The purpose of this section is to disclose and analyze the potential impacts associated with hazards and hazardous materials related to the project site and general vicinity, and to analyze the potential for exposure of people to hazards and hazardous materials as the project is built and operated in the future. This section is based in part on the following technical studies and other resources:

- *Preliminary Geotechnical Assessment – Davis Innovation Center* (ENGEO, 2014);
- *Phase I Environmental Site Assessment – Davis Innovation Center* (ENGEO, 2014);
- California Department of Toxic Substances Control. 2017. Envirostar database search (DTSC, 2016). Available online at: http://www.envirostor.dtsc.ca.gov/public/.
- State Water Resources Control Board (GeoTracker) Information System and Geographic Environmental Information Management System (GEIMS) 2017 (SWRCB, 2017). Available at: https://geotracker.waterboards.ca.gov/.
- United States Environmental Protection Agency. 2017. Toxics Release Inventory (TRI) Program (USEPA, 2017). Available at: https://www.epa.gov/toxics-release-inventory-tri-program.

Comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic from the following: Russ Kanz and Toni Terhaar (April 26, 2017), and Russ Kanz and Toni Terhaar (May 4, 2017). Each of the comments related to this topic are addressed within this section.

3.8.1 ENVIRONMENTAL SETTING

PHYSICAL SETTING

Project Location

The project site consists of approximately 74 acres located northwest and adjacent to the City of Davis within the City of Davis Sphere of Influence (SOI) of unincorporated Yolo County. Approximately 11.53 acres of off-site improvements would also occur within developed and undeveloped areas surrounding the project site (see Figure 2.0-5 in Section 2.0, Project Description). The project site is bounded by existing agricultural land within unincorporated Yolo County (within the City's SOI) to the west, mapped rural residential subdivision lots to the north, the Sutter Davis Hospital and Risling Court to the east, and West Covell Boulevard to the south. The project site can be identified by Yolo County Assessor's Parcel Number (APN) 036-060-05. Figures 2.0-1 and 2.0-2 in Section 2.0 show the project's regional location and the project area.

Existing Site Uses

The project site is currently undeveloped and has been previously used for agricultural uses. Existing trees are located along the southwestern and eastern project site boundaries, as well as within the southeastern corner of the site. Risling Court, an existing public access roadway to the Sutter Davis Hospital, is located along the southernmost portion of the eastern project site

boundary. An existing drainage channel (known as the Covell Drain) conveys runoff from west to east north of Covell Boulevard.

Existing Surrounding Uses

As described in Section 2.0, the land directly to the north of the project site is Binning Ranch, an improved, final mapped, but unbuilt seven lot rural residential subdivision. Further north is a single-family rural residential development known as the Binning Farms community. Public/Semi-Public land uses such as Sutter Davis Hospital, Sutter Medical Foundation, North Davis Water Tank, and the Sutter Drainage Pond are located directly adjacent to the project site to the east. Further to the east are existing developed General Commercial land uses located west of SR 113 and east of John Jones Road. The parcels south of West Covell Boulevard are designated Residential – High Density by the City's General Plan (including the University Retirement Community and the Saratoga West Apartments). Residential – Low Density land uses also exist south of the project site (including the Evergreen and Aspen Neighborhoods). Additionally, land west of the project site consists of agricultural uses and fallow land with a few ranchette-style single family homes and associated structures located along County Road (CR) 99.

Site Topography

The site is nearly level at an elevation of approximately 47 to 50 feet above mean sea level (MSL).

Airports

Three airports are located within five miles of the project site: the Medlock Field, the University of California, Davis (UC Davis) University Airport, and the Yolo County Airport

MEDLOCK FIELD AIRPORT

The Medlock Field Airport is located approximately 3.2 miles northeast of the project site. The airport is privately-owned and operated and has been actively used since 1974. The project site is not located within any safety restricted areas associated with this airport.

UNIVERSITY OF CALIFORNIA, DAVIS, UNIVERSITY AIRPORT

The UC Davis University Airport is located approximately 1.9 miles southwest of the project site. The airport is operated as a general aviation airport. The airport offers the sale of aviation fuel and rents hangers, open shades and tie downs for aircraft storage. In addition, two fixed base operators are located at the airport that provide aircraft maintenance, flight instruction, and aircraft rentals. A Comprehensive Land Use Plan (CLUP) has not been prepared for the UC Davis University Airport. The project site is not located within any safety restricted areas associated with this airport.

YOLO COUNTY AIRPORT

The Yolo County Airport is located approximately 4.3 miles west of the project site. The Yolo County Airport is a general aviation airport for public use owned and operated by Yolo County. The airport features a 6,000 foot runway, both full and self-service, hangars, and tie downs. The airport

is open seven days a week. As described in SAGOG's ALUCP the project site is not located within the airport influence area.

HAZARDS ASSESSMENT

For the purposes of this EIR, "hazardous material" is defined as provided in California Health & Safety Code, Section 25501:

- Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

"Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

"Hazardous waste" is a subset of hazardous materials. For the purposes of this EIR, the definition of hazardous waste is essentially the same as that in the California Health & Safety Code, Section 25517, and in the California Code of Regulations (CCR), Title 22, Section 66261.2:

- Hazardous wastes are wastes that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

CCR Title 22 categorizes hazardous waste into hazard classes according to specific characteristics of ignitibility, corrosivity, reactivity, or toxicity. Hazardous waste with any of these characteristics is also known as a Resource Conservation and Recovery Act (RCRA) waste.

Hazardous materials can be categorized as hazardous non-radioactive chemical materials, radioactive materials, toxic materials, and biohazardous materials. The previous definitions are adequate for non-radioactive hazardous chemicals. Radioactive and biohazardous materials are further defined as follows:

- Radioactive materials contain atoms with unstable nuclei that spontaneously emit ionizing radiation to increase their stability.
- Radioactive wastes are radioactive materials that are discarded (including wastes in storage) or abandoned.
- Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute groundwater.
- Biohazardous materials include materials containing certain infectious agents (microorganisms, bacteria, molds, parasites, and viruses) that cause or significantly

contribute to increased human mortality or organisms capable of being communicated by invading and multiplying in body tissues.

- Medical wastes include both biohazardous wastes (byproducts of biohazardous materials) and sharps (devices capable of cutting or piercing, such as hypodermic needles, razor blades, and broken glass) resulting from the diagnosis, treatment, or immunization of human beings, or research pertaining to these activities.

There are countless categories of hazardous materials and hazardous wastes that could be found on any given property based on past uses. Some common examples include agrichemicals (chlorinated herbicides, organophosphate pesticides, and organochlorine pesticides, such as such as Mecoprop [MCPP], Dinoseb, chlordane, dichloro-diphenyltrichloroethane [DDT], and dichloro-diphenyl-dichloroethylene [DDE]), petroleum based products (oil, gasoline, diesel fuel), a variety of chemicals including paints, cleaners, and solvents, and asbestos-containing or lead-containing materials (e.g., paint, sealants, pipe solder).

Historical Use Information

Historical information was reviewed to develop a history of the previous uses on the proposed project site and surrounding area, in order to evaluate the project site and adjoining properties for evidence of Recognized Environmental Conditions. Standard historical sources reviewed during the preparation of this report included the following, as available:

ENVIRONMENTAL RECORDS

De Novo Planning Group performed a search of local, state, and federal agency databases for the proposed project site and known contaminated sites in the vicinity. No parcels in the project site were found to contain any known contamination.

The EPA Toxic Release Inventory (TRI) does not list data on disposal or other releases of toxic chemicals in the project area (USEPA, 2017). The nearest TRI sites are located in the cities of Woodland, approximately 8.1 miles to the north, and West Sacramento, located approximately 10.7 miles to the east.

The CA Department of Toxic Substances Control (DTSC) maintains the *Envirostor Data Management System*, which provides information on hazardous waste facilities (both permitted and corrective action) as well as any available site cleanup information. There are no sites listed in the database within the project site. See Table 3.8-1 for a complete list of active sites within one mile of the project site.

The Solid Waste Information System (SWIS) is a database of solid waste facilities that is maintained by the California Integrated Waste Management Board (CIWMB). The SWIS data identifies active, planned and closed sites. The project site does not have any active or planned solid waste facilities listed in the database.

Additionally, in October of 2014, ENGEO conducted a Phase I Environmental Site Assessment for a 208-acre area identified by Assessor's Parcel Numbers (APN) 036-060-005 (39660 and 39668 West Covell), 036-020-018, 017, 016, 015, 014, 013, and 012 (which includes the proposed project site).

None of the records reviewed for the project area indicates that a Recognized Environmental Condition is associated with the project site.

DATABASES

There is a broad list of federal and state database that provide information for sites with varying potential for risk from the possible existence of hazardous materials. There are numerous redundancies among these various database listings. Below is a brief summary of each.

National Priorities List: The National Priorities List (NPL) of Superfund Sites and Proposed NPL Sites is EPA's database of more than 1,200 sites designated or proposed for priority cleanup under the Superfund program. NPL sites may encompass relatively large areas. The project site is not listed in this database.

RCRIS System: The Resource Conservation and Recovery Information System (RCRIS) is an EPA database that includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA. Identification on this list does not indicate that there has been an impact on the environment. The project site is not listed in this database.

CERCLIS Data: Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) is an EPA database that contains information on potential hazardous waste sites that have been reported to EPA by states, municipalities, private companies, and individuals, pursuant to Section 103 of CERCLA. CERCLIS contains sites that are either proposed for or on the NPL, as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The project site is not listed in this database.

CORRACTS: Corrective Action Report (CORRACTS) is an EPA database that identifies hazardous waste handlers with RCRA corrective action activity. The project site is not listed in this database.

PADS System: PCB Activity Database System (PADS) is an EPA database that identifies generators, transporters, commercial storers, and/or brokers and disposers of polychlorinated biphynels (PCBs) who are required to notify EPA of such activities. The project site is not listed in this database.

Cortese Database: The Cortese database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release, and all solid waste disposal facilities from which there is known hazardous substance migration. The source of this database is the California Environmental Protection Agency (CAL-EPA) and are found in the EPA's GeoTracker database. The project site is not listed in this database.

GeoTracker has replaced past databases, such as the Leaking Underground Storage Tank Information System (LUSTIS) and the Underground Storage Tank (UST) database. Permitted USTs are not located in the project site. The nearest permitted UST is located at the Sutter Davis Hospital, located approximately 350 feet east of the project site.

Hazardous Material Sites

As noted above, the State of California Hazardous Waste and Substances Site List (also known as the "Cortese List") is a planning document used by the state, local agencies, and developers to comply with the California Environmental Quality Act (CEQA) requirements for providing information about the location of hazardous materials sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (Cal EPA) to annually update the Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for preparing a portion of the information that comprises the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information that is part of the complete list.

GeoTracker is a geographic information system (GIS) that provides online access to environmental data and is the interface to the Geographic Environmental Information Management System (GEIMS), a data warehouse which tracks regulatory data about underground fuel tanks, fuel pipelines, and public drinking water supplies. Searches of the above resources and records identified five active and five inactive hazardous material sites located within one mile of the project site known to handle and store hazardous materials that are associated with a hazardous material related release or occurrence. The terms "release" or "occurrence" include any means by which a substance could harm the environment: by spilling, leaking, discharging, dumping, injecting, or escaping.

Table 3.8-1 displays the known hazardous material sites located within one mile of the project site with a description of the hazards provided. The open case closest to the project site is located at the Sutter Davis Hospital, approximately 350 feet to the east.

TABLE 3.8-1: GEOTRACKER KNOWN HAZARDOUS MATERIAL RELEASE SITES WITHIN 1 MILE

SITE NAME	*TYPE*	*STATUS*	*ADDRESS*
Anderson Gas & Mini Mart	Permitted UST	Active	1935 Anderson Rd., Davis
Anderson Road Shell #57	Permitted UST	Active	1944 Anderson Rd., Davis
Chevron #9-1420	LUST Cleanup Site	Completed - Case Closed	1935 Anderson Rd., Davis
Circle K Store #2701914	Permitted UST	Active	1930 Lake Blvd., Davis
Circle K Store # 01914	LUST Cleanup Site	Completed - Case Closed	1930 Lake Blvd., Davis
Davis 1 Stop	Permitted UST	Active	2002 Lyndell Terrace, Davis
Davis Texaco	LUST Cleanup Site	Completed - Case Closed	2002 Lyndell Terrace, Davis
Shell SS	LUST Cleanup Site	Completed - Case Closed	1944 Anderson Rd., Davis
Sutter Davis Hospital Inc.	Permitted UST	Active	2000 Sutter Pl., Davis
Westlake Plaza	Cleanup Program Site	Completed - Case Closed	1260 Lake Blvd., Davis

SOURCE: STATE WATER RESOURCES CONTROL BOARD GEOTRACKER (2017).

Other Environmental Records

Environmental Data Resources, Inc. (EDR) performed a search of federal, tribal, state, and local databases regarding the project site and nearby properties. The property is not listed on the Standard Environmental Record sources. Offsite facilities documented by EDR within 1-mile of the Study Area are listed below.

TABLE 3.8-2: OTHER OFFSITE FACILITIES DOCUMENTED BY EDR WITHIN 1-MILE

FACILITY	*ADDRESS*	*DATABASE*
Sutter Davis Hospital	2000 Sutter Pl	UST, EMI, RCRA-SQG, FINDS, HAZNET
Sutter Medical	2020 Sutter Pl Ste 1	HAZNET
Sutter Medical	2030 Sutter Pl Ste 2	HAZNET
Beacon Station	3643 12845 Hwy 33	UST
R. & R. Enterprises	1940 Barry Rd	HIST UST
Not Listed	2002 Lyndell Tr	EDR US Hist Auto Stat
Davis 1 Stop	2002 Lyndell Tr	UST
Davis Texaco	2002 Lyndell Terranc	LUST
Not Listed	2014 Lyndell Ter	EDR US Hist Auto Stat, AST
Not Listed	39748 Sharon Ave	EDR US Hist Cleaners

SOURCE: ENGEO PHASE I ENVIRONMENTAL SITE ASSESSMENT (2014).

Based on the distances to the identified database sites, regional topographic gradient, and the EDR findings, it is unlikely that the above-stated database sites pose an environmental risk to the Study Area.

Historical Topographic Maps

Historical USGS topographic maps were reviewed to determine if discernible changes in topography or improvements pertaining to the property had been recorded.

- 1907 Map – A building is mapped in the southeast portion of APN 036-060-005.
- 1915 Map – A structure and access road is mapped near the southeast property corner.
- 1952 Map – Three buildings are mapped in APN 036-060-005. No other buildings are mapped on the property.
- 1953 and 1968 Maps – No significant changes are noted onsite.
- 1975 Map – Offsite Highway 113 and the Covell Boulevard interchange are mapped as newly developed.
- 1981 Map – No significant changes are noted.
- 1992 Map – The Davis City limit line is mapped along the east edge of the property.

Aerial Photographs

Aerial photographs were reviewed for information regarding past conditions and land use at the proposed project site and in the immediate vicinity. Below is a brief summering of the aerial photographs and related site conditions:

- 1957 Photograph – APN 036-060-005 is being used for growing small grain or hay. Two buildings and a small orchard consisting of approximately 50 trees are visible in the southeast corner of the APN 036-060-005.
- 1968-1993 Photographs – A small basin is visible near the northwest corner of APN 036-060-005. The small orchard is no longer visible. The property appears to be used for hay and grazing.
- 1998 Photograph – The western building is no longer visible in the southeast corner of APN 036-060-005. A soil stockpile is visible of the north edge of APN 036-060-005.
- 2005 Google Earth – One main building and a small outbuilding are visible remaining in APN 036-060-005.
- 2006 Google Earth – All buildings have been removed from APN 036-060-005.
- 2010 and 2011 Google Earth/Photographs – The former homestead area in APN 036-060-005 is being used as a parking lot for the adjacent medical center and construction equipment. The parking area appears to have a gravel surface. The gravel was removed and the parking area was abandoned in 2011.

Site Reconnaissance

A reconnaissance of the property was conducted by ENGEO on October 14, 2014. The reconnaissance was performed by Paul Cottingham, Senior Geologist, of ENGEO. The property was viewed for hazardous materials storage, superficial staining or discoloration, debris, stressed vegetation, or other conditions that may be indicative of potential sources of soil or groundwater contamination. The site was also checked for evidence of fill/ventilation pipes, ground subsidence, or other evidence of existing or preexisting underground storage tanks. A summary of findings based on site reconnaissance is provided below:

- Structures. No building structures were observed during the site reconnaissance.
- Hazardous Substances and Petroleum Products in Connection with Identified Uses. No hazardous substances or petroleum products were observed within the property during the site reconnaissance.
- Storage Tanks. No above-ground storage tanks or evidence of existing underground storage tanks was observed during the site reconnaissance.
- Odors. No odors indicative of hazardous materials or petroleum material impacts were noted at the time of the reconnaissance.
- Pools of Potentially Hazardous Liquid. No pools of potentially hazardous liquid were observed within the property at the time of site reconnaissance.
- Drums. No drums were observed on the property at the time of the reconnaissance.
- Polychlorinated Biphenyls (PCBs). No PCB-containing materials, including transformers, were observed within the property during the site reconnaissance.
- Pits, Ponds and Lagoons. No pits, ponds or lagoons were observed within the property at the time of the reconnaissance.
- Stained Soil/Pavement. No stained soil or pavement was observed within the property at the time of the reconnaissance.

- Stressed Vegetation. No signs of stressed vegetation were observed on the property at the time of the reconnaissance.
- Solid Waste/Debris. No disposal of solid waste was observed at the subject property.
- Stockpiles/Fill Material. Stockpiled soil along the north edge of APN 036-060-005 was observed. Based on aerial photos, the stockpile was created between 1993 and 1998.
- Wastewater. No wastewater conveyance systems were observed at the property during the reconnaissance.
- Wells. An older large irrigation well in the southwest corner of APN 036-060-005 was observed. A third well was observed at the east edge of APN 036-060-005. A determination if this well is located onsite or offsite has not been made.
- Septic Systems. No septic systems were found within the property during the site reconnaissance. Former buildings were observed on APN 036-060-005. Septic systems may exist at this location.

The project site was also surveyed by De Novo Planning Group on October 23, 2017. An overflow gravel parking lot is currently located in the southeastern portion of the site, adjacent to Risling Court. The remaining site conditions have not changed since the ENGEO site visit in 2014.

Site Features

Based on the ENGEO review of databases and site reconnaissance, the following present information on features of potential environmental concern that were either contained in the databases or observed on the property. These features were not considered to be RECs, and are briefly discussed below.

- Buildings were located in the southeast portions of APNs 036-060-005 prior to 1907. It is possible that abandoned septic tanks, fuel tanks, and/or wells remain at these locations.
- Irrigation wells currently exist in the southwest portion of APN 036-060-005. At third well is located at the east edge of APN 036-060-005. It has not been determined if this well is located onsite or offsite.
- A soil stockpile was created at the north edge of APN 036-060-005 between 1993 and 1998.

Transportation of Hazardous Materials

The transportation of hazardous materials within the City of Davis is subject to various federal, state, and local regulations. The only roadway and transportation route approved for the transportation of explosives, poisonous inhalation hazards, and radioactive materials in the City of Davis is Interstate 80.

In addition to area roadways, hazardous materials are routinely transported on Union Pacific Railroad lines that exist approximately 1.5 miles east of the project site. The risk of accidents, and more specifically accidents involving hazardous materials, is relatively low. The U.S. Department of Transportation Federal Railroad Administration found the UPRR company train accident rate to be 4.18 train accidents per one million train miles traveled, resulting in a less than 0.001% chance of an accident. Risk of a railroad accident containing hazardous materials is considered much lower,

as only an average of eight accidents involving hazardous material spills occur annually in California.

The Union Pacific Railroad Company does implement a security plan in compliance with the Department of Transportation Final Rule 49 CFR Part 172 Hazardous Materials (HM 232): Security Requirements for Offerors and Transporters of Hazardous Materials. The plan includes requirements to enhance the security of transported hazardous materials and ensures proper cleanup procedures in the instance of an accidental release.

3.8.2 REGULATORY SETTING

FEDERAL

The primary federal agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the Environmental Protection Agency (EPA), Department of Labor Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Several laws governing the transport, storage, and use of hazardous materials are governed by these agencies as well as oversight for contaminated sites cleanup. Federal laws and regulations that are applicable to hazards and hazardous materials are presented below.

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (the Act) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

STATE

The primary state agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the California Office of Emergency Services (OES), California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC), California Department of Transportation (Caltrans), California Highway Patrol (CHP), California Water Quality Control Board, and the California Air Resources Board. Several laws governing the generation, transport, and disposal of hazardous materials are administered by these agencies. State laws and regulations that are applicable to hazards and hazardous materials are presented below.

California Health and Safety Code

Cal-EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. Many of these regulations are embodied in the California Health and Safety Code. The code includes regulations that govern safe drinking water, substances control, land reuse and revitalization, remediation, restoration, and methamphetamine contaminated cleanups.

California Code of Regulations Title 22 and Title 26

The California Code of Regulations (CCR) Title 22 provides state regulations for hazardous materials, and CCR Title 26 provides regulation of hazardous materials management. In 1996, Cal/EPA established the "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program) which consolidated the six administrative components of hazardous waste and materials into one program.

LOCAL

City of Davis General Plan

The City of Davis General Plan contains the following goals and policies that are relevant to hazards and hazardous materials aspects of the proposed project:

DISASTER PLANNING

Goal HAZ 3. Provide for the safety and protection of citizens from natural and environmental hazards.

Policy HAZ 3.1 Provide for disaster planning.

TOXICS

Goal HAZ 4. Reduce the use, storage, and disposal of toxic and hazardous substances in Davis, and promote alternatives to such substances and their clean up.

Policy HAZ 4.1. Reduce and manage toxics within the planning area.

Policy HAZ 4.2. Provide for the proper disposal of hazardous materials in Davis.

Policy HAZ 4.3. Reduce the potential for pesticide exposure for people, wildlife, and the environment.

Policy HAZ 4.4. Increase awareness of agricultural chemical use impacting Davis residents.

Policy HAZ 4.5. Minimize impacts of hazardous materials on wildlife inhabiting or visiting the Davis area.

Policy HAZ 4.6. Increase awareness of asbestos in the community.

Policy HAZ 4.7. Ensure that remediation of hazardous waste sites is conducted in the most timely and environmentally responsible manner possible.

COMBINED POLLUTANTS

Goal HAZ 5. Reduce the combined load of pollutants generated in the City by 30 percent by the year 2010.

Policy HAZ 5.1. Reduce the combined load of pollutants generated in the City's wastewater, stormwater, and solid waste streams. Such pollutants include, but are not limited to toxic and hazardous substances.

Yolo County Office of Emergency Services

The Yolo County Office of Emergency Services (OES) is the emergency management agency for Yolo County. OES coordinates the County government's response to disaster or other large scale emergency. In 2013, the Yolo County OES began revision of many emergency management plans and systems to enhance the preparedness and response capability of the County. The revisions and enhancements encompass partners throughout the entire County over a multi-year strategy. The final product will be a set of emergency plans that outline responsibilities and provide guidance to local responders.

County of Yolo Emergency Operations Plan

The County of Yolo Emergency Operations Plan, revised in December 2013, was developed for each Yolo County department, local special districts with emergency services responsibilities, and in coordination with the cities in Yolo County. The content is based upon guidance approved and provided by the California Governor's Office of Emergency Services and the Federal Emergency Management Agency (FEMA). The intent of the County's Emergency Operations Plan is to provide direction on how to respond to an emergency from the onset, through an extended response, and into the recovery process.

Yolo County Operational Area Multi-Jurisdictional Hazard Mitigation Plan

Every five years, the local Multi-Hazard Mitigation Plan (MHMP) is updated and submitted to FEMA. The MHMP identifies natural hazards and risks and identifies the hazard mitigation strategy to reduce vulnerability and make the communities of Yolo County more disaster resistant and sustainable. The MHMP describes strategies that government and private sector organizations may utilize as acceptable and effective mechanisms for mitigating those hazards, within the

realistic constraints of capability and priority. The MHMP was developed using the FEMA Local Mitigation Plan Review Guide, dated October 11, 2011, and is structured similar to their Plan Review Tool. Natural hazards, including dam failure, drought, earthquakes, flooding, severe weather, volcanic activity, and wildfire, are discussed in the MHMP.

City of Davis Multi-Hazard Functional Planning Guide

According to the City's General Plan, the City of Davis Fire Department maintains the City's Multi-Hazard Functional Planning Guide, which plans for emergency management and evacuation in the event of disasters. The Guide includes operating procedures in the event of a disaster, as well as descriptions of emergency evacuation routes in Davis.

City of Davis Emergency Operations Plan

In recognition of the critical need to make emergency operations planning a priority for all urban areas, the City of Davis City Council approved a Strategic Plan in 2008 to begin an update to the City's 2004 version of the Emergency Operations Plan. The current (January 2010) update of the Emergency Operations Plan was extensive. The plan has been completely restructured and includes expanded Emergency Operations Center (EOC) and Recovery Sections. In addition, the Emergency Operations Plan has been updated to include the National Incident Management System (NIMS), which is a requirement of the Federal Government.

The Davis Emergency Operations Plan is an essential document for emergency management. The plan provides a framework for response and emergency management systems, defines roles and responsibilities of the City's emergency response organization, and provides triggers for implementation of the plan during disasters, all of which, along with training and exercises, prepare the emergency organization to respond effectively when Davis is impacted by a disaster. The plan also fulfills federal and State planning requirements for continued Homeland Security Grant eligibility.

Certified Unified Program Agency (CUPA)

The California Environmental Protection Agency designates specific local agencies as Certified Unified Program Agencies (CUPA), typically at the county level. The Yolo County Environmental Health Division is the CUPA designated for Davis, West Sacramento, Winters, Woodland, Yolo-Unincorporated. The Yolo County Environmental Health Division is responsible for the implementation of six statewide programs within its jurisdiction. These programs include:

- Underground storage of hazardous substances (USTs)
- Hazardous Materials Business Plan (HMP) requirements
- Hazardous Waste Generator requirements
- California Accidental Release Prevention (Cal-ARP) program
- Uniform Fire Code hazardous materials management plan
- Above Ground Storage Tanks (Spill Prevention Control; and Countermeasures Plan only)

Implementation of these programs involves:

- Permitting and inspection of regulated facilities.
- Providing educational guidance and notice of changing requirements stipulated in State or Federal laws and regulations.
- Investigations of complaints regarding spills or unauthorized releases.
- Administrative enforcement actions levied against facilities that have violated applicable laws and regulations

3.8.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact from hazards and hazardous materials if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- 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 create a significant hazard to the public or the environment.
- 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.
- 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.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Potential hazards associated with active agricultural operations in close proximity to urban uses is addressed in Section, 3.2, Agricultural Resources.

IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: The project may have the potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (Less than Significant with Mitigation)

Like most agricultural and farming operations in the Central Valley, agricultural practices in the area have used agricultural chemicals including pesticides and herbicides as a standard practice. Although no contaminated soils have been identified on the project site or the vicinity above applicable levels, residual concentrations of pesticides may be present in soil as a result of historic agricultural application and storage. Continuous spraying of crops over many years can potentially result in a residual buildup of pesticides, in farm soils. Of highest concern relative to agrichemicals are chlorinated herbicides, organophosphate pesticides, and organochlorine pesticides, such as such as Mecoprop (MCPP), Dinoseb, chlordane, dichloro-diphenyltrichloroethane (DDT), and dichloro-diphenyl-dichloroethylene (DDE). There are no records of soil contamination on the project site, and initial sampling found contaminates to be below criteria levels, however this is considered a ***potentially significant*** impact.

CONSTRUCTION PHASE IMPACTS

Construction of the proposed project would likely require the use of petroleum based products (oil, gasoline, diesel fuel), and a variety of chemicals including paints, cleaners, and solvents. The use of these materials will pose a reasonable risk of release into the environment if not properly handled, stored, and transported. Additionally, as described previously, buildings were located in the southeast portions of APN 036-060-005 prior to 1907. It is possible that abandoned septic tanks, fuel tanks, and/or wells could be located at these locations. Irrigation wells also currently exist in the southwest portion of APN 036-060-005. At third well is located at the east edge of APN 036-060-005. It has not been determined if this well is located onsite or offsite. A soil stockpile was also created at the north edge of APN 036-060-005 between 1993 and 1998. These are ***potentially significant*** impacts.

OPERATIONAL PHASE IMPACTS

The operational phase of the project would occur after construction is completed and tenants and residents move in to occupy the structures and facilities on a day-to-day basis. The site would be primarily used for residential uses. Residential land uses, such as the proposed project, do not routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential grade hazardous materials such as household cleaners, paint, etc.

The project also includes a 4.3-acre mixed use area and a 3.0-acre University Retirement Community expansion site. The expansion area would have up to 30 assisted living, age-restricted detached units. Current plans for the mixed-use area include an 8,000-square-foot (sf) health club,

outdoor swimming pool, and a 5,000 sf "fast casual" restaurant and clubhouse. The assisted living area and the mixed use uses will likely use a variety of hazardous materials commonly found in urban areas including: paints, cleaners, and cleaning solvents. If handled appropriately, these materials do not pose a significant risk. These facilities will store and use these materials. There will be a risk of release of these materials into the environment if they are not stored and handled in accordance with best management practices approved by the Yolo County Environmental Health Division. These are ***potentially significant*** impacts.

MITIGATION MEASURE(S)

Mitigation Measure 3.8-1: *A soil sampling program shall be implemented to assess potential agrichemical (including pesticides, herbicides, diesel, petrochemicals, etc.) impacts to surface soil within the project site, as follows:*

The sampling and analysis plan shall meet the requirements of the Department of Toxic Substances Control Interim Guidance for Sampling Agricultural Properties (2008). If the sampling results indicate the presence of agrichemicals that exceed screening levels, a removal action workplan shall be prepared in coordination with Yolo County Environmental Health Division. The removal action workplan shall include a detailed engineering plan for conducting the removal action, a description of the onsite contamination, the goals to be achieved by the removal action, and any alternative removal options that were considered and rejected and the basis for that rejection. The removal action shall be deemed complete when the confirmation samples exhibit concentrations below the commercial screening levels, which will be established by the agencies.

Mitigation Measure 3.8-2*: Prior to commencement of grading, the applicant shall submit a Soil Management Plan (SMP) for review and approval by the City. The SMP shall establish management practices for handling hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction to reduce the potential for spills and to direct the safe handling of these materials if encountered. The city will approve the SMP prior to any earth moving.*

Mitigation Measure 3.8-3*: Prior to bringing hazardous materials (including 55 or more gallons for liquids, 500 or more pounds for solids, and/or 200 or more cubic feet for compressed gases) onsite, the applicant shall submit a Hazardous Materials Business Plan (HMBP) to Yolo County Environmental Health Division (CUPA) for review and approval. If during the construction process the applicant or his subcontractors generates hazardous waste, the applicant must register with the CUPA as a generator of hazardous waste, obtain an EPA ID# and accumulate, ship and dispose of the hazardous waste per Health and Safety Code Ch. 6.5. (California Hazardous Waste Control Law).*

Mitigation Measure 3.8-4: *If any underground septic tanks, or fuel tanks are uncovered from past site uses during construction, the project proponent shall retain an environmental professional to assist with the removal consistent with the Yolo County Environmental Health Department's Underground Storage Tank Program, and Septic Abandonment Permit requirements.*

Mitigation Measure 3.8-5: *Project site wells that are no longer operated shall be properly abandoned through permit by the Yolo County Environmental Health Division (YCEH) permit program. The well abandonment work shall be completed by a C-57 State licensed well contractor.*

Mitigation Measure 3.8-6: *If the source of soil onsite soil stockpiles is undocumented, the applicant shall confirm to the City of Davis that soil sampling of the stockpiles was performed to identify potential soil contaminates associated with onsite soil stockpiles. The samples shall be submitted for laboratory analysis of total petroleum hydrocarbons (TPH) (gas, diesel and motor oil) by EPA Method 8015M and volatile organic compounds (VOCs) by EPA Method 8260. The results of the soil sampling shall be provided to the City of Davis. If elevated levels of TPH or VOCs are detected during the laboratory analysis of the soils, a soil cleanup and remediation plan shall be prepared and implemented prior to the commencement of grading activities.*

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures 3.8-1 through 3.8-3 would ensure that soils are tested for residual agricultural chemicals prior to commencement of grading, and ensures a Soil Management Plan and a Hazardous Materials Business Plan are completed, and prior to bringing hazardous materials onsite, while Mitigation Measures 3.8.4 through 3.8-6 ensure that any unknown onsite conditions from past project site uses would be removed in compliance with county and state requirements, which would reduce potential impacts to a ***less than significant*** level.

Impact 3.8-2: 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 create a significant hazard to the public or the environment (Less than Significant)

The site reconnaissance and records review did not find documentation or physical evidence of soil or groundwater impairments associated with the use or past use of the property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the property and did not identify contaminated facilities within the appropriate American Society for Testing and Materials (ASTM) search distances that would reasonably be expected to impact the property. Based on the findings of this assessment, no Recognized Environmental Conditions (RECs), no historical RECs, and no controlled RECs were identified for the property. Therefore, this is considered a ***less than significant*** impact.

Impact 3.8-3: The project has the potential to 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)

The proposed project has limited potential for the routine transport, use, or disposal of hazardous materials as discussed above (Impact 3.8-1). The closest school (Davis Waldorf School) is located

approximately 0.37 miles northeast of the project site. Other schools nearby include Cesar Chavez Elementary School (0.85 miles southeast), and Ralph Waldo Emerson Junior High School (0.65 miles south). The proposed residential and mixed uses would not involve the routine transport, use, or disposal of hazardous materials, or present a reasonably foreseeable release of hazardous materials. Therefore, the project would have a ***less than significant*** impact with respect to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.

Impact 3.8-4: The project has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (Less than Significant)

(*Note: The following discussion is associated with potential impacts of the proposed project on emergency response plans and/or evacuation plans. Proposed emergency vehicle access to and from the site is addressed in Section 3.14, Transportation and Circulation.*)

The City of Davis Fire Department maintains the *City's Multi-Hazard Functional Planning Guide*, which plans for emergency management and evacuation in the event of disasters. According to the department, the most likely disaster scenario for Davis is a toxic spill on Interstate 80 or the Southern Pacific mainline railroad tracks passing through town. Other disasters could occur, such as a flood, an earthquake or a major fire.

The Guide includes operating procedures in the event of a disaster, as well as descriptions of emergency evacuation routes in Davis. According to the Guide, all major roads are available for evacuation, depending on the location and type of emergency that arises. Major roads identified for evacuation in the Guide are Russell Boulevard, Highway 113, Interstate 80, Richards Boulevard, County Road 102/Pole Line Road, Mace Boulevard southbound, Road 32A, Covell Boulevard/Road 31, "F" Street/County Road 101A and North Sycamore Frontage Road.

Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. The proposed project would also not interfere with any emergency response plan or emergency evaluation plan. The proposed project does not include any actions that would impair or physically interfere with the City's Multi-Hazard Functional Planning Guide. As shown on Figure 2.0-6 (Chapter 2.0, Project Description), the project site includes vehicle access to provide for of ingress and egress in the event of an emergency that must comply with city street design standards to ensure streets adequately serve emergency response. An expanded discussion of local circulation and traffic volumes is provided in the Transportation and Circulation Section of this report. This is a ***less than significant*** impact.

Impact 3.8-5: The project has the potential to expose people or structures to a risk of loss, injury or death from wildland fires (Less than Significant)

The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and

making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

The site is not located within an area where wildland fires are known to occur, or within a high or moderate Fire Hazard Severity Zone as indicated by Calfire FHSZ Maps. The site is surrounded by developed land uses and open space/agricultural land. Existing roadway, residential uses, and public uses are located to the east, southeast, and south, while undeveloped agricultural land is located to the west of the project site. County Road 99 is also located 0.5 miles west of the project site, which could serve as a firebreak from any potential fires to the west of the site. This is a ***less than significant*** impact.

Impact 3.8-6: The project has the potential to result in a safety hazard for people residing or working in the project are due to proximity to a private airstrip or public airport (Less than Significant)

The Federal Aviation Administration (FAA) establishes distances of ground clearance for take-off and landing safety based on such items as the type of aircraft using the airport. There are three airports in the vicinity of the project site. The UC Davis Airport is located approximately 1.9 miles southwest of the proposed project site. The Yolo County Airport is located approximately 4.3 miles to the west of the project site. Medlock Field Airport is located approximately 3.2 miles northeast of the project site.

The UC Davis Airport is operated as a general aviation airport. The project site is not located within any safety restricted areas. Additionally, the project site is buffered from the UC Davis Airport operations to the south by residential areas and other urban uses.

The Medlock Field Airport is located approximately 3.2 miles northeast of the project site. The airport is privately-owned and operated and has been actively used since 1974. The airfields also serves agricultural chemical aviation applications. The project site is not located within any identified safety zones, is not within the direct takeoff, landing, or flight path, and is not expected to interfere with, or be subject to hazards from private aviation activities.

The Yolo County Airport is a general aviation airport owned by the County. The Yolo County Comprehensive Airport Land Use Plan (1999) provides Yolo County Airport Safety Zones including: Clear Zone, Approach-Departure Zone, and Overflight Zone. The proposed project site is not located within any of the identified Yolo County Airport safety zones.

Additional flights near the project areas may include air ambulance services via helicopter at the adjacent Sutter Davis hospital. These helicopter flights are considered emergency services and operational safety requirements are governed by the FAA, which oversees all air ambulance operators. New structures within the project site would be used for residential and mixed uses. No high-rise buildings are proposed. Therefore, the project would not impede flights or place structures within helicopter airspace.

The proposed project site is not located within any identified airport safety zones. Additionally, the project site is located adjacent to urban uses on the south and east sides of the site. Implementation of the proposed project would have a ***less than significant*** impact with regards to this environmental issue.