sooner than fall 2014 and would continue, but would gradually decline in intensity over time, until construction is completed in spring 2016 and use of the staging areas is no longer needed and utility connection are completed. Because use of the staging areas would begin when raptors and other migratory birds would not be nesting, and project activities would be continuous from fall through summer, it is unlikely that raptors or other migratory birds would nest in the trees near the staging areas.

If the project schedules were substantially delayed and the building construction were to begin after February 15 and before August 31, CDCR would avoid any direct and indirect impacts to raptors and/or any migratory birds protected under the Migratory Bird Treaty Act (MBTA) and California's Fish and Game (CFG) Code, by retaining a qualified biologist to conduct preconstruction surveys in

accordance with California Department of Fish and Wildlife (CDFW) guidelines. If active nests are detected during the preconstruction survey(s), a biological monitor would be present onsite during construction to minimize construction impacts and ensure that no nest is removed or disturbed until all young have fledged. Construction activity may occur within a buffer established by the monitoring biologist in consultation with CDCR and CDFW.

2.6.3 - Inadvertent Discovery Clauses

CDCR would require a standard inadvertent discovery clause in every construction contract to inform contractors that if a potentially significant cultural resource is encountered during subsurface earthwork, a buffer zone would be created around the find and further construction work would cease therein. Construction activities would be discontinued in the vicinity of the find in accordance with California Code of Regulations (CCR) Section 15064.5[f], until a qualified archaeologist or paleontologist determines whether the discovery requires a significance evaluation in accordance with CCR Section 15064.5(a)(3). Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramic, wood, or shell artifacts; or features including hearths, structural remains, or historic dumpsites that are more than 50 years old. In addition, the standard inadvertent discovery clause would require that if a potentially significant paleontological resource is encountered during subsurface earthwork, activities for the proposed projects would cease until a qualified paleontologist determines whether the resource requires further study following Public Resources Code (PRC) Section 5097.5.

2.6.4 - Earthquake-Resistant Design

A geotechnical subsurface investigation would be prepared prior to final design and preparation of grading plans. The report would contain recommendations related to site preparation and earthwork, appropriate types of fill, structural foundations, grading practices, erosion and special geotechnical issues onsite, slope stability, and road and pavement areas. The report would determine which foundation designs would be appropriate for the sites. All structures constructed at the project sites would be consistent with the 2007 CBC, California Code of Regulations, Title 24, Part 2, Chapter 16, 18, 19, 20, 21, 22, and 23, and as outlined in Appendix D of CDCR's Design Criteria Guidelines.

2.6.5 - Water Quality Protection

CDCR or its contractor would prepare a grading and erosion control plan for both CMF and SOL, either independently or combined, consistent with the requirements of the General National Pollutant Discharge Elimination System (NPDES) permit for Discharges of Storm Water Associated with Construction Activity (General Permit, 2009-0009-DWQ as amended by 2010-0014-DWA and 202-006-DWQ). The plan(s) would include the location, implementation schedule, and maintenance schedule of all erosion and sediment control measures; describe measures designed to control dust and stabilize the construction site road and entrance; and describe the location and methods for storage and disposal of construction materials. In addition, the plan(s) would include a Storm Water Pollution Prevention Plan (SWPPP) that identifies specific actions and Best Management Practices

(BMPs) to prevent stormwater pollution during construction activities. The SWPPP(s) would identify pollution prevention measures and practices to prevent polluted runoff from leaving the project sites and be consistent with the NPDES Construction Permit. Examples of stormwater pollution prevention measures and practices that may be contained in the plan include but are not limited to:

- Perimeter protection (e.g., straw bales or wattles, fiber rolls, silt fencing) to prevent sediment escaping from the construction site
- Drainage inlet protection
- Hydroseeding or landscaping of non-paved surfaces
- Employee training in good housekeeping practices and to inform personnel of stormwater pollution prevention measures

The SWPPP(s) would also contain information related to spill prevention countermeasures, measures to prevent or materials available to clean up hazardous material and waste spills, as well as emergency procedures for hazardous spills. All construction contractors would retain a copy of the approved SWPPP(s) on the construction sites.

In addition, CDCR would retain a registered civil engineer to design and implement post-construction drainage plans that would safely retain, detain, and/or convey stormwater runoff and would be consistent with CDCR Design Criteria Guidelines.

2.6.6 - LEED Certification

LEED is an internationally recognized green building certification system, providing third-party verification that a building or community has been designed and built using strategies aimed at improving performance across the following critical metrics: energy savings, water efficiency, carbon dioxide (CO₂) emissions reduction, and improved indoor environmental quality.

Developed by the United States Green Building Council (USGBC), LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations, and maintenance solutions. LEED is flexible enough to apply to all building types—commercial as well as residential. It works throughout the building lifecycle—design and construction, operations and maintenance, tenant fit-out, activation, and any necessary retrofits.

Pursuant to the Energy Action Plan (Executive Order B-18-12), the goal for new qualifying buildings (based on square footage) is to meet a minimum Silver Certificate level in accordance with LEED. At SOL, Sub-project 1, New Complex Facility Clinic, would be LEED Silver certified. Furthermore, sustainable measures and conservation features would be implemented throughout the CMF and SOL projects in accordance with the Green Building Code. However, the minimal size of the other new

Project Description and Background

buildings included in the projects at CMF and SOL exempts them from LEED Certification requirements.

Compliance with LEED and the Green Building Code would promote sustainable building practices that would lead to decreased energy and natural resource usage. The USGBC indicates that LEED buildings perform 25 to 30 percent better in terms of energy efficiency than non-LEED buildings.

SECTION 3: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Project Information	
1. Project Title	Health Care Facility Improvement Projects for the California Medical Facility and California State Prison, Solano
2. Lead Agency Name and Address	California Department of Corrections and Rehabilitation 9838 Old Placerville Road, Suite B, Sacramento, CA 95827
3. Contact Person and Phone Number	Roxanne Henriquez, Senior Environmental Planner (916) 255-3010
4. Project Location	CMF and SOL are located adjacent to each other within the southwestern corner of the incorporated limits of the City of Vacaville. CMF is located at 1600 California Drive and SOL is located at 2100 Peabody Road.
5. Project Sponsor’s Name and Address	California Department of Corrections and Rehabilitation 9838 Old Placerville Road, Suite B, Sacramento, CA 95827
6. General Plan Designation	Public/Quasi-Public Facilities
7. Zoning	Community Facilities
8. Description of Project	See Section 2.5, Project Description
9. Surrounding Land Uses and Setting	See Section 2.4, Project Location and Existing Conditions
10. Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement)	Regional Water Quality Control Board (RWQCB) State Department of Finance State Public Works Board Joint Legislative Budget Committee

Environmental Factors Potentially Affected			
The environmental factors checked below would be potentially affected by these projects, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.			
<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry Resources
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards/Hazardous Materials
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Services Systems
<input type="checkbox"/>	None with Mitigation		

Environmental Determination

On the basis of this initial evaluation:

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

Nancy MacKenzie
Signed

5-15-2013
Date

Nancy MacKenzie
Printed Name

Chief, Environmental Planning Section
Title

California Department of Corrections and
Rehabilitation
Agency

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Aesthetics <i>Would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The following discussion is based on the site reconnaissance performed by Michael Brandman Associates in March 2013. High-resolution photographs were taken from representative viewpoints in the surrounding vicinity, and visual simulations were created to demonstrate the proposed projects' building massing.

Visual Distance Zones

The following distance zones (foreground, middle ground, and background) are used to characterize the dominant visual character from each vantage point and describe views in terms that can be analyzed and compared. As discussed below, sensitivity of views modified from the existing environment is defined in order to establish thresholds for analysis of potential visual impacts resulting from the implementation of the proposed projects.

Foreground Views. These views include elements that can be seen at a close distance and that dominate the entire view. Impacted views at this distance are generally considered potentially adverse when viewed by a sensitive viewer group, such as surrounding residents, workers, pedestrians, or regular motorists.

Middle Ground Views. These views include elements that can be seen at a middle distance and that partially dominate the view. Impacted views at this distance are generally considered potentially adverse when viewed by a sensitive viewer group.

Background Views. These views include elements that are seen at a long distance and typically do not dominate the view but are part of the overall visual composition of the view. Impacted views at this distance are generally considered not to be an adverse impact when viewed by a sensitive viewer group.

Regional Setting

CMF and SOL are located adjacent to each other, on a single parcel totaling approximately 385 acres, within the southwestern corner of the incorporated limits of the City of Vacaville, Solano County, California (Exhibit 2). Solano County is located northeast of the San Francisco Bay Area and southwest of Sacramento. Visually, the project area is located against the eastern edge of the Coastal Range, which extends to the west. The City of Vacaville surrounds the project sites to the north and east. Areas south of the project sites consist of undeveloped lands and foothills of the Coastal Range. The City of Fairfield is located approximately one mile to the south. The wetlands and tributaries of the Sacramento-San Joaquin Delta extend east and southeast of Vacaville and Fairfield. Much of the area between the project sites and the Delta is farmland. The Delta empties into San Pablo Bay 24 miles to the southwest. Interstate 80 (I-80) is located approximately 1.4 miles to the northwest. Mount Diablo is within 30 miles to the south, and Travis Air Force Base is within five miles of the project sites to the south.

Visual Setting

CMF and SOL are bounded by the former Sacramento Northern Railroad right-of-way, Al Patch Park, a small water treatment plant, Peabody Road, and residential land uses (east); an inactive orchard, Keating Park, California Drive, and commercial and residential land uses (north); undeveloped hillsides (west); and undeveloped land and hillsides (south).

Views of proposed improvements would be available from a limited number of locations, as the area surrounding CMF and SOL is largely developed and views are blocked by existing prison buildings, topography, and vegetation. The combination of the setback and intervening features obscures views of the facilities from adjoining land uses.

Views of CMF from the intersection of California Drive and Mariposa Avenue indicate that proposed improvements would be located in middle ground views from this viewpoint. Foreground views include landscaping consisting of oleander, and background views include the Vaca Mountains. Mature elm trees extend along the southern border of Keating Park between CMF and California Drive. A row of tall palm trees lines the northern entrance to CMF along the west side of Mariposa Avenue. Residences are located on the northern side of California Drive. However, the existing vegetation along California Drive currently obscures views of CMF from these residences.

Views of CMF from Al Patch Park located at the corner of California Drive and Peabody Road are blocked by an existing berm along the former Sacramento Northern Railroad right-of-way.

Views of SOL from Peabody Road near Arlington Park indicate that proposed improvements would be located in middle ground views from this viewpoint. Foreground views include Peabody Road and landscaping put in place specifically as a visual buffer along Peabody Road. Views of SOL from Arlington Park and the residential area located east of Peabody Road are primarily obscured by landscaping along Peabody Road.

Sensitive Viewsheds

Sensitive viewsheds in the area would consist of those from the adjacent Keating Park, Al Patch Park, and Arlington Park. In addition, views of the Vaca Mountains, located immediately west of the prison facilities, would be considered sensitive. However, existing CMF and SOL buildings and vegetative landscaping would screen any views of the proposed projects at either institution. Accordingly, no sensitive viewsheds are present.

Discussion

Would the project:

a) Have a substantial adverse effect on a scenic vista?

No impact. The proposed project at CMF would consist of three new one-story buildings as well as interior renovations and/or minor additions at four existing buildings. The proposed project at SOL would consist of five new one-story buildings (four of which are small, 476-square-foot buildings) as well as interior renovations and/or minor additions at two existing buildings.

Views of the project sites from residences immediately north of California Drive consist of Keating Park and views of CMF that are largely obstructed by existing vegetation. Background views consist of the Vaca Mountains. Views of the project sites from residences east of Peabody road consist of Al Patch Park and views of CMF and SOL that are largely obstructed by existing vegetation. Background views consist of the Vaca Mountains.

The proposed project building additions would be consistent in character, design, and height with other existing buildings at both CMF and SOL and would be minimally visible from outside the secure perimeters. As such, existing views of the surrounding hillsides as seen from outside the facilities would not change and the proposed projects would not have an adverse effect on a scenic vista. No impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?

No impact. There are no state-designated scenic highways near the project sites. The nearest eligible state scenic highways (not officially designated) are State Route 37 (SR-37) in far western Solano

County, and SR-16 in Yolo County, approximately 18 miles southwest and 27 miles north of the project sites, respectively. Accordingly, no impact would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than significant impact. The existing visual character of the project vicinity is residential in nature, with some commercial properties and background views of the Vaca Mountains. The character of the immediate site vicinity is influenced by views of the Vaca Mountains and the existing CMF and SOL institutional buildings surrounded by vegetative screening on the 385-acre parcel.

Locations from which site photographs of each institution were taken are illustrated in Exhibit 4a and Exhibit 4b. The photographs are provided in Exhibit 4c through Exhibit 4e, which include visual simulations of several of the proposed facilities. Exhibit 4c provides views of the new CHS Specialty Clinic building and the new Stand-By Emergency Room building proposed at CMF. Exhibit 4d provides views of the Medication Distribution Building for C and D Dormitories at CMF and the CHS building expansions proposed at SOL. Exhibit 4e provides views of the Complex Facility Clinic building and one of the four Medication Distribution rooms proposed at SOL. As indicated in the representative site photographs, the proposed buildings would be consistent with the building massing and character existing at CMF and SOL. The proposed improvements would be relatively minor additions to the existing large institutions and would be minimally visible from areas surrounding the projects. As such, the proposed projects would not represent a significant visual change as viewed from nearby residential areas, parks, or public open space in the adjacent Vaca Mountains. During construction, temporary staging areas would occur within the institution, and large equipment such as cranes may be used. Views of construction-related activity would be limited to the directly surrounding area and would be temporary. Accordingly, no substantial change would occur to the visual character or quality of the site and its surroundings. Impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact. The CMF and SOL facilities are currently well lit with onsite high-mast and building lighting. In addition, high-mast lighting is used at Keating Park and Al Patch Park for nighttime outdoor recreation.

The proposed projects would include exterior wall- and/or roof-mounted security lighting associated with the new and renovated structures. No new large sources of lighting (e.g., high-mast lighting) would be installed as part of the projects. Existing high-mast lighting would not be altered. Newly added exterior wall and/or roof-mounted lighting would be consistent with CDCR Design Criteria Guidelines to minimize spillover light into surrounding properties. Furthermore, CDCR's Design Criteria Guidelines require a lighting plan for each institution to ensure light spillover is limited.

Given the existing lighting, the additional lighting associated with the proposed projects would not increase the intensity of illumination in and around CMF and SOL and, therefore, would not be expected to substantially affect nighttime views.

The proposed projects do not include any building materials that would be expected to produce substantial amounts of glare. Given the distance to nearby residential development and intervening vegetation, no offsite impacts would be expected if glare were to occur. As such, impacts related to lighting and glare would be less than significant.



Source: Ersi World Imagery, MBA GIS Data, California Department of Corrections and Rehabilitation 2013.



Exhibit 4a Photograph Vantage Points for CMF Site

Legend

Photograph Locations



Source: Ersi World Imagery, MBA GIS Data, California Department of Corrections and Rehabilitation 2013.



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Exhibit 4b Photograph Vantage Points for SOL Site

HEALTH CARE FACILITY IMPROVEMENT PROJECTS FOR CMF AND SOL
INITIAL STUDY AND PROPOSED NEGATIVE DECLARATION



Photograph 1: View (facing southwest) of the new Central Health Services Specialty Clinic Building expansion located between the "I" Wing and "G" Wing at CMF.



Photograph 2: View (facing northeast) of the Stand-By Emergency Room Building expansion, located between the "J" Wing and "H" Wing at CMF.

Source: MBA, 2013.



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Exhibit 4c Site Photographs

HEALTH CARE FACILITY IMPROVEMENT PROJECTS FOR CMF AND SOL
INITIAL STUDY AND PROPOSED NEGATIVE DECLARATION



Photograph 3: View (facing southwest) of the Medication Distribution building expansion, which is located between the "C" Dormitory and "D" Dormitory at CMF.



Photograph 4: View (facing north) of the Central Health Services Building expansions at SOL.

Source: MBA, 2013.



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Exhibit 4d Site Photographs

HEALTH CARE FACILITY IMPROVEMENT PROJECTS FOR CMF AND SOL
INITIAL STUDY AND PROPOSED NEGATIVE DECLARATION



Photograph 5: View (facing west) of the Complex Facility Clinic building located east of the Receiving and Release Medical Screening building at SOL.



Photograph 6: View (facing northwest) of the B Facility Medication Distribution Rooms at SOL.

Source: MBA, 2013.



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Exhibit 4e Site Photographs

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>2. Agriculture and Forestry Resources <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</i></p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Agricultural production is a million dollar industry in Solano County with 2011 crop production values estimated at \$291 million (Solano County 2012). Walnuts were the leading agricultural crop valued at \$36 million. Other leading crops include alfalfa, processing tomatoes, and nursery products (Solano County 2012). According to the Farmland and Mapping Monitoring Program’s (FMMP’s) 2010 inventory (the most recent available), approximately 357,818 acres of agricultural land are located in Solano County (California Department of Conservation 2010). Currently, there are no active agricultural operations within CMF or SOL.

Discussion

Would the project:

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

No impact. Based on a review of maps prepared pursuant to the FMMP of the California Department of Conservation, the project sites do not contain any land designated “Prime Farmland,” “Unique Farmland,” or “Farmland of Statewide Importance.” Both CMF and SOL are designated by the FMMP as Urban and Built-Up Land (California Department of Conservation 2010). The proposed projects would be located entirely within CMF and SOL boundaries and would not impact any undisturbed lands. Therefore, no impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur.

- b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

No impact. No Williamson Act contract land exists on the project sites. According to the Solano County Williamson Act 2011/2012 Map, both CMF and SOL are designated Urban and Built-Up Land, and are considered non-Williamson Act land. An area of Williamson Act contract land is located directly south of SOL. However, implementation of the proposed projects would not change operations at CMF or SOL and would not conflict with any existing adjacent agricultural activities. The CMF and SOL project sites are zoned for community facilities. Therefore, the proposed projects would not conflict with existing agricultural zoning. In summary, the proposed projects are consistent with land use and zoning designations and are not expected to encourage the non-renewal or cancellation of other Williamson Act contract lands or conflict with agricultural zoning. No impact would occur.

- c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

No impact. PRC section 12220(g) defines forest land as “. . . land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits”; additionally, timberland is defined by PRC 4526 as land “. . . which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products.” The project sites consist of previously disturbed lands and non-native landscaping within state correctional institutions. Therefore, no forest land or timberland activity could be supported on the project sites or in the

vicinity of the project sites. These conditions preclude the possibility of changes to forest land or timberland zoning resulting from the proposed projects. For these reasons, no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. See response to c), above. No forest land or timberland exists on the project sites or in the vicinity of the project sites. Therefore, no impact would occur.

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

No impact. Indirect impacts on agricultural lands can occur under two types of conditions: (1) development (urban, residential) can place pressure on adjacent agricultural lands to convert to non-agricultural uses, or (2) land uses (urban, residential) adjacent to existing agricultural lands can create conflicts between the two types of uses which can, in turn, lead to the abandonment of agricultural uses in the area of conflict.

Improvements to CMF and SOL would take place within the existing property boundaries and would only function to serve CMF and SOL inmates and employees. The proposed land use is consistent with both the Vacaville General Plan land use and zoning designations. No farmland or forest land exists within CMF or SOL. Moreover, the proposed projects do not include components that would result in changes to surrounding land uses. Implementation of the proposed projects would not result in conversion of farmland or forest land, and there are no project elements that would otherwise affect agricultural or forest lands. Therefore, no impact would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Air Quality <i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The proposed projects are located in the City of Vacaville in Solano County. Solano County is split between the San Francisco Bay Area Air Basin and the Sacramento Valley Air Basin (SVAB). The proposed projects are located within the SVAB portion of Solano County and the Yolo-Solano Air Quality Management District (Air District). Regional and local air quality in the SVAB is impacted by topography, dominant airflows, location, and season. The SVAB is bounded by the Coast Ranges on the west and the Northern Sierra Mountains on the east. The intervening terrain is flat, and the area is often described as a bowl-shaped valley. The SVAB has a Mediterranean climate, characterized by hot, dry summers and mild, rainy winters. The mountains surrounding the SVAB create a barrier to airflow, and air pollutants can become trapped in the valley when meteorological conditions are right and a temperature inversion exists.

The United States Environmental Protection Agency (EPA) sets National Ambient Air Quality Standards, also known as federal standards. There are federal standards for six common air pollutants, called criteria air pollutants, which were identified resulting from provisions of the Clean Air Act of 1970. The six criteria pollutants are ozone, particulate matter (PM₁₀ and PM_{2.5}), nitrogen dioxide, carbon monoxide (CO), lead, and sulfur dioxide. The federal standards were set to protect

public health, including that of sensitive individuals. Thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants.

The California Air Resources Board (ARB) administers California ambient air quality standards for the 10 air pollutants designated in the California Clean Air Act. The 10 state air pollutants consist of the six federal criteria pollutants listed above, plus visibility reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride.

Health effects of the criteria pollutants may be found in the Air District's 2007 Handbook for Assessing and Mitigating Air Quality Impacts (2007 Handbook), as discussed below.

The Air District is designated non-attainment for state and federal ozone standards. The Air District is also designated non-attainment for state PM₁₀ standards, and as partial non-attainment for federal PM_{2.5} standards. Therefore, the pollutants of concern for the project area are primarily ozone and particulate matter (PM) (YSAQMD 2013a).

Significant ozone formation generally requires an adequate amount of ozone precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. Ozone precursors are primarily oxides of nitrogen (NO_x) and reactive organic gases (ROG). The conditions for ozone formation are prevalent during the summer when thermal inversions are most likely to occur. Elevated levels of ozone and PM are seasonal in nature. PM levels tend to be highest during the winter months when the meteorological conditions favor the accumulation of localized pollutants. This occurs when relatively low inversion levels trap pollutants near the ground and concentrate the pollution.

Existing local air quality, historical trends, and projections of air quality are best evaluated by reviewing relevant air pollutant concentrations near the project area. Table 3 summarizes air monitoring data from stations operated by the Air District. The nearest station that measures PM₁₀ is the Vacaville-Merchant Street Station (Vacaville-Merchant Station), located less than two miles northwest of the project sites. The Vacaville-Ulatis Drive ambient air monitoring station (Vacaville-Ulatis Station), located approximately 2.5 miles northeast of the project sites, has measurements of 1-hour and 8-hour ozone. The nearest station that measures PM_{2.5} is located in the City of Davis (Davis-UCD Station), over 20 miles northeast of the project sites. The PM_{2.5} and NO_x measurements from this station are shown in Table 3 but may not be representative of the projects' setting and are shown mainly for informational purposes. The Air District does not operate any CO monitoring stations.

Table 3: Ambient Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Measurement/Standard	Year		
			2009	2010	2011
Ozone ^a	1 Hour	Max 1 Hour Measurement (ppm)	0.106	0.105	0.088
		Days above CAAQS of 0.09 ppm	3	2	0
	8 Hour	Max 8 Hour Measurement (ppm)	0.085	0.079	0.073
		Days above CAAQS of 0.070 ppm	2	3	3
		Days above NAAQS of 0.075 ppm	2	1	0
Particulate matter (PM ₁₀) ^b	24 Hour	Est. Annual Average Measurement (µg/m ³)	13.6	12.7	14.4
		Max 24 Hour Measurement (µg/m ³)	27.4	34.7	35.8
		Est. Days above CAAQS of 50 µg/m ³	0	0	0
		Est. Days above NAAQS of 150 µg/m ³	0	0	0
Fine particulate matter (PM _{2.5}) ^c	24 Hour	Annual Average Measurement (µg/m ³)	9.1	*	12.6
		Max 24 Hour Measurement (µg/m ³)	*	*	*
		Measured Days above NAAQS of 35 µg/m ³	*	*	*
Nitrogen dioxide ^c	1 Hour	Max 1 Hour Measurement (ppm)	0.040	0.037	0.043
		Days above CAAQS of 0.18 ppm	0	0	0
Abbreviations: > = exceeds ppm = parts per million µg/m ³ = micrograms per cubic meter Max = maximum Est. = Estimated CAAQS = California Ambient Air Quality Standards NAAQS = National Ambient Air Quality Standards * Denotes no available data. ^a Ozone data from Vacaville-Ulatis Station. ^b PM ₁₀ data from Vacaville-Merchant Station. ^c PM _{2.5} and NO _x data from Davis-UCD Station. Source: California Air Resources Board, 2013.					

Sensitive Receptors

Certain populations are particularly sensitive to the health impacts of air pollution, such as children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. For purposes of CEQA, sensitive receptors are defined as a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. The proposed projects have the potential to impact the existing sensitive inmate population and staff at CMF and SOL. Some of the existing inmates may be considered sensitive receptors because they are long-term residents with pre-existing illnesses. Sensitive receptors also exist near the project sites, as residential areas are located to the north and east of CMF and SOL. A few residences within these areas are located less than 1,000 feet from the northern and eastern site boundaries.

Yolo-Solano Air Quality Management District Thresholds of Significance

While the final determination of whether or not a project has a significant effect is within the purview of the lead agency pursuant to CEQA Guidelines Section 15064(b), the Air District recommends that its air pollution thresholds be used to determine the significance of project emissions. These criteria pollutant thresholds and various assessment recommendations are contained in the Air District's 2007 Handbook, and are discussed under the checklist questions below.

Discussion

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No impact. To meet federal planning requirements, the Air District must prepare attainment plans for pollutants for which attainment has not been achieved. The Air District is included in the Sacramento Federal Non-attainment Area for the 8-hour ozone standard, and is currently under the 8-Hour Ozone Attainment Plan adopted in 1997. The Air District is also included as part of a larger PM_{2.5} non-attainment area for the federal 2006 24-hour PM_{2.5} standard. The Air District is currently developing an attainment plan for PM_{2.5} with an attainment deadline of December 2014. State planning requirements dictate that plans must be prepared for areas that do not meet the state ambient air quality standards. The Air District's original 1992 Air Quality Attainment Plan (AQAP) is currently being updated in the 2012 Triennial Assessment and Plan Update (YSAQMD 2013b).

The Air District's 2007 Handbook does not provide guidance on determining project consistency with applicable air quality attainment plans. A commonly used method for evaluating a project's potential to conflict with the applicable AQAP is to compare the project's associated population and vehicle miles traveled (VMT) with the growth anticipated in the AQAP.

As stated in the Project Description, the projects are not anticipated to result in an increase in inmate population or visitation levels, and would add only one employee position at each institution. Furthermore, the addition of onsite facilities would be expected to reduce the need for transportation of inmates to offsite facilities for medical treatment. Therefore, the projects would not cause substantial increases in population, vehicle trips, or VMT that would conflict with the AQAP.

In summary, the projects would not result in an increase in VMT or population that would conflict with the AQAP and would actually be expected to reduce the need for transportation of inmates to offsite facilities for medical treatment. Therefore, the projects would not conflict with or obstruct implementation of the applicable air quality plan and no impact would occur.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than significant impact. This impact relates to localized and regional criteria pollutant impacts. Potential localized impacts would be exceedances of state or federal standards for PM₁₀, PM_{2.5}, or CO. The pollutants of regional concern are PM and ozone.

Thresholds

The Air District has recommended construction and operational thresholds of 80 pounds per day of PM₁₀. Additionally, the Air District provides project screening sizes for operational and PM₁₀ emissions. The Air District does not have a construction or operational threshold for PM_{2.5}. Because the Air District is in nonattainment for PM_{2.5}, emissions of this pollutant should be evaluated for the potential to substantially contribute to this air quality violation. A threshold of 48 pounds per day of PM_{2.5} will be used for this analysis. The rationale for this threshold is based on the existing PM₁₀ threshold and the annual standards for PM₁₀ and PM_{2.5}. The annual standard for PM₁₀ is 20 µg/m³ and the annual standard for PM_{2.5} is 12 µg/m³. Therefore, applying the ratio of PM₁₀ to PM_{2.5} standards to the PM₁₀ threshold of 80 pounds per day results in a threshold for PM_{2.5} of 48 pounds per day.

The Air District does not have a quantitative threshold or project screening size for CO, but projects that cause a violation of a state ambient air quality standard for CO would have a significant impact.

Ozone is not emitted directly into the air, but is a regional pollutant formed by a photochemical reaction in the atmosphere. Ozone precursors, ROG and NO_x, react in the atmosphere in the presence of sunlight to form ozone. The Air District has recommended construction and operational thresholds of 10 tons per year of ROG and NO_x. Additionally, the Air District provides project screening sizes for operational ozone precursor emissions.

Construction Emissions

The Air District's screening sizes do not apply to emissions during the construction phase, therefore, these emissions were quantified using CalEEMod. The maximum daily emission rates and annual emissions for the projects are shown in Table 4. Renovations were not included in these construction calculations, as renovations would not require heavy duty equipment usage or large volume soils movement, which are the main sources of air pollutant emissions during construction. Construction activities would consist of site preparation (including grading) and building construction, as discussed in the Project Description. The projects were modeled as a Medical Office Building Institute of Transportation Engineers (ITE) land use type in CalEEMod. Grading was assumed to take place over six months and architectural coating phase duration was extended to approximately three months. All other construction phases used the model default duration values. The projects are assumed to be constructed in a single 15-month period, which is more conservative than the estimated 18- to

20-month construction duration provided in the Project Description. Full model outputs and assumptions used in CalEEMod are provided in Appendix A – Air Quality Model Output.

As seen in the table, construction emissions are well below the PM₁₀ and PM_{2.5} daily emissions or the ROG and NO_x annual emissions thresholds. Therefore, impacts related to construction emissions would be less than significant.

Table 4: CMF/SOL Construction Criteria Pollutant Emissions

Component	Maximum Daily Emissions (lbs. per day)		Annual Emissions (tons per year)	
	PM ₁₀	PM _{2.5}	NO _x	ROG
CMF construction	5.45	2.26	1.92	0.30
SOL construction	6.27	1.49	1.93	0.31
Total construction emissions	11.72	3.75	3.85	0.61
Threshold of significance	80	48	10	10
Exceeds threshold?	No	No	No	No
Notes: ROG = reactive organic gases NO _x = oxides of nitrogen PM ₁₀ and PM _{2.5} = particulate matter lbs. = pounds Source: Appendix A – CalEEMod output.				

Operational Emissions

The Air District provides screening sizes of projects that may exceed the Air District thresholds for ROG, NO_x, and PM₁₀. Screening sizes for analysis years 2007 and 2010 are provided, as these years generally represent two different scenarios where significance thresholds are triggered. ROG and NO_x emissions generally trigger significance thresholds in years before 2007, while PM₁₀ emissions generally trigger significance thresholds in years after 2010. The total square footage of the CMF and SOL additions would be 26,759 square feet. The applicable screening size provided by the Air District for a Medical Office Building is 110,000 square feet for the year 2007 and 150,000 square feet for the year 2010. The 2007 Handbook states that projects falling considerably (more than 10 percent) under the screening size may be safely assumed to need further emissions quantification to meet the Air District’s criteria pollutant thresholds. As shown in Table 5, the projects are 22 percent of the year 2007 screening size and 17 percent of the year 2010 screening criteria. Therefore, the projects’ operational emissions impacts would be less than significant.

Table 5: Yolo Solano Air Quality Management District Operational Screening Criteria

Project Component	Building space Increase (sf)	2007 Screening Criteria		2010 Screening Criteria	
		Square Feet	Project Percent	Square Feet	Project Percent
CMF	9,904	110,000	9%	150,000	7%
SOL	16,855	110,000	15%	150,000	11%
Project Percent of Screening Criteria		—	22%	—	17%
Notes: Percentages rounded to the nearest whole number. sf = square feet Source: Yolo-Solano Air Quality Management District 2007.					

CO Hotspots

The 2007 Handbook provides a screening approach for potential CO hotspots that states that a project can be said to have the potential to create a violation of the CO standard if either of the following criteria are true:

- A traffic study for the project indicates that the peak-hour Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to an unacceptable LOS (typically LOS E or F); or
- A traffic study indicates that the project will substantially worsen an already existing peak-hour LOS F on one or more streets or at one or more intersections in the project vicinity.
 “Substantially worsen” includes situations where delay would increase by 10 seconds or more when project-generated traffic is included.

As stated in the Project Description, the projects are not anticipated to result in an increase of inmate population or visitation level and would only add one employee position at each facility. As such, the projects would not cause substantial increases in vehicle trips that may cause road intersections to operate at a lower LOS or substantially worsen intersections already at LOS F. Furthermore, the projects would be expected result in a net reduction of vehicle trip generation, as the increased capacity of onsite facilities may reduce the existing need for transport between CMF or SOL and other facilities. Therefore, the projects do not have the potential to create violations of the CO standard and impacts are less than significant.

- c) 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?**

Less than significant impact. The 2007 Handbook states that any project that would individually have a significant air quality impact would also be considered to have a significant cumulative impact. The Air District has put forth additional cumulative impact significance thresholds for AQAP and State Implementation Plan consistency, but these thresholds are used for evaluating local or regional plans, and are therefore not applicable for project-level analysis such as the proposed projects.

As shown in discussion b), the construction and operational phases of the proposed projects would result in air quality impacts that are less than significant. The construction phase emissions do not exceed the Air District's threshold for PM₁₀, PM_{2.5}, and ozone precursors as shown previously in Table 4. The project sizes are well below the Air District's applicable operational screening size (as previously shown in Table 5), which is conservatively set to identify projects that may exceed criteria pollutant thresholds. Concerning cumulative CO impacts, the projects would not generate traffic or VMT increases that may cause significant CO hotspots and would be expected to reduce operational VMTs. Furthermore, the improvement in onsite health care facilities would be expected to reduce the need for transportation of inmates to offsite facilities for medical treatment, thereby likely reducing existing VMTs. As shown in discussion d) below, the projects are not anticipated to be a source of toxic air contaminants (TACs). Therefore, operation of the projects would not result in significant cumulative pollutant impacts and impacts would be less than significant.

- d) Expose sensitive receptors to substantial pollutant concentrations?**

Less than significant impact. The Air District states that localized impacts on sensitive receptors can occur in one of two ways:

- A (new) source of air pollutants is proposed to be located close to existing receptors. For example, an industrial facility is proposed for a site near a school; or
- A (new) development project with receptors is proposed near an existing source of air pollutants. For example, a hospital is proposed for a site near an industrial facility.

The projects would not locate new receptors near an existing source or air pollutants. As stated in the Project Description, the projects are not anticipated to result in an increase of inmate population or visitation levels. Therefore, the projects would not locate additional receptors near an existing source of air pollutants.

As previously discussed, the proposed projects have the potential to impact the existing sensitive prison population and staff. Some of the existing prison inmates may be considered sensitive receptors because they are long-term residents with pre-existing illnesses. Residential land uses to the north and east of the project sites may also be considered locations of sensitive receptors. This discussion addresses whether the projects would expose existing sensitive receptors to significant risks from asbestos, carbon monoxide hotspots, TACs, or fugitive (construction) dust.

Asbestos

Asbestos is a fibrous mineral which is both naturally occurring in ultramafic rock (a rock type commonly found in California), and used as a processed component of building materials. Because asbestos has been proven to cause a number of disabling and fatal diseases, such as asbestosis and lung cancer, it is strictly regulated either based on its natural widespread occurrence, or in its use as a building material. In the initial Asbestos National Emission Standards for Hazardous Air Pollutants rule promulgated in 1973, a distinction was made between building materials that would readily release asbestos fibers when damaged or disturbed (friable) and those materials that were unlikely to result in significant fiber release (non-friable). The EPA has since determined that, severely damaged, otherwise non-friable materials can release significant amounts of asbestos fibers. Asbestos has been banned from many building materials under the Toxic Substances Control Act, the Clean Air Act, and the Consumer Product Safety Act. However, most uses of asbestos for building material are not banned. Therefore, the potential source of asbestos exposure for the projects is the renovation activity of the existing structures.

Because the proposed projects would involve renovation activity, they would be required to comply with Air District's Rule 9.9, Rule 9.8, and Rule 4.3 for asbestos demolition and renovations. Specifically, Rule 9.9 and Rule 4.3 apply to every demolition or renovation where the combined amount of regulated asbestos-containing material is more than 260 linear feet, 160 square feet, or 35 cubic feet. Rule 4.3 requires that a notification be made to the Air Pollution Control Officer at least 10 working days prior to commencement of setup for demolition or planned renovation, and that an owner or operator shall pay a fee for each demolition or renovation submitted to the Air District. Rule 9.9 requires that these projects be subject to specific work standards and practices designed to limit the emission of asbestos into the atmosphere. Rule 9.8 prohibits the use of serpentine rock containing more than one percent asbestos for surfacing applications. Compliance with regulations as discussed above reduces the potential for exposure to asbestos-containing material to less than significant.

Carbon Monoxide Hotspot

As shown previously in discussion b), the projects would not create a CO hotspot, as the projects are not anticipated to generate additional trips during operation and would be expected to result in a reduction of offsite trips. Therefore, the projects would not expose existing sensitive receptors to localized CO hotspots. Furthermore, the projects would not result in additional sensitive receptors.

As such, exposure of sensitive receptors to CO hotspots would not occur as a result of the proposed projects.

Toxic Air Contaminants

Two scenarios have the potential to expose sensitive receptors to TACs. The first is when a project includes a new or modified source of TACs and would be located near an existing or proposed sensitive receptor. The second scenario involves locating a residential or other sensitive receptor development near an existing or planned source of TACs. As previously stated, the proposed projects are considered sensitive receptors. Some of the existing CMF and SOL inmates may be considered sensitive receptors because they are long-term residents with pre-existing illnesses. The projects would generate diesel exhaust, a source of diesel particulate matter, during project construction. Onsite emissions of both diesel particulate matter and PM_{2.5} occur during construction from the operation of heavy-duty construction equipment and from vendor trucks that operate on project sites.

Construction phase risks would be considered acute health risks as opposed to cancer risks, which are long-term. The California Office of Environmental Health Hazard Assessment has yet to define acute risk factors for diesel particulates that would allow the calculation of a hazards risk index. Thus, evaluation of this impact would be speculative and no further analysis is necessary.

ARB's Air Quality and Land Use Handbook (Land Use Handbook) was used to determine if the projects would be a TACs "source" site. The Land Use Handbook contains recommendations for locating sensitive receptors in relation to known sources of TACs in order to minimize potential health impacts to sensitive receptors (ARB 2005). The Land Use Handbook recommends avoiding siting new receptors within 1,000 feet of a distribution center that accommodates more than 100 trucks per day. Although the projects are not a distribution center, the guidance is a good gauge of potential significance. The projects would not generate any new on-road trips. As such, potential health risks and exposure to TACs from operation of the projects are less than significant.

Fugitive Dust

Dust emissions from grading, trenching, or land clearing can create nuisances and localized health impacts related to fugitive dust. The Air District states that even projects not exceeding PM thresholds should implement best management practices to reduce dust emissions and avoid localized health impacts. As shown previously in discussion b), PM₁₀ emissions during the construction phase are well below Air District thresholds. Based on the Air District's 2007 Handbook, these emissions should still be considered as having a potentially significant impact. As indicated in Section 2.6, Environmental Protection Design Features, the projects would implement the applicable best management practices for dust as provided in Section 6.1 of the Handbook, thereby reducing dust emissions and avoiding these potential localized health impacts. Therefore, the projects would not expose sensitive receptors to substantial concentrations of construction dust and impacts would be reduced to a level of less than significant.

Conclusion

The proposed projects would not expose sensitive receptors to substantial pollutant concentrations related to asbestos, CO hotspots, TACs, or fugitive dust, and impacts would be less than significant.

e) Create objectionable odors affecting a substantial number of people?

Less than significant impact. The Air District’s 2007 Handbook states that screening of potential odor impacts should be conducted for the following two situations:

- Projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate, and
- Residential or other sensitive receptor projects or other projects that may attract people locating near existing odor sources.

The Air District’s 2007 Handbook identifies some common types of facilities that are known producers of odors, including wastewater treatment facilities, chemical manufacturing, landfills, transfer stations, feed lots, composting facilities, and painting or coating operations, among others. The projects’ type is not included in the Air District’s list of known odor producers, and is not anticipated to be a source of odor. Diesel exhaust and volatile organic compounds—considered by some to be objectionable odors—would be emitted during construction of the projects but emissions would disperse rapidly from the project sites and would not be at a level considered to induce a negative response. Operation of the proposed projects would be similar to the existing baseline conditions for odor. As such, the proposed projects would not create significant amounts of objectionable odors and would not place sensitive receptors in proximity to existing odor sources. Impacts would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4. Biological Resources <i>Would the project:</i>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game [Wildlife] or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

CMF and SOL are located adjacent to each other within the southwestern corner of the incorporated limits of the City of Vacaville along the eastern edge of the Coastal Range, which extends prominently to the north. Urban areas of Vacaville are located to the north and east of the project sites, while undeveloped land is located to the south and west. Temperatures in the project vicinity range from July highs of 95.2 degrees Fahrenheit (°F) to January lows of 36.7°F. Average annual precipitation is 24.55 inches and falls as rain primarily between the months of October through April (Western Regional Climate Center [WRCC] 2013).

Vegetation Communities and Wildlife Habitats

Vegetation communities are assemblages of plant species that occur together in the same area and are defined by their structure and by the relative abundance of associated plant species. The vegetation communities within the project sites are classified as urban according to the Guide to Wildlife Habitats (Mayer and Laudenslayer 1988). By using this classification system, it is possible to predict the wildlife species likely to occur within the project sites using the California Wildlife Habitat Relationship System (CWHR). CWHR is based upon the Guide to Wildlife Habitats, a predictive model that lists species likely to occur in a given location under certain habitat conditions.

The project sites are developed and/or disturbed and are referred to as urban in the CWHR. The proposed improvements at both CMF and SOL are within the existing secure perimeter (lethal electrified) fences surrounding both the CMF and SOL facilities (with the exception of minor utility connections at CMF). Vegetated areas within CMF and SOL are mowed as part of ongoing facility maintenance. Soils at both CMF and SOL are compacted and have been disturbed during previous construction. The areas associated with the proposed projects at CMF and SOL are considered to have low habitat quality and provide limited habitat for wildlife species. The proposed sites do not support any native vegetative communities.

Wildlife diversity at the sites of the proposed projects is expected to be low because of the relatively low-quality habitat provided by the ruderal and lawn vegetation and generally high levels of disturbance in the vicinity. Wildlife species observed or expected to occur on the project sites are limited to those adapted to disturbed conditions, such as northern mockingbird (*Mimus polyglottos*), house finch (*Carpodacus mexicanus*), yellow-billed magpie (*Pica nuttalli*), European starling (*Sturnus vulgaris*), turkey vulture (*Cathartes aura*), black-tailed jackrabbit (*Lepus californicus*), and California ground squirrel (*Spermophilus beecheyi*).

Special-Status Species

Special-status species are those wildlife and plant species that, in the judgment of the resource agencies, trustee agencies, and certain non-governmental organizations, warrant special consideration in the CEQA process. This includes the following species:

- Officially designated “threatened,” “endangered,” or “candidate” species federally listed by the United States Fish and Wildlife Service (USFWS) and protected under the Federal Endangered Species Act.
- Officially designated “rare,” “threatened,” “endangered,” or “candidate” species state listed by the CDFW and protected under the California Endangered Species Act. CDFW also maintains a list of “Fully Protected” (CFP) species as well as “California Species of Special Concern” (SSC) that are also generally included as special-status species under CEQA.

- Taxa considered rare, threatened, or endangered under the conditions of Section 15380 of the CEQA Guidelines, such as plant taxa identified on lists 1A, 1B, and 2 in the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California.
- Bat species listed as Medium or High Priority by the Western Bat Working Group.

Methodology

This evaluation of biological resources includes a review and inventory of potentially occurring special-status species (including those officially designated endangered or threatened), wildlife habitats, vegetation communities, and jurisdictional waters of the U.S. or State of California. The setting descriptions provided in this section are based upon a combination of literature reviews, site photographs, aerial photographs, and database queries. The reference data reviewed for this report include the following:

- North Fairfield and Elmira, California, 7.5-minute topographic quadrangles (USGS 1980)
- CDFW California Wildlife Habitat Relationship System (CWHR) (CDFW 2013a)
- California Natural Diversity Database (CNDDDB), RareFind 4 computer program for the North Fairfield and Elmira, California 7.5-minute topographic quadrangles (CNDDDB 2013)
- California Native Plant Society Electronic Inventory of Rare and Endangered Plants for the North Fairfield and Elmira, California 7.5-minute topographic quadrangles (CNPS 2013)
- United States Fish and Wildlife Service, Sacramento Office. Federal Endangered and Threatened Species that Occur in North Fairfield and Elmira USGS 7.5-Minute Quads (U.S. FWS 2013)
- Special Animals List (CDFW 2013b)
- Endangered and Threatened Animals List (CDFW 2010c)
- Special Plants List (CDFW 2013d)

Special-Status Plant Species

The special-status plant species reviewed for this document are included in several lists provided in Appendix B. These lists were compiled from query results from CNDDDB and the CNPS online inventory. CNDDDB-recorded occurrences of special-status plant species within five miles of the project sites are shown in Exhibit 5.

Several regionally occurring species have no potential to occur within the project sites, either because the distribution of the species does not extend into the vicinity or because the habitat and/or micro-site conditions (e.g., serpentine soils) required by the species are not present.

Based on the results of the species review, there are no special-status plants with potential to occur within the project sites.

Special-Status Wildlife Species

The special-status wildlife species reviewed for this document are included in several lists provided in Appendix B. These lists were compiled from the USFWS list and query results from CNDDDB.

Several regionally occurring species were determined not to have potential to occur within the project sites, either because the distribution of the species does not extend into the vicinity, or because the habitat or habitat elements (e.g., caves, tall snags) required by the species are not present.

Based upon results of the species review, there are no special-status wildlife species that would be impacted by the projects.

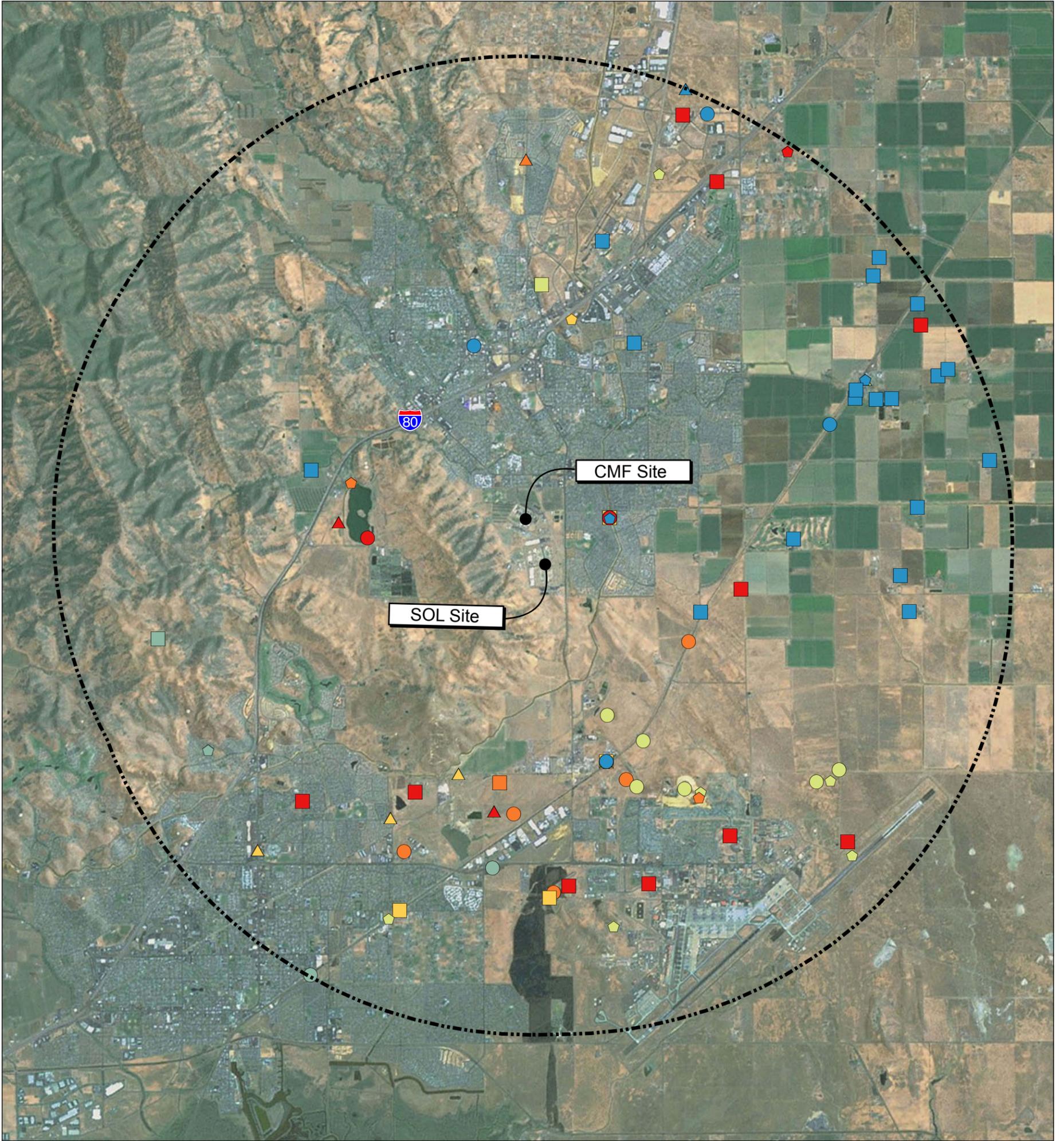
Other Sensitive Biological Resources

The MBTA protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs (defined as “take”).

Section 3503 of the California Fish and Game Code (CFG Code) makes it illegal to destroy any birds’ nest or any birds’ eggs that are protected under the MBTA. Section 3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey such as hawks and owls, and their eggs and nests from any form of take.

Improvements associated with both CMF and SOL would occur in ornamental lawn areas within the already existing lethal electrified fence with the exception of minor utility connections at CMF. A limited number of trees are located adjacent to the construction staging areas at CMF and SOL. These trees could provide potential nesting habitat for species protected under the MBTA and CFG Code.

There are no additional sensitive biological resources within or immediately adjacent to any of the projects’ components. There are no wetlands, native trees, or existing ornamental trees that would be removed during construction.



Source: ESRI Aerial Imagery. CNDDDB Data, February 2013.

Legend

5-Mile Buffer

Special-Status Species

- | | | | |
|-------------------------------|--|-------------------------------------|--|
| ● Baker's Navarretia | (<i>Navarretia leucocephala ssp. bakeri</i>) | ■ Burrowing Owl | (<i>Athene cunicularia</i>) |
| ● California Linderiella | (<i>Linderiella occidentalis</i>) | ▲ Dwarf Downingia | (<i>Downingia pusilla</i>) |
| ● California Tiger Salamander | (<i>Ambystoma californiense</i>) | ▲ Heartscale | (<i>Atriplex cordulata var. cordulata</i>) |
| ● Carquinez Goldenbush | (<i>Lasthenia conjugens</i>) | ▲ Legenere | (<i>Legenere limosa</i>) |
| ● Contra Costa Goldfields | (<i>Isocoma arguta</i>) | ▲ Pappose Tarplant | (<i>Centromadia parryi ssp. parryi</i>) |
| ● San Joaquin Spearscale | (<i>Atriplex joaquinana</i>) | ▲ Recurved Larkspur | (<i>Delphinium recurvatum</i>) |
| ■ Swainson's Hawk | (<i>Buteo swainsoni</i>) | ▲ Saline Clover | (<i>Trifolium hydrophilum</i>) |
| ■ Wilbur Springs Shorebug | (<i>Saldula usingeri</i>) | ◆ Showy Rancheria Clover | (<i>Trifolium amoenum</i>) |
| ■ Adobe-Lily | (<i>Fritillaria pluriflora</i>) | ◆ Valley Elderberry Longhorn Beetle | (<i>Desmocerus californicus dimorphus</i>) |
| ■ Alkali Milk-Vetch | (<i>Astragalus tener var. tener</i>) | ◆ Vernal Pool Fairy Shrimp | (<i>Branchinecta lynchi</i>) |
| ■ Brittsescale | (<i>Atriplex depressa</i>) | ◆ Vernal Pool Tadpole Shrimp | (<i>Lepidurus packardi</i>) |
| | | ◆ Western Pond Turtle | (<i>Emys marmorata</i>) |
| | | ◆ White-Tailed Kite | (<i>Elanus leucurus</i>) |

Discussion

Would the project:

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Less than significant impact. Based on a site visit performed in March 2013, a literature review (as previously discussed), and the distance from known recorded occurrences of sensitive plant and wildlife species, the project footprints at both CMF and SOL do not provide suitable habitat for any federally or state listed threatened or endangered species, or other sensitive plant or wildlife species, and it is highly unlikely that any sensitive plant or wildlife species would be directly impacted during project construction.

There are no shrubs or trees capable of providing suitable nesting habitat for migratory birds within 300 feet of the proposed project components located within the secure perimeter fences of CMF and SOL. However, construction staging areas and minor utility connections (at CMF only) are located within the vicinity of suitable nesting habitat for a number of migratory birds. No nesting activity or evidence of nesting activity was observed during the site visit performed by an MBA biologist in March 2013. Tree removal would not be required for implementation of the projects. Nonetheless, implementation of nesting bird avoidance as described under Environmental Protection Design Features in Section 2.6 would ensure impacts are less than significant.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game [Wildlife] or U.S. Fish and Wildlife Service?**

No impact. There are no riparian habitats or other natural communities identified within the project sites in local or regional plans, policies, and regulations or by the CDFW or USFWS (confirmed by MBA biologist site visit, March 2013). No impacts would occur.

- c) **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No impact. There are no state or federally regulated wetlands or drainage features as defined by Section 404 of the Clean Water Act or Section 1600 of the CFG Code within the project sites (confirmed by MBA biologist site visit, March 2013). No impacts would occur.

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?**

No impact. Because of the developed nature of the project sites and the existing secure perimeter, development would not create an impediment to any existing migratory corridor or movement of wildlife. No impacts would occur.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

No impact. No local policies or ordinances protecting biological resources that include the project sites have been adopted, and the proposed projects would not be in conflict with any local policies or ordinances protecting biological resources. Therefore, no impacts would occur.

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

No impact. CDCR has an approved Habitat Conservation Plan (HCP) for its Statewide Electrified Fence Project (1999). The HCP covers the operation of lethal electrified fences that surround 27 state prisons, including SOL. CMF is part of the Six-Prison Electrified Fence Project Habitat Management Plan (HMP) (CDCR 2001). The proposed projects would not involve impacts or modification to the existing lethal electrified fences at either institution. As such, the proposed projects would not conflict with the HCP or the HMP.

The Draft Solano County Multi-Species Habitat Conservation Plan has not yet been adopted, and therefore would not apply to the proposed projects. The proposed project sites are not within the boundaries of any other applicable habitat conservation plan or natural community conservation plans. As such, no impact would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
5. Cultural Resources				
<i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Review of historic topographic maps 1908, 1917, 1922, 1944, 1955, 1959, 1965, 1969, 1974, 1981, 1984, and 1994 were examined as a part of this analysis to determine previous uses of the project sites (Nationwide Environmental Title Research 2013). The project sites are shown as undeveloped up to the 1944 map. The area was most likely used for agricultural purposes prior to the construction of CMF and SOL. The 1955 map shows the earliest structures at CMF. Opened in 1955, CMF is the largest and oldest prison hospital in California. According to historic topographic maps reviewed for this project, CMF was about one-third the size when it opened, and major expansion of the facilities took place in the 1960s and 1970s. Topographic maps indicate that the SOL property did not contain structures prior to its construction in 1984. A ditch carrying runoff from the foothills to the west bypasses CMF and crosses SOL from northwest to southeast, but this was removed within the SOL footprint when construction began in 1984.

Previous environmental compliance studies have taken place at CMF and SOL, none of which concluded that prehistoric cultural resources were known to be recorded onsite (CDCR 1995, 2008).

Discussion

Would the project:

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

Less than significant impact. Historical aerials and topographic maps indicate that the CMF and SOL sites had been used for agricultural purposes prior to construction of the institutions. SOL was constructed in 1984 and, therefore, would not be considered a historical resource. While many of the structures at CMF are more than 50 years old and CMF does not appear to meet any of the four criteria for inclusion in the California Register of Historic Resources (as defined in Public Resources Code 50524.1, Title 14 CCR, Section 4852), CMF Sub-project 6, which includes the construction of a 280-square-foot medication distribution room inside of each of the U-Wing and V-Wing, and Sub-project 5, which includes renovations to 3,299 square feet of the X-Wing, would modify buildings built in 1955. CMF Sub-project 4 would include renovations to 8,044 square feet on three floors of the B-Wing, also constructed in 1955. However, because there would be no change to the exterior facades of these buildings nor changes to the roof lines, potential impacts to the overall historical integrity of the structures, which may or may not be considered architecturally significant, would not be expected to affect the structure such that any future potential for inclusion on the California Register would be jeopardized.

In summary, the potential for impacts to significant historical resources as a result of the proposed project is considered low. As such impacts to historical resources would be less than significant.

- b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

Less than significant impact. The evidence suggests that the project sites did not exhibit any known archaeological resources before CMF and SOL were built. The construction of the existing institutions and previous use of the property has completely disrupted all topsoils in and near the perimeter of the institutions. Because no aspects of the projects would impact soils below the expected level of modern-era disturbance, which is anticipated to be about three feet below existing grade, the potential for impacts to buried archaeological resources is considered low. Furthermore, implementation of the inadvertent discovery clause described under Environmental Protection Design Features in Section 2.6 would ensure this impact would be less than significant.

- c) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Less than significant impact. Various EIRs generated for projects in Vacaville have shown that the project area is located on Holocene-era alluvial sediments associated with the Sacramento River

Alluvial Fan. Pleistocene sediments are likely to occur beneath the Holocene sediments. The Holocene sediments are considered not sensitive for fossil resources, whereas Late Pleistocene sediments, which are very deep, would be moderately sensitive. Deep excavations may encounter fossil resources but only at 12 feet or more and only in the oldest section of the institutions before modern grading standards were required. These depths would not be required in any part of the project-related excavations. As such, excavation within previously undisturbed soils within the project sites would have low potential for impacts to significant paleontologic resources located within the Sacramento River Alluvial Fan. No aspects of the projects would impact soils below the expected level of modern construction disturbance, which is anticipated to be about three feet below existing grade. Furthermore, implementation of the inadvertent discovery clause described under Environmental Protection Design Features in Section 2.6 would ensure this impact would be less than significant.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact. Human remains are unlikely to be found in the disturbed soil horizons of the project sites. Nonetheless, implementation of the inadvertent discovery clause described under Environmental Protection Design Features in Section 2.6 would ensure this impact would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. Geology and Soils <i>Would the project:</i>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

CMF and SOL are located in the transition zone between the Coast Ranges and Great Valley Geomorphic Provinces of California, directly east of the Vaca Mountains. Local topography consists of the rolling hills of the Vaca Mountains to the east and the flat plains of the Sacramento Valley to the west.

According to the Preliminary Geologic Map of the Lodi Quadrangle, the project sites are underlain by Holocene alluvial fan deposits (CGS 2009).

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, CMF is located on soils consisting of Brentwood clay loam, 0 to 2 percent slopes, and SOL is located primarily Rincon clay loam 0 to 2 percent slope (NRCS 2013).

Discussion

Would the project:

- a) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:**
- i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Less than significant impact. The Alquist-Priolo Act (PRC Sections 2621-2630) was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. Surface rupture is an actual cracking or breaking of the ground along a fault during an earthquake. Structures built over an active fault can be structurally compromised if the ground ruptures. Surface ground rupture along faults is generally limited to a linear zone a few yards wide. The Alquist-Priolo Act was created to prohibit the location of structures designed for human occupancy across the traces of active faults, thereby reducing the loss of life and property from an earthquake. There are no active faults (i.e., having surface displacement within the last 10,000 years) underlying the project area as shown in the most recent Alquist-Priolo Earthquake Fault Zoning Map (Department of Conservation, 2012).

An active tectonic boundary between the Sierra Nevada basement and the Coast Ranges lies buried beneath the entire western edge of the Great Valley. This system of faults is generally referred to as the Great Valley Fault. The project sites lie within Segment 4 of the Great Valley Fault. The most recent substantial event on the Great Valley Fault zone was the 1983 Coalinga earthquake (Fugro 2008) of magnitude 6.4, which caused the most severe damage in the City of Coalinga, California (USGS 2008), approximately 175 miles southeast of the project sites. The Great Valley Fault is associated with a type of fault known as “blind thrust,” which typically has an epicenter located approximately 1.2 to 3.1 miles below the surface and does not normally cause ground rupture.

The Vaca Fault is mapped approximately 0.33 mile west of the project sites (Wagner et al. 1987). The Vaca Fault has been identified as a possible source of the 1892 Vacaville-Winters earthquake. This earthquake had an estimated Richter magnitude of 6.4 and was centered in the English Hills area approximately seven miles north of the project sites. Although there is evidence that the Vaca Fault may be active, because surface ground rupture only occurs in a linear zone a few yards wide, surface

rupture along the Vaca Fault would not adversely affect the project sites except, potentially, through ground shaking.

In summary, there are no active faults designated on the Alquist-Priolo Fault Zone maps underneath or adjacent to the project sites. The Great Valley Fault is a blind thrust fault that does not normally result in surface ground rupture. Any surface ground rupture along the Vaca Fault would be located 0.33 mile west of the project sites. As such, the project sites would not be susceptible to fault rupture and this impact is considered less than significant.

ii) Strong seismic ground shaking?

Less than significant impact. Ground shaking—motion that occurs because of energy released during faulting—could result in damage or collapse of buildings and other structures, depending on the magnitude of the earthquake, the location of the epicenter, and the character and duration of the ground motion. Other factors that determine the amount of potential damage from strong seismic ground shaking are the characteristics of the underlying soil and rock, the building materials used, and the workmanship of the structure.

Ground motions from seismic activity can be estimated by probabilistic method at specified hazard levels. These levels are determined by projecting earthquake rated based on earthquake history and fault slip rates (CGS 2007). Ground shaking is expressed in terms of peak ground acceleration using a percentage of gravity (g) or a percentage of the earth's normal gravitational strength. The intensity of ground shaking depends on the distance from the earthquake epicenter to the site, the magnitude of the earthquake, site soil conditions, and the characteristic of the source. According to the CBC, the project area is located in Seismic Zone 4. This location implies a minimum horizontal acceleration of 0.4g for use in earthquake resistant design.

Peak horizontal ground acceleration with 10 percent probability of being exceeded in 50 years or 100 years was calculated for firm rock, soft rock, and alluvium in percentage of gravity. According to a Geotechnical Investigation Report prepared for CMF in 2008 by Fugro West, Inc., local peak ground accelerations of 0.56g may result from an event having a 10-percent chance of occurring within a 50-year timeframe and 0.71g for a 10 percent chance of occurring within a 100-year timeframe.

There are three active faults within 10 miles of the project sites, Vaca Fault (0.33 mile to the west), Great Valley Fault (2.0 miles to the west), and Concord-Green Valley Fault (9.9 miles to the west). Earthquake activity along any of these active faults could produce strong seismic ground shaking at the project sites. Further, in 1882, a Richter magnitude 6.5 earthquake caused considerable damage to the communities of Vacaville, Dixon, and Winters (Bennett 1987). Various potential fault locations have been theorized for the epicenter of that earthquake, including the Great Valley Fault, as well as the Vaca Fault (Sims et al. 1973). Because several active faults are located within the regional

vicinity of CMF and SOL, the project sites could be subjected to strong seismic ground shaking in the event of an earthquake.

The proposed projects' components have been designed to be consistent with CBC Title 24 regulations. The CBC requires extensive geotechnical analysis and engineering for grading, foundations, retaining walls, and other structures, including criteria for seismic design. Incorporation of standard CBC design and construction methods would ensure that risks resulting from seismic shaking would be minimized. In addition, a geotechnical engineering report would be prepared for each project. The geotechnical engineering reports would provide site-specific recommendations regarding site preparation, appropriate sources and types of fill, structural foundations, grading practices, erosion/winterization, slope stability, and earthquake resistant design.

In accordance with CBC and Appendix D of CDCR's Design Criteria Guidelines, recommendations from the geotechnical engineering reports would be incorporated into project plans and implemented during project construction. Incorporation of recommendations from the geotechnical engineering reports and conformance to the CBC would ensure that the proposed projects would result in less than significant impacts related to seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. Liquefaction is a process by which water-saturated materials (including soil, sediment, and certain types of volcanic deposits) lose strength and may fail during strong ground shaking. Liquefaction occurs most frequently where unconsolidated sediments and a high water table coincide. In some cases, a complete loss of strength occurs and catastrophic ground failure may result. Factors determining the liquefaction potential are soil type, the level and duration of seismic ground motions, the type and consistency of soils, and the depth to groundwater.

As indicated on the City of Vacaville General Plan Figure 9-2, CMF and SOL are located in an area designated as having moderate and low susceptibility to liquefaction. According to a Geotechnical Investigation Report prepared in 2008 by Fugro West, Inc., liquefaction-related settlement potential at CMF would be between two and five inches. Because of the proximity of SOL to CMF, it would be expected that similar liquefaction-related settlement could also occur at SOL.

As previously noted, the proposed projects' components have been designed to be consistent with CBC Title 24 regulations. The CBC requires extensive geotechnical analysis and engineering for grading, foundations, retaining walls, and other structures, including criteria for seismic design and liquefaction potential. Incorporation of standard CBC design and construction methods would ensure that risks resulting from liquefaction would be minimized. In addition, a geotechnical engineering report would be prepared for each project. The geotechnical engineering reports would provide site-specific recommendations regarding site preparation, appropriate sources and types of fill, structural foundations, grading practices, erosion/winterization, slope stability, and earthquake resistant design.

In accordance with CBC and Appendix D of CDCR’s Design Criteria Guidelines, recommendations from the geotechnical engineering reports would be incorporated into project plans and implemented during project construction. Incorporation of recommendations from the geotechnical engineering reports and conformance to the CBC would ensure that impacts related to liquefaction would be less than significant.

iv) Landslides?

Less than significant impact. The topography at both CMF and SOL is relatively flat. The Vaca Mountains are located to the east of the project sites at varying distances between 250 and 1,000 feet. The Vaca Mountains show varying indications of moderate to high susceptibility to debris flows and landslides. However, actual mapped debris flow and landslides are relatively few (Fugro West 2008) and are not located immediately adjacent to the project sites. Furthermore, the City of Vacaville General Plan Figure 9-1 indicates that CMF and SOL are located in an area designated least susceptible to landslides. Therefore, because the project sites are flat and are located approximately 250 to 1,000 or more feet from the foot of the Vaca Mountains, potential landslide impacts would be considered less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. The proposed projects would be constructed within the CMF and SOL boundaries. Surface soils at CMF are primarily composed of Brentwood clay loam of 0 to 2 percent slope, and surface soils at SOL are primarily comprised of Rincon clay loam of 0 to 2 percent slope (NCRS 2013). Both soil types are well drained with slow runoff and the erosion hazard is slight. The proposed projects would result in 13,700 square feet and 34,893 square feet of ground disturbance (excluding interior renovations that would not disturb soils) at CMF and SOL, respectively, as well as temporary disturbance of construction staging areas. All exterior areas to be disturbed have been previously graded or disturbed. Construction activities associated with the proposed projects would involve grading and excavation activities that could expose barren soils to sources of wind or water, resulting in the potential for erosion and sedimentation on and off the project sites. The NPDES stormwater permitting programs overseen by the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) regulate stormwater quality from construction activities. Compliance with the environmental protection design feature for water quality protection described in Section 2.6—Construction General Permit, SWPPP, and BMPs—would ensure that potential impacts from soil erosion or loss of topsoil would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than significant impact. All project components would be located within the developed CMF and SOL footprints on soils that have been previously graded and do not contain any significant

slopes. Conformance with CBC requirements and implementation of soil preparation recommendations of the site specific geotechnical engineering report would ensure that onsite soils are stable prior to building construction. Existing buildings undergoing renovations as a part of these projects are not located on unstable soils. As such, impacts related to a geologic unit or soil that is unstable would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than significant impact. Expansive soils are mainly composed of clay. According to the NRCS Web Soil Survey, surface soils at CMF are primarily comprised of Brentwood clay loam which was estimated to contain approximately 34 percent sand, 32 percent silt, and 34 percent clay. Surface soils at SOL are primarily composed of Rincon clay loam which was estimated to contain approximately 35 percent sand, 34 percent silt, and 31 percent clay (NCRS 2013).

The geotechnical report prepared by Fugro West, Inc. for a previous project at CMF considered the onsite expansion potential to be low to medium. Because of this potential, it was concluded that damage to building foundations related to expansive soils could occur without proper engineering controls. While SOL is located on different soils, the sand/silt/clay percentages of those soils, as previously noted, are relatively similar to those at CMF. As such, similar risks of expansion could be expected to occur at SOL.

As previously discussed, prior to construction the proposed projects would include the completion of geotechnical engineering studies that would include the determination of the extent of onsite expansive soils and recommend design features and soil preparation procedures accordingly. The resulting recommendations would be incorporated into project designs in accordance with standard construction practices. As such, impacts related to expansive soils would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No impact. The proposed projects do not include the installation or use of septic tanks or alternative wastewater disposal systems. Wastewater generated at CMF and SOL is discharged to the City of Vacaville's sewer system for conveyance to the City's Easterly Wastewater Treatment Plant for treatment and disposal. As such, no impacts to soils due to septic tanks or alternative wastewater disposal systems would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Greenhouse Gas Emissions <i>Would the project:</i>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Climate change is a change in the average weather of the earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes that have occurred in the past, such as during previous ice ages. Many of the concerns regarding climate change use these data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

Gases that trap heat in the atmosphere are greenhouse gases. The effect is analogous to the way a greenhouse retains heat. Common greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Natural processes and human activities emit greenhouse gases. The presence of greenhouse gases in the atmosphere affects the earth’s temperature. However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

There have been significant legislative and regulatory activities that directly and indirectly affect climate change and greenhouse gases in California. The primary climate change legislation in California is AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. “Greenhouse gases” as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The ARB is the state agency charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases.

The ARB Governing Board approved the Climate Change Scoping Plan (Scoping Plan) in December 2008. The Scoping Plan “proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil,

diversify our energy sources, save energy, create new jobs, and enhance public health” (ARB 2008). The measures in the Scoping Plan were to be developed over the subsequent two years through rule development at the ARB and other agencies.

Emissions Inventories and Trends

California is the second largest contributor in the U.S. of greenhouse gases and the sixteenth largest in the world (CEC 2006). In 2004, California produced 500 million metric tons of carbon dioxide equivalents (CEC 2007), including imported electricity and excluding combustion of international fuels and carbon sinks or storage. The major source of greenhouse gases in California is transportation, contributing 41 percent of the State’s total emissions (CEC 2006). Electricity generation (both in and out of state) is the second largest source, contributing 22 percent of the State’s greenhouse gas emissions (CEC 2006).

Potential Environmental Effects

For California, climate change in the form of warming has the potential to incur/exacerbate environmental impacts, including but not limited to changes to precipitation and runoff patterns, increased agricultural demand for water, inundation of low-lying coastal areas by sea-level rise, and increased incidents and severity of wildfire events (Moser et al. 2009). Cooling of the climate may have the opposite or different effects. Although certain environmental effects are widely accepted to be a potential hazard to certain locations, such as rising sea level for low-lying coastal areas, it is currently infeasible to predict all environmental effects of climate change on any one location.

Discussion

Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than significant impact. The Air District’s 2007 Handbook does not contain specific thresholds for greenhouse gas emissions. To date, the Air District has not adopted quantitative greenhouse gas thresholds, but the 2007 Handbook recommends at least a qualitative discussion of greenhouse gas emissions for sizable projects.

Based on guidance from the Air District, the greenhouse gas thresholds put forth by the Bay Area Air Quality Management District (BAAQMD) in the 2010 California Environmental Quality Act Air Quality Guidelines (2010 Air Quality Guidelines) will be used in this analysis (BAAQMD 2010). On March 5, 2012, the Alameda County Superior Court issued a judgment, in *California Building Industry Association v. Bay Area Air Quality Management District*, finding that the BAAQMD had failed to comply with CEQA when it adopted its 2010 Air Quality Guidelines. The 2010 Air Quality Guidelines were updated with minor edits in May 2011. However, for the purposes of clarity, the

document is referred to in this section by the 2010 adoption date. The 2010 Air Quality Guidelines were further updated in 2012, as described below.

The 2010 Air Quality Guidelines included new thresholds of significance (2010 Air Quality Thresholds) for operational-related greenhouse gas emissions. The Court ruled that the adoption of new thresholds is considered a “project” under CEQA, and, thus, the BAAQMD should have prepared the required CEQA review and documentation for the 2010 Air Quality Guidelines, which provided the 2010 Air Quality Thresholds. The Court issued a writ of mandate ordering the BAAQMD to set aside the 2010 Air Quality Thresholds and cease dissemination of them until the BAAQMD had complied with CEQA. As such, this ruling effectively nullified the BAAQMD’s adoption of the 2010 Air Quality Thresholds. The BAAQMD currently recommends that lead agencies determine appropriate air quality thresholds of significance based on substantial evidence in the record. In the May 2012 update to the 2010 Air Quality Guidelines, the BAAQMD removed all references of the 2010 Air Quality Thresholds, including related screening criteria.

For reference, the San Joaquin Valley Air Pollution Control District (SJVAPCD) recommends an analysis that evaluates a project’s compliance with adopted greenhouse gas (GHG) reduction plans, compliance with approved Best Performance Standards, or achievement of AB 32 targeted GHG reductions compared to business-as-usual scenarios (SJVAPCD 2009). The South Coast Air Quality Management District (SCAQMD) does not have an adopted threshold, but it recommends a tiered analysis based on a project’s consistency with a qualifying local GHG reduction plan, annual GHG emissions levels screening criteria, and GHG reductions from business-as-usual scenarios (SCAQMD 2008).

For the purposes of analysis, the BAAQMD’s 2010 Air Quality Thresholds for greenhouse gases are utilized in this CEQA document as recommended by the Air District. A project’s operational emissions would have a less than significant impact if they demonstrate compliance with a qualified GHG Reduction Strategy, do not exceed 1,100 metric tons of carbon dioxide equivalents (MTCO₂e) per year, or do not exceed 4.6 MTCO₂e per service population per year. The BAAQMD does not have thresholds for greenhouse gas emissions related to construction.

The projects’ construction and operational emissions were calculated using CalEEMod. The Medical Office Building ITE land use was utilized for the purposes of estimating operational emissions. Total square footage of new construction was considered under these calculations. Project renovations were not included, as these renovations do not correspond to an increase in intensity or use. As stated in the Project Description, the projects would add one new employee to each facility, but would not increase inmate capacity or change visitation levels. Additionally, the projects would increase the capacity of onsite health care services, which would be expected to reduce the current need to transport inmates to offsite health care facilities and therefore would result in a net decrease in number of trips and VMT. Therefore, trip generation associated with the proposed projects is assumed to be zero. Full assumptions used in the CalEEMod model are provided in Appendix A.

Construction emissions for a conservatively assumed buildout year of 2014 are shown in Table 6. As stated earlier, there is no threshold for construction emissions of GHGs. Furthermore, construction emissions are limited in duration and scope and would occur prior to the year 2020, when greenhouse gas reductions are required under AB 32. Therefore, the impacts from construction would be less than significant.

Table 6: Project Construction Greenhouse Gas Emissions

Source Category	Emissions (MTCO ₂ e per year)		
	CMF	SOL	Total
Construction Total	210.66	212.85	423.51
Significance Threshold			None
Exceeds Threshold?			—
Note: MTCO ₂ e = metric tons of carbon dioxide equivalents Source: Appendix A – CalEEMod output.			

Operational emissions for the year 2020 are shown in Table 7. As indicated in the table, the total annual greenhouse gas emissions are 288 MTCO₂e per year, which is well below the annual emissions threshold of 1,100 MTCO₂e per year. Therefore, the impacts would be less than significant.

Table 7: Project Operational Greenhouse Gas Emissions

Source Category	Emissions (MTCO ₂ e per year)		
	CMF	SOL	Total
Area	0.00	0.00	0.00
Energy	64.14	95.39	159.53
Mobile	0.00	0.00	0.00
Waste	48.54	70.01	118.55
Water	3.31	4.77	8.08
Project Total	117.99	170.17	288.16
Significance Threshold			1,100
Exceeds Threshold?			No
Notes: MTCO ₂ e = metric tons of carbon dioxide equivalents Projects are not expected to generate additional vehicle trips. Source: Appendix A – CalEEMod output.			

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

Less than significant impact. A greenhouse gas reduction plan or climate action plan has not been adopted by the Air District or local governments at this time. Therefore, the applicable adopted law is AB 32, and the applicable plan is the Scoping Plan adopted by ARB, as discussed previously under Environmental Setting above.

Construction of the proposed projects is estimated to generate CO₂. However, AB 32 requires that GHG emissions generated in California in year 2020 be equal to or less than California's statewide inventory from 1990. Construction emissions would occur before the year 2020, so the projects' construction would not contribute to year 2020 emissions. Therefore, construction emissions would not conflict with the AB 32 Scoping Plan and would be less than significant.

As discussed in the Environmental Setting, the Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target. Each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
- Achieving a statewide renewable energy mix of 33 percent.
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system.
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

CMF and SOL are correctional institutions. As an institutional facility (rather than a residential, energy sector, or commercial facility), the majority of the Scoping Plan's recommended measures do not apply. The Scoping Plan's recommended measures mainly target reductions in the transportation and electricity sectors. As shown in Table 8, the strategies are not applicable to the projects.

Table 8: Applicable Scoping Plan Reduction Measures

Scoping Plan Reduction Measure	Reason Why Not Applicable
<p>1. California Cap-and-Trade Program Linked to Western Climate Initiative. Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California’s program meets all applicable AB 32 requirements for market-based mechanisms.</p>	<p>This is a statewide measure that cannot be implemented by a project applicant or lead agency. When this cap-and-trade system begins, products or services (such as electricity) would be covered and the cost of the cap-and-trade system would be transferred to the consumers.</p>
<p>2. California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.</p>	<p>This is a statewide measure that cannot be implemented by a project applicant or lead agency. When this measure is initiated, the standards would be applicable to the light-duty vehicles that would access the project sites.</p>
<p>3. Energy Efficiency. Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.</p>	<p>This is a measure for the State to increase its energy efficiency standards. However, the projects would increase their energy efficiency through existing regulation.</p>
<p>4. Renewable Portfolio Standard. Achieve 33 percent renewable energy mix statewide. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.</p>	<p>This is a measure to increase the renewable energy mix throughout California and is not directly applicable to the proposed projects.</p>
<p>5. Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.</p>	<p>This is a statewide measure that cannot be implemented by a project applicant or lead agency. When this measure is initiated, the standard would be applicable to the fuel used by vehicles that would access the project sites.</p>
<p>6. Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles. This measure refers to SB 375.</p>	<p>The projects are not related to developing greenhouse gas emission reduction targets.</p>
<p>7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.</p>	<p>When this measure is initiated, the standards would be applicable to the light-duty vehicles that would access the project sites.</p>
<p>8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.</p>	<p>The projects do not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.</p>

Table 8 (cont.): Applicable Scoping Plan Reduction Measures

Scoping Plan Reduction Measure	Reason Why Not Applicable
9. Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California’s existing solar programs.	This measure is to increase solar throughout California, which is being done by various electricity providers and existing solar programs including solar programs implemented by CDCR at various institutions.
10. Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	This is a statewide measure that cannot be implemented by a project applicant or lead agency. When this measure is initiated, the standards would be applicable to the vehicles that access the project sites.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.	The projects are not an industrial land use.
12. High Speed Rail. Support implementation of a high-speed rail system.	This is a statewide measure that cannot be implemented by a project applicant or lead agency.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California’s new and existing inventory of buildings.	The State is to increase the use of green building practices. The projects would implement green building strategies through existing regulations.
14. High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	When this measure is initiated, it would be applicable to the high global warming potential gases that would be used by the projects (such as in air conditioning and refrigerators).
15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	The projects would not contain a landfill. Both CMF and SOL already implement several recycling and waste diversion programs.
16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	The project sites are in an urban, built-up condition. No forested lands exist onsite.
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	This is a measure for state and local agencies. However, the projects would reduce water through existing infrastructure design.
18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	The project sites are in an urban, built-up condition. No grazing, feedlot, or other agricultural activities that generate manure occur onsite or are proposed to be implemented by the projects.
Source of ARB Scoping Plan Reduction Measure: California Air Resources Board 2008.	

Pursuant to the Energy Action Plan (Executive Order B-18-12), the goal for new qualifying buildings (based on square footage) is to meet a minimum Silver Certificate level in accordance with LEED. At SOL, Sub-project 1, New Complex Facility Clinic, would be LEED Silver Certified. Furthermore, sustainable measures and conservation features would be implemented throughout the CMF and SOL projects in accordance with the Green Building Code. However, the minimal size of the other new buildings included in the projects at CMF and SOL exempts them from LEED Certification requirements.

The proposed projects would not conflict with any applicable plan, policy or regulation of an agency adopted for reducing the emissions of GHGs. The projects would generate low levels of GHGs at project buildout (see discussion a) above). SOL Sub-project 1, New Complex Facility Clinic would be designed to meet and obtain the USGBC's LEED Silver Certification for New Construction and all other newly constructed buildings would implement sustainable measures and conservation features in accordance with the Green Building Code. Therefore, the projects would enact the applicable Scoping Plan recommended measure of energy efficiency.

In summary, GHG impacts from the proposed projects would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
8. Hazards and Hazardous Materials <i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The project sites historically contained agricultural uses prior to the construction of CMF in 1955 and SOL in 1984.

CMF and SOL are not listed as Resource Conservation and Recovery Act (RCRA) generators of hazardous wastes according to the EPA's Envirofacts database (EPA 2013). CMF and SOL are not listed on California's Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances List (DTSC 2013) or the EPA's Superfund National Priorities List (EPA 2013). In addition, there are no sites listed within 0.5 mile of CMF and SOL on the DTSC's Envirostor database (DTSC 2013).

LUST/UST Sites

In 1998, a 2,500-gallon diesel underground storage tank (UST) was removed from CMF outside of the B-Wing near the emergency generator. A 2,500-gallon above-ground storage tank (AST) was installed over the former UST excavation. In February 2004, a release was discovered from a ruptured seal in the fuel filter on the AST. An estimated 200 gallons of fuel were released into the fuel lines associated with the former UST. The 2004 diesel oil spill was repaired. Petroleum hydrocarbon-contaminated soils associated with the tank have been excavated and successfully remediated. In addition, only one soil boring from the vicinity of the B-Wing emergency generator had very low detections of total petroleum hydrocarbons as diesel (TPHD) (SHN Consulting Engineers & Geologists 2004). However, those detections were below the environmental screening level. Benzene, toluene, ethylbenzene and total xylenes (BTEX) were not detected above laboratory detection limits for any soil borings. Lastly, none of the groundwater samples in the vicinity of the B-Wing emergency generator had detections of TPHD or BTEX above laboratory detection limits, with the exception of TPHD, which was detected below the taste and odor threshold (SHN Consulting Engineers & Geologists 2004). The project site is listed as a closed leaking underground storage tank (LUST) cleanup site as of May 13, 2008 (SWRCB 2013) and does not present an environmental concern to the project sites.

In 1989, two USTs were removed from the Maintenance Building Garage Fuel Island Area at CMF (located outside of the secure perimeter fence). The tanks consisted of one 2,000-gallon diesel tank and one 1,000-gallon premium unleaded gasoline tank. Two holes were noted in the 2,000-gallon diesel tank and no holes were noted in the 1,000-gallon gasoline tank. A soil sample from the UST area had detectable levels of total petroleum hydrocarbons as gasoline. The two tanks were replaced with one new 10,000-gallon split-use tank that was installed using clean fill material at the same location as the removed tanks. The split use tank is in operation and stores both gasoline and diesel fuels. A cleanup program is currently ongoing for the Maintenance Building Garage Fuel Island Area of CMF including excavation of contaminated soils. Five underground monitoring wells were installed near the Maintenance Building Garage Fuel Island Area in 2001 (SHN Consulting Engineers & Geologists 2011). The site is currently under remediation following an Interim Remedial Action Work Plan prepared by SHN Consulting Engineers & Geologists, Inc. as approved by Solano County Department of Resource Management Environmental Health Division in a letter addressed to John Hurley of CMF dated May 4, 2011. Groundwater monitoring and sampling is required to continue on a semi-annual basis until receipt of no-further action from Solano County or the RWQCB is received.

Because remedial actions are ongoing, and the proposed projects would not disturb any affected areas, the contamination does not present an environmental concern to the proposed projects.

Discussion

Would the project:

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

Less than significant impact. Construction and operation of the proposed projects would involve the routine transport and handling of hazardous substances such as diesel fuels, lubricants, solvents, asphalt, hospital supplies and waste. Handling and transport of these materials could result in the exposure of workers to hazardous materials. However, the proposed projects would not create a significant hazard to the public or the environment because project construction and operation would comply with applicable federal, state, and local laws pertaining to the safe handling and transport of hazardous materials, including California Division of Occupational Safety and Health Administration (Cal OSHA) requirements. For example, the California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires preparation of Hazardous Materials Business Plans and disclosure of hazardous materials inventories. In addition, the proposed projects' SWPPP(s) and associated BMPs would include spill prevention and cleanup measures applicable to hazardous waste.

The proposed projects would be in accordance with CMF's and SOL's Hazardous Materials Business Plans, which include an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). In addition, Cal OSHA's regulations for the use of hazardous materials in the workplace, as detailed in CCR Title 8, include requirements for safety training, availability of safety equipment, accidents and illness prevention programs, hazardous substance exposure warnings, and the emergency action and fire prevention plan preparation. Cal OSHA enforces hazard communication program regulations that contain training and information requirements, including procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparing health and safety plans to protect workers and employees at hazardous waste sites. The hazard communication program requires that Material Safety Data Sheets be available to employees and that employee information and training programs are documented.

Medical facility operations, such as those included in the proposed projects, typically involve the transport, storage, and use of relatively small quantities of materials that would be classified as hazardous. Types of hazardous materials found in medical facilities include pharmaceuticals;

chemicals used to sterilize equipment; formaldehyde for specimen preservation; solvents, oxidizers, corrosives, and stains used in clinical laboratories; photographic processing chemicals used in some x-ray equipment; and certain biohazardous toxins used in treatment and processing. Facilities maintenance activities require various common hazardous materials, including cleaners (typically soaps and detergents, but also solvents and corrosives), paint, pesticides and herbicides (used in building maintenance), fuels (e.g., diesel), and oils and lubricants.

The medical facilities would also use and store radioactive material, used primarily to treat certain types of cancer. X-ray equipment is also regulated as radioactive material. Radioactive materials decay (become non-radioactive) over time. The time it takes for a material to shed approximately one-half of its radioactivity is referred to as the material's half-life. Radioactive materials with half-lives greater than 90 days are considered long-lived radioactive materials, while those with half-lives less than 90 days are considered short-lived radioactive materials. Some long-lived radioactive materials that may be used at the facility, such as those used in x-ray equipment, would essentially be a sealed, stationary source of radiation. Both short-lived and long-lived radioactive materials would be used for patient treatment, primarily for the treatment of cancer. Long-lived radioactive materials (such as cesium 137 used in cancer radiation therapy) are not disposed of but are retained over time for patient treatment.

State and federal laws require detailed planning to ensure that hazardous materials are properly transported, handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. The California Department of Public Health's Medical Waste Management Act governs the management of medical waste to prevent the dissemination of potentially infectious organisms and the spread of infection to others within the medical center and in the community. Certified Unified Program Agencies (CUPAs) are responsible for local regulation and enforcement of hazardous materials laws and regulations. The Solano County Department of Environmental Management serves as the County's CUPA.

In summary, use of hazardous materials during construction would be temporary and in accordance with regulation. Furthermore, operation of project components would be consistent with regulations regarding hazardous materials. As such, impacts related to the routine use, transport, or disposal of hazardous materials would be considered less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. Based on the nature of the hazardous materials that would be used, stored, and/or disposed of during construction (e.g., diesel-fueled equipment, asphalt) and operation (e.g., medical waste) of the proposed projects, it is unlikely that upset and accident conditions

involving the release of hazardous materials into the environment would occur. As indicated in discussion 3.8 a) above, all hazardous materials would be handled in accordance with applicable laws. Medical wastes would be appropriately stored onsite and subsequently disposed of in accordance with health and safety regulations.

Because of the age of existing structures at CMF, it is likely that there are building materials that contain hazardous substances, such as asbestos, lead, polychlorinated biphenyls (PCBs), and others that were once commonly used in building construction. Conversely, the substances would not be expected to be found at SOL because it was constructed in 1984 after such substances were primarily banned from construction materials. Nonetheless, such substances could be present at SOL. As indicated in discussion 3.3 d), the Air District's Rule 9.9, Rule 9.8, and Rule 4.3 establish notification and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. CDCR's Environmental Compliance Section is responsible for ensuring CDCR's compliance with the Air District's Rules, as well as EPA's NESHAP and OSHA requirements for handling asbestos-containing materials. CDCR's architectural consultant would employ a licensed hazardous materials specialist to conduct a focused survey within existing buildings identified for construction activities within both CMF and SOL. As indicated in Section 2.5.11, Hazardous Materials, if hazardous building materials are identified, the hazardous material specialist would prepare a hazardous materials safety plan, consistent with the requirements of the Air District, OSHA, and DTSC, to ensure construction worker safety and reduce impacts to the environment associated with release of these materials. As such, impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than significant impact. No schools are located within 0.25 mile of the proposed project sites. The Foxboro Elementary School is located approximately 0.33 mile east of SOL's eastern boundary and approximately 0.40 mile east of the nearest sub-project location at SOL. Based on the distance from the closest school and the proposed project components, no impacts would occur related to emissions or handling of hazardous materials within 0.25 mile of a school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than significant impact. As previously indicated, CMF and SOL are not listed as RCRA generators of hazardous wastes according to the EPA's Envirofacts database (EPA 2013). CMF and SOL are not listed on the DTSC Hazardous Waste and Substances List (DTSC 2013) or the EPA's Superfund National Priorities List (EPA 2013). In addition, there are no sites listed within 0.5 mile of CMF and SOL on the DTSC's Envirostor database (DTSC 2013).

Also previously indicated, UST and LUST sites at CMF have undergone or are currently undergoing remediation activities. However, these areas would not be disturbed by the proposed projects and it is not likely that conditions related to the sites present an environmental concern to the project sites.

A qualified hazardous materials professional conducted a site visit on March 18, 2013 and did not identify any potentially hazardous materials or conditions within the areas to be disturbed by the proposed projects. Interviews with institution operational staff further confirmed that there are no potentially hazardous conditions at the project sites, and all hazardous materials are handled and stored in accordance with applicable federal, state, and local regulations.

In summary, while CMF contains areas that have undergone or are currently undergoing remediation activities, implementation of the projects would not create a significant hazard to the public or the environment, and impacts would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No impact. The nearest airports to CMF and SOL are the Nut Tree Airport and Travis Air Force Based, located approximately 3.0 miles northeast and 4.2 miles southeast, respectively. While CMF and SOL are not located within two miles of either airport, they are located within Zone D of the Travis Air Force Based Land Use Compatibility Plan. Zone D includes locations beneath any of the Travis Air Force Base airspace protection surfaces delineated in accordance with Federal Aviation Regulations Part 77, but outside of any other compatibility zone. Limitations on the height of structures are the only compatibility factors within this zone. All of the proposed projects' new buildings would be one-story and would not exceed heights of existing onsite structures. Therefore, the proposed projects would not result in a safety hazard for people residing or working in the project area as a result of being located within an airport land use plan. No impact would occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No impact. The proposed project sites are not located in the vicinity of a private airstrip. Therefore, no safety hazards exist for people residing or working in the project area, and no impacts would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. The California Emergency Services Act (CESA) of 1970 established authority for the preparation of an Emergency Preparedness Plan for correctional institutions. Each CDCR institution must assign an emergency coordinator to implement this plan and must prepare an

Emergency Preparedness Plan for submission to the CDCR Office of Correctional Safety for review and approval. In accordance with CESA, such plans were developed for CMF and SOL according to the requirements of the State Office of Emergency Services and organized according to the specific site needs for this institution. The plans have a sub-plan that clearly identifies measures to be taken pertaining to specific emergencies in each area of the institutions. All institutions are required to ensure preparedness in dealing with disasters such as earthquakes, fires, and floods. The emergency plans for CMF and SOL include contingency plans to respond to the following types of emergency situations: war, flood, civil disturbance, pollution, earthquake, and fire. The plans provide detailed routes of egress to more secure buildings and/or areas in the event of an emergency evacuation of buildings and/or other areas within CMF and SOL. Employees are trained to follow specific instructions and precautionary measures for emergencies, and in the use of emergency equipment and medical aids. The proposed projects would not interfere with appropriate compliance with these plans, in case of an emergency. The Emergency Preparedness Plans would be amended as necessary to ensure adequate coverage for the proposed projects and associated buildings and operations. Therefore, implementation of the proposed projects would not physically interfere with or impair implementation of the emergency response plan and impacts would be less than significant.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than significant impact. CMF and SOL are located in an area of moderate fire hazard according to the California Department of Forestry and Fire Protection’s Draft Fire Hazard Severity Zones in Local Responsibility Areas map.

All of the proposed projects’ components would be constructed within the existing CMF and SOL institutions. Ground cover vegetation at CMF and SOL is mowed as part of the ongoing facility maintenance. The proposed projects would not increase the inmate population and would not construct residences. The buildings that would be constructed as part of the proposed improvements would be designed to meet all fire code requirements that would address ignition-resistive construction, interior fire sprinklers, and/or sufficient water supply (volume) and pressure. Adequate fire protection is in place in the form of the City of Vacaville fire station on Alamo Drive west of Peabody Road (approximately 0.5 mile from the project sites) and an onsite fire station operated by CMF and SOL. Both fire stations would be able to respond immediately should a fire occur onsite. As such, impacts related to the exposure of persons or structures to wildfire would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. Hydrology and Water Quality <i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Climate

Temperatures in the vicinity of the project sites range from July highs of 95.2°F to January lows of 36.7°F. Average annual precipitation is 24.55 inches and falls as rain primarily between the months of October through April (WRCC 2013).

Regional Hydrology

The City of Vacaville lies within the Sacramento River Hydraulic Region. The Sacramento River Hydraulic Region covers approximately 17.4 million acres (27,200 square miles). The region includes all or large portions of Modoc, Siskiyou, Lassen, Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra, Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa counties. Small areas of Alpine and Amador counties are also within the region. Geographically, the region extends south from the Modoc Plateau and Cascade Range at the Oregon border to the Sacramento-San Joaquin Delta. The Sacramento Valley, which forms the core of the region, is bounded to the east by the crest of the Sierra Nevada and southern Cascades and to the west by the crest of the Coast Range and Klamath Mountains. Other significant features include major river systems such as the Sacramento River, the longest river system in California. Major tributaries of the Sacramento River system include the Pit, Feather, Yuba, Bear and American rivers (DWR 2004). Vacaville is located approximately 13 miles north of the Sacramento River and Sacramento-San Joaquin Delta in the Elmira Hydrologic Subarea (HSA) of the Valley Putah-Cache Hydrologic Unit (CRA 2009). The Elmira HSA does not contain any major surface water resources, such as a river or portions of the delta. However, it does contain several creeks, drainages, sloughs, and marshes that drain toward the Sacramento River, which forms the southern border of the HSA.

Local Drainage

Runoff in the project vicinity (including CMF, SOL, and areas west of the institutions) generally flows in an east-southeasterly direction to the 11-acre Union Creek-Peabody Detention Basin, located east of SOL and Peabody Road. The Union-Creek Peabody Detention Basin has a 50 acre-foot capacity and is used to capture increased stormwater flows that sometimes occur from unanticipated, unusual storm events. Stormwater from the basin ultimately drains into the Sacramento River (Boyle 2008).

Site Drainage

The onsite drainage system for CMF utilizes surface flow, drain inlets, and underground storm drains. The existing drainage system discharges to three separate locations, all of which drain to a detention basin located between SOL and Peabody Road via drainage ditches. Onsite drainage at SOL utilizes surface flow, drain inlets and pipes and also drains to the adjacent detention basin located between SOL and Peabody Road. Overflow runoff from the detention basin is directed underneath Peabody Road to the Union Creek Peabody Detention Basin (Boyle 2008).

Discussion

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less than significant impact. Short-term impacts to water quality standards might occur during project construction due to demolition, grading and construction activities resulting in the potential for stormwater to carry sediment and small quantities of pollutants into the stormwater system and local waterways. Implementation of the environmental protection design feature for water quality protection described in Section 2.6 would ensure that the proposed projects would not violate any water quality standards or waste discharge requirements. As such, impacts would be less than significant.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?)

No impact. CMF and SOL receive potable water from the City of Vacaville, which relies primarily on surface water. Four existing groundwater wells are located within the institutions and are used for irrigation water only. The proposed projects would not change the source of potable water, and no groundwater wells would be drilled as part of the proposed projects. The existing groundwater wells would not be affected and usage rates would not change. Accordingly, the proposed projects would not deplete groundwater supplies.

The proposed projects would increase impervious surface coverage at CMF by 8,090 square feet or approximately 0.4 percent (based on existing impervious surface area of approximately 2.1 million square feet). Impervious surface coverage at SOL would be increased by 34,893 square feet or approximately 1.1 percent (based on existing impervious surface area of approximately 3.2 million square feet). These additions of impervious surface areas are minimal and would be located throughout each institution where undeveloped areas would continue to offer recharge potential. Therefore, the proposed projects would not interfere substantially with groundwater recharge. As such, no impacts would occur.

c-e) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation, or flooding on- or off-site?

Less than significant impact. As stated in discussion 3.9 b), the increase in impervious surface area at each institution would be insignificant (0.4 percent and 1.1 percent at CMF and SOL, respectively) relative to the existing impervious areas and 385-acre parcel. The increase in impervious surface area

would be negligible relative to the existing institution, and the existing stormwater system would be sufficient to handle runoff from the proposed projects components. Additionally, as indicated under Section 2.6, implementation of a SWPPP and a finalized engineered drainage plan would ensure that stormwater quality would be properly managed and runoff would be properly directed to existing facilities, thereby inhibiting any erosion, siltation or flooding from occurring on or offsite. As such, impacts would be less than significant.

f) Otherwise substantially degrade water quality?

Less than significant impact. Based on the discussion provided regarding the preceding checklist questions, the projects do not include any actions that are expected to substantially degrade water quality, and a less than significant impact to water quality would occur.

g-h) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or impede or redirect flood flows?

No impact. The proposed projects do not include any housing. According to the FEMA Flood Insurance Rate Map entitled Community Parcel Number 06095C0278E, the project sites are designated Zone X, which denotes areas determined to be outside of the 100-year flood hazard area, and therefore, would not situate housing or structures in such a way that flood flows would be impeded or redirected. No impact would occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No impact. There are no dams or detention basins located upstream from the project sites. Therefore, no impact to people or structures would occur.

j) Inundation by seiche, tsunami, or mudflow?

No impact. Seiches are waves in inland bodies of water produced by earthquakes or landslides. The projects are not located near an inland body of water capable of producing seiches. The projects are more than 30 miles inland from the Pacific Ocean and are not at risk for inundation by a tsunami. While the projects are located near the foothills of the Vaca Mountains, mudflows would not be expected to occur on or affect the project sites. Therefore, no impact in relation to inundation by seiche, tsunami or mudflow would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. Land Use and Planning <i>Would the project:</i>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

This section describes the existing land use and potential effects from project implementation on the sites and their surrounding areas. As a state agency, CDCR is generally exempt from local plans, policies, and regulations, but it does consider them for purposes of complying with federal or state law.

Site Vicinity Setting

CMF and SOL are located adjacent to each other within the southwestern corner of the incorporated limits of the City of Vacaville on a 385-acre parcel. CMF and SOL are designated Public/Quasi Public Facilities under the Solano County Land Use Diagram and are zoned as Community Facilities. The project sites are bounded by the former Sacramento Northern Railroad right-of-way, Al Patch Park, a small water treatment plant, Peabody Road, and residential land uses (east); an inactive orchard, Keating Park, California Drive, and commercial and residential land uses (north); undeveloped hillsides (west); and undeveloped land and hillsides (south).

Discussion

Would the project:

a) Physically divide an established community?

No impact. The proposed projects would not physically divide an established community. CMF and SOL are located on approximately 385 acres under CDCR jurisdiction and directly surrounded by undeveloped land or land used for recreational purposes. No existing residential areas are located

directly adjacent to the existing institutions. All project components would be located within the boundaries of SOL and CMF. Thus, the proposed projects would not physically divide an established community and no impact would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No impact. The proposed projects would be constructed within the existing SOL and CMF facilities, which are designated Public/Quasi-Public Facilities land uses by the Solano County General Plan and are zoned as Community Facilities. As correctional institutions, CMF and SOL are consistent with both the land use and zoning designations. The proposed projects would be consistent with existing institutional land uses and would not change existing operations. As such, no impact would occur.

c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?

No impact. CDCR has an approved HCP for its Statewide Electrified Fence Project (1999). The HCP covers the operation of lethal electrified fences that surround 27 state prisons, including SOL. CMF is part of the Six-Prison Electrified Fence Project HMP (CDCR 2001). The proposed projects would not involve impacts or modification to the existing lethal electrified fences at either institution. As such, the proposed projects would not conflict with the HCP or the HMP.

The Draft Solano County Multi-Species Habitat Conservation Plan has not yet been adopted and, therefore, would not apply to the proposed projects. The proposed project sites are not within the boundaries of any other applicable habitat conservation plan or natural community conservation plans. As such, no impact would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Mineral Resources <i>Would the project:</i>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The City of Vacaville General Plan does not delineate any mineral resource areas within the city limits. The Solano County General Plan Resources Chapter describes the mineral resources in the county. Mineral resources in the county include mercury, sand and gravel, clay, stone products, calcium and sulfur. The project sites are not designated a Mineral Resource Zone (MRZ) but are located within three miles of six MRZ-3 areas and six currently inactive mine locations. MRZ-3 designated areas contain mineral deposits, the significance of which cannot be evaluated from available data.

Discussion

Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

No impact. The project sites are completely within existing CMF and SOL boundaries and do not contain any known mineral resources as indicated by the Solano County General Plan. In addition, the existing CDCR institutions preclude mineral extractions from occurring onsite. As such, no impact would occur.

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

No impact. As identified in discussion 3.11 a) above, the project sites do not contain any known mineral resources. The existing CDCR institutions preclude mineral extractions from occurring. Furthermore, no proposed, existing, or known abandoned mines exist at CMF or SOL. As such, no impact would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. Noise <i>Would the project result in:</i>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Decibels are the unit of measurement for sound pressure expressed on a logarithmic scale otherwise expressed in A-weighted decibels (dBA). Likewise, L_{eq} is the constant sound level that would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period). The equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The City of Vacaville's General Plan Noise Element and the Vacaville Municipal Code contain noise standards for evaluating the compatibility of any proposed new development with the existing or anticipated noise environment. The standard for maximum exterior non-transportation noise levels in sensitive land use areas, as defined in Table 10-4 of the General Plan, is 50 dBA L_{eq} with a maximum peak level of 70 dBA. The standard for maximum exterior transportation noise levels in sensitive land use areas, as defined in Table 10-1 of the General Plan, is 60 dB DNL.

Sensitive Receptors

Sensitive noise receptors are, in general, those areas of human habitation or substantial use where the intrusion of noise has the potential to adversely impact the occupancy, use, or enjoyment of the environment. These can include residences, schools, hospitals, parks, and places of business requiring low levels of noise. Correctional and government facilities, such as CMF and SOL and the proposed projects’ additions and renovations, are not considered noise-sensitive land uses. Offsite noise sensitive receptors (residences) are located to the north and east of the project sites, at distances of approximately 1,500 feet to the north along California Drive, and 720 feet to the east along Peabody Road.

Existing Noise Levels

An ambient noise survey was conducted within the project area by MBA on Wednesday, March 13, 2013. The purpose of the ambient noise survey was to establish existing noise conditions within the project vicinity. Short-term noise measurements were taken at the following locations: Keating Park, the northeast corner of Mariposa Avenue and California Drive, Al Patch Park, and Arlington Park. Table 9 shows a complete listing of the noise measurements. The minimum noise level reading observed was 40.2 dBA, while the maximum noise level reading was 85.1 dBA.

Table 9: Summary of Ambient Noise Measurements

Reading	Location	Time	A-Weighted Decibel Sound Level		
			L _{eq}	L _{min}	L _{max}
1	Keating Park	12:50 p.m.–1:05 p.m.	52.2	43.7	66.1
2	Mariposa Avenue and California Drive	1:13 p.m.–1:28 p.m.	62.7	40.2	85.1
3	Al Patch Park	1:35 p.m.–1:50 p.m.	48.6	42.3	64.3
4	Arlington Park	1:57 p.m.–1:12 p.m.	54.1	41.8	71.3

Notes:
L_{eq} = energy-equivalent noise level; L_{min} = minimum noise level; L_{max} = maximum noise level.
Source: Data collected by MBA, 2013.

Discussion

Would the project result in:

- a) **Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Less than significant impact. The City of Vacaville’s General Plan Noise Element and the Vacaville Municipal Code contain noise standards for evaluating the compatibility of any proposed new development with the existing or anticipated noise environment. As previously mentioned, the standard for maximum exterior non-transportation noise levels in sensitive land use areas, as defined

in Table 10-4 of the General Plan, is 50 dBA L_{eq} with a maximum peak level of 70 dBA. The standard for maximum exterior transportation noise levels in sensitive land use areas, as defined in Table 10-1 of the General Plan, is 60 dB DNL. In addition, the City’s Public Health Code (Title 8, Section 8.10.030-19) limits construction equipment operation and outdoor construction or repair work within 500 feet of occupied residences to between the hours of 6:00 a.m. and 10:00 p.m. on Monday through Saturday, and from 8:00 a.m. to 10:00 p.m. on Sunday. Interior construction work is exempt from these hourly restrictions provided noise from such work would not “create noise or disturbance noticeable to a reasonable person of normal sensitivity in the surrounding neighborhood.”

Short-term construction noise impacts would occur during construction activities from the transport of workers and movement of construction materials to and from the project sites, and from the noise generated onsite during ground clearing, grading, and construction activities. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction. Equipment required during the construction process would typically include backhoes, dozers, compactors, graders, front-end loaders, and trucks. Additional equipment, such as a portable crane and paving equipment, may also be required on a short-term and intermittent basis. Noise generated by construction equipment can reach high levels. Typical noise levels for individual pieces of construction equipment are summarized in Table 10.

Table 10: Typical Construction Equipment Noise Levels

Type of Equipment	Typical Noise Level (dBA) at 50 feet
Concrete Saw	90
Jack Hammer	88
Grader	85
Pneumatic Tools	85
Scraper	84
Compactor	83
Concrete Breaker	82
Dozer	82
Concrete Pump	81
Crane, Mobile	81
Generator	81
Water Pump	81
Front-end Loader	79
Air Compressor	78
Backhoe	78
Asphalt Paver	77
Trucks	74–81
Source: Federal Transit Administration – Construction Noise Handbook Table: 9.1, 2011.	

Offsite noise sensitive receptors are located to the north and east of the project sites, at distances of approximately 1,500 feet to the north along California Drive, and 720 feet to the east along Peabody Road. Noise from a point source (such as a stationary piece of equipment) attenuates at a rate of 6 dBA for every doubling of distance. Based on these distances and assuming that certain piece of construction equipment can generate maximum noise levels of 90 dBA or louder at a distance of 50 feet, resulting noise level at the nearby sensitive noise receptors would be 61 dBA north of California Drive and 67 dBA east of Peabody Road. The resulting construction related noise levels would be well below the maximum allowable non-transportation noise peak level of 70 dBA. Therefore, any construction-related activities would have a less than significant noise impact.

Once fully operational, the proposed projects' components would not involve the use of any major stationary noise sources or activities, nor would the projects significantly change the existing noise generating activities onsite. Exterior mechanical equipment would be required for the new buildings and possibly the building additions. Noise levels generated by exterior mechanical equipment typically average between 55 and 85 dBA at three feet from the source (EPA 1971). Mechanical equipment is typically shielded from direct public exposure and usually housed on rooftops, within equipment rooms, or within exterior enclosures. The project components would result in operations similar to those existing at CMF and SOL. As shown under threshold 12 c) below, operational noise impacts from the proposed facilities would not exceed the residential noise standard of 50 dBA L_{eq} at the nearest residence as noise levels would be approximately 36 dBA at residential boundaries for the CMF project site, and 42 dBA at residential boundaries for the SOL project site. These noise levels are less than the maximum threshold outlined by the City and do not conflict with the City of Vacaville's General Plan guidelines. Therefore, the proposed projects would have a less than significant impact.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. The metric for measuring groundborne noise and vibration is peak ground velocity (measured in inches per second). During the site preparation and construction phase, which includes site excavation activities, groundborne vibration and groundborne noise may occur. However, these excavation activities do not include activities known to induce strong vibration effects, such as those produced by tunneling or blasting. Furthermore, the site has already been leveled as part of previous CMF and SOL construction activities.

The ground vibration levels associated with common construction equipment are depicted in Table 11. Ground vibration generated by construction equipment spreads through the ground and diminishes in strength with distance. The effects of ground vibration can vary from no perceptible effects at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and slight damage to nearby structures at the highest levels. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and

rarely results in structural damage. For most structures, a peak particle velocity (PPV) threshold of 0.5 inch per second is sufficient to avoid structural damage, with the exception of fragile historic structures or ruins. There are no fragile historic structures or ruins within the projects’ vicinity.

Table 11: Representative Vibration Source Levels for Construction Equipment

Equipment		Peak Particle Velocity at 25 feet (in/sec)
Pile Driver (impact)	Upper range	1.518
	Typical	0.644
Pile Driver (sonic)	Upper range	0.734
	Typical	0.170
Large Bulldozer		0.089
Caisson Drilling		0.089
Loaded Trucks		0.076
Jackhammer		0.035
Small Bulldozer		0.003
Source: Federal Transit Administration 2006.		

Long-term operation of the proposed projects would not involve the use of any equipment or processes that would result in potentially significant levels of ground vibration. Ground vibration generated by the proposed construction activities would be primarily associated with the use of jackhammers, loaded trucks, and other mobile equipment, which as shown in Table 11 would result in vibration levels of less than 0.08 inch per second PPV at 25 feet. Impact pile driving is not expected to be required during project construction. Most ground vibration during construction would consist of onsite truck activity, which typically generates levels less than 0.08 in/sec PPV at 25 feet. In addition, the nearest sensitive receptor to any of the proposed sites is approximately 720 feet east of the project sites. Construction and development at CMF and SOL are anticipated to result in vibration levels that would not be expected to exceed the PPV threshold of 0.5 inch per second. Furthermore, long-term operation of the proposed projects would not involve the use of any equipment or processes that would result in potentially significant levels of ground vibration. As a result, impacts related to groundborne vibration levels would be considered less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant impact. The projects’ potential to substantially increase ambient noise levels at CMF and SOL and in the nearby areas is defined by using the term “substantial.” “Substantial” is not defined in the CEQA Guidelines. However, research into the human perception of sound level increases indicates the following:

- A 1-dBA, or less, increase is difficult to perceive,
- A 3-dBA increase is just perceptible,
- A 5-dBA increase is clearly perceptible, and
- A 10-dBA increase is perceived as being twice as loud.

Under typical outdoor ambient conditions, where constantly varying noise levels are occurring over time, people typically cannot clearly perceive increases in ambient noise levels until they reach an additional 3 dBA. Therefore, three dBA is generally accepted as the threshold beyond which increases to local ambient noise levels resulting from projects are considered substantial.

In light of the sound level perception thresholds and noise standards described above, a potentially significant increase in ambient noise levels would occur if noise generated by the projects would permanently increase outdoor noise levels by 3 dBA or more, and if outdoor noise levels at that location would exceed the City's noise standards.

The primary noise source in the vicinity of the projects is vehicle traffic on local area roadways. Traffic volumes along the major access roadways to CMF and SOL sites (e.g., California Drive and Peabody Road) typically average thousands of vehicle trips per day. Traffic volumes would increase temporarily during construction because of construction workers traveling to and from the sites and delivery of construction material and equipment. Once constructed, no increase and even a reduction in vehicle trips to the project sites would be expected, because the improved onsite health care services are expected to reduce the need to transport inmates offsite for such services. Typically, a doubling of vehicle traffic is required before a noticeable (three dBA or greater) increase in traffic noise levels would occur. Consequently, the proposed projects would not result in a perceptible increase in local traffic noise levels.

In addition, long-term operational noise levels attributed to the proposed projects are not anticipated to exceed applicable noise standards and/or result in any noticeable increase of three dBA or more in average daily ambient noise levels. Once fully operational, the proposed new buildings and additions would not involve the use of any major stationary noise sources or activities. In general, noise levels generated by building mechanical systems typically average between 55 and 85 dBA at three feet from the source (EPA 1971). Building mechanical equipment is typically shielded from direct public exposure and usually housed on rooftops, within equipment rooms, or within exterior enclosures. As shown by the results in Table 9, noise levels within the project vicinities are already experiencing maximum noise levels around 85 dBA. The project components would result in operations similar to those existing at CMF and SOL and, as such, would not result in a significant perceptible change in ambient noise levels.

The closest sensitive receptors to CMF are residences located approximately 1,500 feet to the north. Based on this distance and assuming a maximum operational noise level of 80 dBA at 10 feet from

the proposed facility, operational noise levels at the nearest residence would be approximately 36 dBA. Noise generated from the expansion and construction of new buildings at the CMF project site would not adversely affect nearby offsite sensitive receptors.

Likewise, the closest sensitive receptor to SOL is approximately 720 feet to the east. Based on this distance and assuming a maximum onsite operational noise level of 80 dBA at 10 feet from the proposed facility, operational noise levels at the nearest residence would be approximately 42 dBA.

In summary, the noise generated from operation of the proposed projects would not create a substantial permanent increase in ambient noise, which would result in a less than significant impact.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant impact. Construction of the projects could generate a temporary increase in noise, corresponding to the particular phase of building construction and the noise-generating equipment used during construction. Certain pieces of construction equipment can generate noise levels of 85 dBA or louder at a distance of 50 feet. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Although there would be a relatively high, single-event noise exposure potential, resulting in potential short-term intermittent annoyances, the effect in long-term ambient noise levels would be small when averaged over a longer period.

As shown by the existing noise reading results in Table 9, maximum noise levels in the vicinity of the projects are between 64.3 and 85.1 dBA L_{max} . The SOL project site's closest distance to sensitive receptors is approximately 720 feet, the area from which equipment operations would result in a noise level of 62 dBA. However, temporary construction noise is exempt from the City of Vacaville noise ordinance. Furthermore, the noise generated from construction would not exceed the General Plan's maximum peak of 70 dBA at sensitive uses for non-transportation sources. Accordingly, impacts related to the temporary increase in ambient noise levels would be less than significant.

Likewise, the construction activities at the CMF project site would not be expected to exceed the maximum peak of 70 dBA. At a distance of approximately 1,500 feet, construction-related equipment would result in a maximum noise level of 55 dBA. Therefore, impacts related to the temporary increase in ambient noise levels would be less than significant.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

No impact. The nearest airports to CMF and SOL are the Nut Tree Airport and Travis Air Force Base, located approximately 3.0 miles northeast and 4.2 miles southeast, respectively. While CMF and SOL are not located within two miles of either airport, they are located within Zone D of the Travis Air Force Base Land Use Compatibility Plan. Zone D includes locations beneath any of the Travis Air Force Base airspace protection surfaces delineated in accordance with Federal Aviation Regulations Part 77, but outside of any other compatibility zone. Limitations on the height of structures are the only compatibility factors within this zone. However, CMF and SOL are located approximately 2.5 miles outside of the 60- to 65-dB community noise equivalent level contour lines of the Air Force Base. Therefore, the proposed projects would not result in the exposure of people residing or working in the project area to excessive airport noise levels. No impact would occur.

- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

No impact. The project sites are not near a private airstrip. Thus, the proposed projects would not result in the exposure of people residing or working in the project area to excessive airstrip noise levels. As a result, the proposed projects would have no impact with respect to airstrip noise.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
13. Population and Housing <i>Would the project:</i>				
a) Induce substantial 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

CMF and SOL are designated Public/Quasi Public Facilities under the Solano County Land Use Diagram and are zoned as Community Facilities.

Discussion

Would the project:

- a) Induce substantial 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)?**

Less than significant impact. The proposed projects would not increase the existing inmate population. One staff position would be added at each of the institutions as a result of the proposed projects. The potential relocation of two employees to the project area would not be considered direct substantial population growth. The infrastructure improvements associated with the implementation of the proposed projects consist of tie-ins with existing infrastructure and would serve only the onsite inmates and staff. No offsite developments would be served. As such, the proposed projects are not anticipated to induce substantial population growth in the area either directly or indirectly. Impacts would be less than significant.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No impact. The proposed projects would not displace any existing housing units, inmates, or staff, and, therefore, would not necessitate the construction of replacement housing elsewhere. No impact would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No impact. The proposed projects would not displace any existing housing units, inmates, or staff, and, therefore, would not necessitate the construction of replacement housing elsewhere. No impact would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
14. Public Services				
<i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Fire Services

CMF has an onsite fire department that provides fire response services to both CMF and SOL. In addition, the Vacaville Fire Department (VFD) provides fire protection, emergency medical services, and ambulance transport services to both institutions. The VFD currently has four stations with a total of 72 sworn and five civilian employees (City of Vacaville, 2013).

Police Services

CMF and SOL provided law enforcement services within their respective boundaries and are supplemented by mutual aid agreements with the City of Vacaville Police Department and the Solano County Sheriff’s Department.

School Services

The project sites are located within the Travis Unified School District, which consists of five elementary schools, one middle school, one high school, and two alternative schools.

Parks

Recreational park facilities near the project sites consist of Keating Park, Al Patch Park, Arlington Park, and Pheasant Country Park. In addition, lands east of CMF and SOL are designated and Public Open Space by the Vacaville General Plan Land Use Map.

Discussion

a) Fire protection?

Less than significant impact. The onsite fire department at CMF and the VFD currently provide emergency services to the project sites and would continue to serve CMF and SOL with the construction of the proposed projects. Because the proposed projects would not increase the existing inmate population, and would require only one additional staff member at each institution, an increase in fire protection and emergency medical services or facilities is not anticipated. The projects would include the construction of new health care facilities and renovation of existing health care facilities on both sites, which would increase the medical capacity and decrease the number of medical-related emergency response calls. Furthermore, the paved emergency access route provided at CMF's new Stand-by Emergency Room as part of the project would shorten the response path of offsite emergency responders. The shortened response path would reduce emergency responder time spent at CMF and thus increase availability for other emergencies in VFD's general response area. Therefore, the proposed projects would not require the construction of new fire protection facilities or alter existing facilities to maintain performance objectives, and impacts would be less than significant.

b) Police protection?

Less than significant impact. CMF and SOL handle all law enforcement needs at each institution without local public law enforcement assistance and have sufficient resources to serve the proposed projects. Because the proposed projects would not increase the existing inmate population and would require only one additional staff member at each institution, an increase in police protection services or facilities is not anticipated. Therefore, the proposed projects would not interfere with local law enforcement agency services and would not require the construction of new facilities or alterations to existing facilities to maintain performance objectives. Impacts would be less than significant.

c) Schools?

No impact. The proposed projects would not result in an increase in inmate population at CMF or SOL and would require only one additional staff position at each institution. The addition of two staff members would not result in a substantial increase in population requiring school facilities. Therefore, the proposed projects would not require the construction of new school facilities or alterations to existing facilities to maintain performance objectives, and the current school facilities would continue to meet the demand for schools. No impact would occur.

d-e) Parks? Other public facilities?

No impact. As previously indicated, the proposed projects would not result in an increase in inmate population at CMF or SOL and would require only one additional staff position at each institution. The addition of two staff members would not result in a substantial increase in population requiring

parks or other public facilities. Therefore the proposed projects would not require the construction of parks or other public facilities or alterations to existing facilities to maintain performance objectives. No impact would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Recreation				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Recreational facilities in the vicinity of the project sites consist of Keating Park, Al Patch Park, Arlington Park, and Pheasant Country Park. In addition, lands east of CMF and SOL are designated and Public Open Space by the Vacaville General Plan Land Use Map. Regionally located recreational facilities consist of city and county parks located throughout Solano County.

Discussion

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

No impact. Operation of the proposed projects would not increase the inmate population but would require one additional employee at each institution, which would not be considered substantial population growth. Therefore, the proposed projects would not cause a substantial increase in the use of local or regional recreational facilities. As such, substantial physical deterioration of existing neighborhood and regional parks or other recreational facilities would not take place. No impacts would occur.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

No impact. The proposed projects do not include the construction or expansion of recreational facilities. No impacts would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. Transportation/Traffic <i>Would the project:</i>				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

CMF and SOL are located adjacent to each other within the southwestern corner of the incorporated limits of the City of Vacaville. Regional access to CMF and SOL is provided by I-80 and I-505 to the north and northeast. Local access is provided by numerous local roadways including Peabody Road, Alamo Drive, and California Drive. CMF is accessed via California Medical Facility Drive which connects to both California Drive and Peabody Road. SOL is accessed via a main entrance on Peabody Road.

According to a Traffic Impact Analysis Report prepared in 2008 by DKS Associates for a previous project at CMF, all study intersections and roadway segments operated at an acceptable level of

service under background conditions based on the intersection LOS standards established by the City. More recently, a Traffic Study Report prepared for the nearby Vanden Meadows Specific Plan in November 2011 by the City of Vacaville indicated that intersections along Peabody Road adjacent to the project sites operated at acceptable LOS during the AM and PM peak hour under existing conditions. The acceptable level of service is defined as LOS C or better at all intersections during peak hours. However, LOS D may be acceptable during peak hours under certain circumstances, and the City allows LOS E and LOS F with special findings (City of Vacaville 2007).

The nearest public transportation service is the City of Vacaville's City Bus Routes 5 and 8, which provide bus stops along Alamo Drive and Peabody Road. Bicycle lanes and sidewalks are provided on both California Drive and Peabody Road.

Discussion

Would the project:

- a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

Less than significant impact. The City of Vacaville General Plan level of service standards state that an acceptable level of service is defined as LOS C or better at all intersections during the peak hours. However, LOS D may be acceptable during the peak hours under certain circumstances, and the City allows LOS E and LOS F with special findings (City of Vacaville 2007). Because CMF and SOL are located adjacent to each other, the same traffic conditions would affect both sites. The following intersections surround the proposed projects:

1. Alamo Drive and Merchant Street
2. Alamo Drive and I-80 Northbound On-ramp
3. Alamo Drive and Mariposa Avenue
4. Peabody Road and Alamo Drive
5. Peabody Road and California Drive
6. Alamo Drive and Davis Street
7. Alamo Drive and Tulare Drive
8. Peabody Road and CMF
9. Peabody Road and Foxboro Parkway
10. Peabody Road and Caldwell Drive
11. Peabody Road and Southwood Drive

According to the General Plan Update, all of the previously listed intersections currently operate acceptable at LOS C or better during the PM peak hour (City of Vacaville 2013).

Project construction would result in short-term traffic increases on local roadways during off-peak hours. Proposed project construction work shifts would occur from 6:00 a.m. to 3:30 p.m., Monday through Friday. Construction activities would average approximately 109 one-way trips or approximately 55 vehicles traveling to and from the project sites per day (MBA 2013). Because construction trips would be temporary and construction workers would arrive and depart during off-peak hours, thereby avoiding conflicts with adjacent street peak hour traffic conditions, construction traffic impacts would be less than significant.

The proposed projects would not result in an increase in the inmate population. As such, existing traffic levels related to inmate visitation would not be expected to change. The proposed projects would only require one new employee at each project site. The addition of two traffic trips to and from the project sites by the new employees would not result in a significant increase in traffic levels and the surrounding intersections would continue to operate at an acceptable level of service. Additionally, the projects would increase the capacity of onsite health care services, which is expected to reduce the current need to transport inmates to and from offsite health care facilities, resulting in a net decrease in number of trips and VMT.

Because of the lack of operational traffic increases from the two-person staff increase, existing mass transit facilities serving the project sites would not experience a substantial increase in ridership. Furthermore, the proposed projects do not include any modifications to the existing circulation system outside of the institution. As such, the proposed projects would not conflict with any applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Impacts would be less than significant.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than significant impact. The 2008 Congestion Management Program (CMP) for Solano County requires that the traffic impacts of individual development projects of potential regional significance be analyzed. The local CMP requires that all CMP monitoring intersections be analyzed where a project would likely add 50 or more trips during either the AM or PM peak hours. In addition, any CMP freeway monitoring segment where a project is expected to add 150 or more trips in any direction during the peak hours is to be analyzed. However, as previously mentioned, the proposed projects would result in the addition of only one employee at each institution and related traffic trips. Furthermore, the projects' increased capacity of onsite health care services is expected to reduce the current need for transportation to and from offsite health care service facilities, which is

expected to result in a net decrease in number of trips and VMT. As such, the proposed projects would not conflict with the applicable congestion management program and would not conflict with applicable level of service standards for designated roads or highways. Impacts would be less than significant.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No impact. The nearest airports to CMF and SOL are the Nut Tree Airport and Travis Air Force Base, located approximately 3.0 miles northeast and 4.2 miles southeast, respectively. Both CMF and SOL are located within Zone D of the Travis Air Force Base Land Use Compatibility Plan. Zone D includes locations beneath any of the Travis Air Force Base airspace protection surfaces delineated in accordance with Federal Aviation Regulations Part 77, but outside of any other compatibility zone. Limitations on the height of structures are the only compatibility factors within this zone. The proposed projects would include the construction of new single-story buildings, which would be consistent with or below the height of existing onsite structures. Interior renovations and additional impervious surface areas would not affect building heights. As such, the proposed projects would not result in a change in air traffic patterns and no impact would occur.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No impact. The proposed projects are located on the grounds of the existing CMF and SOL institutions. Existing roadways on both sites were designed safely to serve the institutions. An onsite driveway would be constructed at CMF to improve emergency vehicle access to the proposed new Stand-by Emergency Room. However, the proposed projects do not include the construction of any new roads. All roadway configurations implemented as part of the proposed projects would conform to CDCR design and safety standards. Therefore, project construction and operation would not increase hazards that are due to a design feature or incompatible use, and no impact would occur.

e) Result in inadequate emergency access?

No impact. The proposed projects would improve emergency access. An onsite driveway would be constructed at CMF to improve emergency vehicle access to the proposed new Stand-by Emergency Room. The driveway would shorten the response path of offsite emergency responders, thereby reducing the emergency response time to incidents at CMF. The reduced response time would also reduce the overall time spent at CMF by emergency responders, thus increasing availability for other emergencies in the general response area. Emergency access at the SOL site is adequate and would not be affected by the proposed project. Proposed project construction activities would occur entirely within the existing institutions and would not change or impair emergency vehicle access. Project operation would not result in an increase in inmates and would add only one employee at each

institution. As such, existing emergency access would continue to be sufficient and no impact would occur.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No impact. The proposed projects would be located within the existing CMF and SOL property boundaries. Construction and operation of the proposed projects are not expected to impact existing alternative transportation. Furthermore, the projects are not expected to generate increases in pedestrian, bicycle, and bus transit demand. The proposed projects would not conflict with adopted policies, plans, or programs supporting alternative transportation. As such, no impact would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
17. Utilities and Service Systems <i>Would the project:</i>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Potable Water

Potable water is provided to CMF and SOL via the onsite SOL Water Treatment Plant (WTP) and distribution system, which is operated and maintained by SOL. The WTP and distribution system consist of a raw water pipeline, a surface water treatment plant, a booster pump station, four storage tanks (two for each facility) and a distribution piping system. The WTP can produce up to 1.68 million gallons of water per day (Boyle 2008). The WTP receives water from the Solano Irrigation District’s (SID’s) Putah South Canal. CDCR has entitlements to 1,200 acre-feet of untreated SID water per year. Raw water is treated at the WTP and is stored in onsite holding tanks (Boyle 2008).

In addition to SID water, CMF and SOL receive water from the City of Vacaville. Water from the City of Vacaville is used to supplement or replace SID supplies during high demand periods, emergency use, or when the Putah South Canal system is taken out of service for repairs or maintenance (Boyle 2008). City of Vacaville water is provided via a 12-inch connection to the City’s distribution system and does not require processing at the WTP. The City’s water supply comes from Lake Berryessa, the Sacramento Delta, and 12 groundwater wells. In accordance with CDCR’s Joint Powers Agreement (JPA) with the City, the City provides the institutions up to one million gallons per day (mgd) with an annual limit of 560 acre-feet per year (afy). Penalties and surcharges are applied to water deliveries over the 1-mgd limit. Historically, during periods when the institutions were required to rely solely on the City’s water supply, CMF and SOL required an average of 1.48 mgd and a maximum of up to 2.96 mgd of water, both of which far exceeded the 1-mgd limit.

Combined, the SID and City maximum contracted water allowances total 1,760 afy (1,200 afy from SID plus 560 afy from the City). The historical average water demand for CMF and SOL is shown in Table 12. As shown in the table, water demand decreased in 2008–2009 as a result of the installation of toilet flush control valves. Water demand further decreased through 2012 as a result of inmate population reduction in accordance with Realignment. The most recent available data indicate that the institutions are well within the 1.68 mgd water treatment capacity of the WTP, the 1-mgd JPA limit, and the total 1,760 afy contracted allowance.

Table 12: CMF and SOL Historical Water Demand

Year	Water Demand	
	Total (afy)	Average (gpd)
1999	1,388	1,238,794
2000	1,375	1,227,202
2001	1,270	1,133,845
2002	1,460	1,303,380
2003	1,481	1,321,720
2004	1,536	1,371,050
2005	1,558	1,391,279
2006	1,480	1,321,010
2007	1,349	1,203,888
2008	1,110	992,928
2009	946	844,757
2010	904	807,201
2011	889	793,255
2012	801	715,385

Source: Vanir Construction 2013

Wastewater

CMF and SOL each have independent wastewater collection systems that flow to separate points of collection in the City's sanitary sewer collection system. Wastewater is directed to the City of Vacaville's Easterly Wastewater Treatment Plant (WWTP), which has an average dry weather flow capacity of 15 mgd. Currently, the WWTP treats 10 mgd (City of Vacaville 2013). Treated water is released to Alamo Creek, where it travels to Cache Slough, and eventually out to the Delta.

In accordance with CDCR's JPA with the City, the maximum allowable average dry weather flow of wastewater is 643,000 gpd for CMF and 854,000 gpd for SOL (Boyle 2008). Both CMF and SOL operate under separate Industrial User Permits issued by the City with similar discharge limits.

Historically, SOL has exceeded its allowable gpd wastewater flows and has been issued noncompliance letters by the City. Exceedances of allowable wastewater discharge occurred between 2004 and 2007 and were likely due to increased inmate populations and inflow and infiltration issues within the onsite stormwater system (Boyle 2008).

As previously mentioned, installation of toilet control flush valves and recent reductions in inmate populations have reduced water usage and wastewater flows. Data from 2010 through 2012 indicate a reduced flow rate averaging approximately 806,134 gallons per day (gpd) from CMF and SOL (Vanir 2012; data compiled by CDCR in 2013). The maximum monthly average dry weather flow (ADWF) at CMF during the reported time period was 446,646 gpd occurring in March 2011. The maximum monthly ADWF at SOL during the reported time period was 776,016 gpd occurring in March 2011 (Vanir 2012). Both peak flow rates are well below the current JPA limitations.

Stormwater

The onsite drainage system for CMF utilizes surface flow, drain inlets, and underground storm drains. The existing drainage system discharges to three separate locations all of which drain to a detention basin located between SOL and Peabody Road via drainage ditches. Onsite drainage at SOL utilizes surface flow, drain inlets, and pipes, and also drains to the adjacent detention basin located between SOL and Peabody Road. Overflow runoff from the detention basin is directed underneath Peabody Road to the Union Creek Peabody Detention Basin (Boyle 2008).

Solid Waste

Vacaville Sanitary Service collects solid waste from CMF and SOL and disposes it at the Hay Road Landfill located at 6426 Hay Road in Vacaville. As of July 2010 (the most recent data available), the remaining capacity at Hay Road Landfill was approximately 30 million cubic yards, with an anticipated closure date of 2077. The facility is permitted to receive up to 2,400 tons of solid waste per day (CalRecycle 2013).

CMF and SOL operate separate recycling and salvage programs that reduce waste delivered to landfills by as much as 40 percent. Regulated medical waste is collected by a private contractor for processing and final disposal.

Electricity and Natural Gas

Electricity and natural gas is provided to CMF and SOL by Pacific Gas & Electric Company.

Discussion

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than significant impact. Existing onsite wastewater collection systems at both CMF and SOL are adequately sized for current flow. CMF and SOL release effluent into the City of Vacaville’s wastewater system under a JPA and separate Industrial User Permits. In accordance with CDCR’s JPA with the City, the maximum allowable average dry weather flow of wastewater is 643,000 gpd for CMF and 854,000 gpd for SOL. Installation of toilet flush control valves and recent reductions in inmate populations as a result of Realignment have reduced water usage and wastewater flows. Current data, as previously discussed, indicate that wastewater flows at both institutions are currently below the maximum allowable rates under the JPA.

Wastewater is directed to the City of Vacaville’s Easterly WWTP, which has an average dry weather flow capacity of 15 mgd. Currently, the WWTP treats 10 mgd (City of Vacaville 2013) and therefore has sufficient capacity available. The WWTP is required to operate in compliance with its current NPDES permit, thereby ensuring wastewater treatment requirements are met.

The proposed projects include upgrades to existing health care service facilities and expansion of facilities to support the improvement of health care services to the existing inmate population. No increase to the inmate population would result from the projects, and only one additional staff member would be required at each institution. Since water usage and, therefore, wastewater production at CDCR institutions are largely driven by inmate levels, and since no increase in inmates would occur, water usage increases would be minimal. Furthermore, the new buildings and renovations would be constructed using the best available water conservation devices. Accordingly, the proposed projects would not exceed wastewater treatment requirements and impacts would be less than significant.

- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

No impact. Water and wastewater facilities are discussed separately below.

Water Facilities

As shown in Table 12, the most recent water demand data indicate that CMF and SOL currently use approximately 801 afy or 715,385 mgd of water. Water usage at CMF and SOL has recently been reduced significantly as a result of the installation of toilet flush control valves and a reduction in inmate population. More importantly for the projects, no additional water consumption would result from installation of new health care facilities. No new inmate capacity would be created, and only one additional staff would be added at each institution.

Since water usage at CDCR institutions is largely driven by the number of inmates, and no increase in inmates would occur, water use associated with inmates would not change. Further, the projects do not involve any uses that would result in increased water consumption. As such, no new or expanded water facilities are necessary for the proposed projects. No impact would occur.

Wastewater Facilities

Wastewater produced at both CMF and SOL has recently been reduced significantly as a result of the installation of toilet flush control valves and a reduction in inmate population. Recent data indicate that the maximum monthly ADWF at SOL was 776,016 gpd in March 2011. The maximum monthly ADWF at CMF was 446,646 gpd in March 2011 (Vanir 2012). Both peak flow rates are below the current JPA limitations.

As previously indicated, the projects primarily include upgrades to existing health care facilities and expansion of facilities to support improvement of existing health care services to the existing inmate population. No increase to the inmate population would result, and only one additional staff member would be required at each institution. Since wastewater usage at CDCR institutions is largely driven by inmate levels, and no increase in inmates would occur, wastewater production increases would be minimal and would remain far below past wastewater production levels, for which sufficient capacity exists. Furthermore, the new buildings and renovations would be constructed using the best available water conservation devices. Wastewater from CMF and SOL is processed by the City of Vacaville's Easterly WWTP. The plant currently treats approximately 10 mgd and has a treatment capacity of 15 mgd. As such, sufficient capacity is available to serve the proposed projects.

In summary, the proposed projects would not require or result in the construction or expansion of water or wastewater facilities and no impacts would occur.

- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

Less than significant impact. The proposed project at CMF would increase impervious surface coverage by 8,090 square feet or approximately 0.4 percent (based on existing impervious surface area of approximately 2.1 million square feet). Impervious surface coverage at SOL would be increased by 34,893 square feet or approximately 1.1 percent (based on existing impervious surface area of approximately 3.2 million square feet). These increases in impervious surfaces are nominal compared with the existing impervious surfaces at each institution. Therefore, existing stormwater infrastructure would be sufficient to serve the proposed projects. Furthermore, CDCR would contract with a registered civil engineer to design and implement drainage plans that would safely retain, detain, and/or convey stormwater runoff. The plans would be consistent with CDCR Design Criteria Guidelines and with the General Construction NPDES Permit(s). As such, impacts would be less than significant.

- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

No impact. See discussion 3.17 b) above. There would be no increase in water demand associated with the projects. Therefore, current supplies would be sufficient. No impact would occur.

- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Less than significant impact. See response to discussion 3.17(b) above. Since wastewater production at CDCR institutions is largely driven by inmate levels, and no increase in inmates would occur, wastewater production increases would be minimal and would remain far below past wastewater production levels, for which sufficient capacity exists. Wastewater from CMF and SOL is processed by the City of Vacaville's Easterly WWTP. The plant currently treats approximately 10 mgd and has a treatment capacity of 15 mgd. As such, the wastewater treatment provider can adequately serve the proposed projects. Impacts would be less than significant.

- f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

Less than significant impact. Solid waste from CMF and SOL are currently transported to the Hay Road Landfill in Vacaville. The Hay Road Landfill is comprised of 640 acres, can accept up to 2,400 tons per day, has approximately 30 million cubic yards of remaining capacity, and has an expected closure date of 2077 (CalRecycle 2013). The Hay Road Landfill has adequate capacity to serve projected waste disposal needs of the community well into the future.

Project construction would result in solid waste over the 20-month construction period. Construction-related solid waste would be recycled to the extent possible and remaining waste would be disposed at Hay Road Landfill. Since construction waste disposal would be temporary and sufficient capacity exists, impacts would be less than significant.

CDCR bases waste generation rates on a factor of 3.6 pounds per inmate per day. However, the proposed projects would not result in an increase in inmates. As such, negligible increases in operational waste production would be expected. With a permitted capacity of up to 2,400 tons of solid waste per day and an anticipated closure date of 2077, sufficient permitted capacity is available at the Hay Road Landfill to accommodate the projects' waste disposal needs. Impacts would be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less than significant impact. As part of standard procedure, the proposed projects would be required to abide by all applicable local, state, and federal solid waste disposal regulations. As previously discussed, CMF and SOL implement several recycling programs. Furthermore, solid waste created by the construction and operation of the proposed projects would be a small percentage of the overall waste production of the institutions. As such, impacts related to solid waste regulation compliance would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. Mandatory Findings of Significance				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a) **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

Less than significant impact. As evaluated in this IS/Proposed ND, the proposed projects would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory. As described under Section 2.6, the projects include specific environmental protection design features to ensure avoidance of impacts to avian species, previously undiscovered human remains, and water supply. Therefore, less than significant impacts from project implementation would occur.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

Less than significant impact. The State of California owns approximately 385 acres where CMF and SOL are located. Approximately 100 acres are used for CMF and 165 acres are used for SOL, while the remaining acreage is undeveloped. Cumulative air quality and traffic impacts are considered in Section 3.3 and Section 3.16, respectively, in this IS/Proposed ND. As described in the impact analyses in Sections 3.1 through 3.17 of this IS/Proposed ND, the proposed projects would not result in any potentially significant impacts requiring mitigation. The projects would also not cause, or result in, a cumulatively considerable contribution to any significant adverse impacts when considered in connection with the effects of past projects, current projects, or probable future projects, primarily because the incremental contributions of the proposed projects at CMF and SOL are so modest.

CDCR is considering CMF and SOL as a potential site for a probable future project proposed as new Level II inmate housing. This project is called the Level II Infill Correctional Facilities Project, and CDCR has proposed to locate either one (792 total bed) facility on 35 acres, or two (1,584 total bed) facilities on 55 acres adjacent to CMF and SOL. In addition, CDCR is considering other alternative locations for infill facilities in California. CDCR released a Notice of Preparation (NOP) of an Environmental Impact Report for the Level II Infill Correctional Facilities Project on December 19, 2012. The EIR is currently being prepared and will evaluate the potential environmental impacts associated with development of housing facilities on each of five different potential infill sites (including CMF/SOL). Other current or probable future projects near the proposed project sites that could cause related impacts include the Vanden Meadows Specific Plan and Development Project. No other projects that could cause related impacts are proposed by CDCR, and as discussed in this document, the proposed projects’ impacts are so limited, they would not contribute considerably to any significant local or regional impacts. As explained in this IS/Proposed ND, CDCR has incorporated measures into the proposed projects such that their incremental impacts would not be cumulatively considerable (see Section 2.6, Environmental Protection Design Features). Accordingly, the incremental addition of impacts from the proposed projects would be considered less than cumulatively considerable.

- c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less than significant impact. The proposed projects would not directly or indirectly cause substantial adverse effects on human beings. Air quality and/or noise would be the only avenues through which the projects could have a substantial effect on human beings. However, all potential effects of the proposed projects related to air quality and noise are identified as less than significant. The impact analysis included in this IS/Proposed ND indicates that for all other resource areas, the proposed projects would have either no impact or less than significant impact.

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