

Final Initial Study and Mitigated Negative Declaration

Prepared for:
Administrative Office of the
Courts

**Yolo County Superior Courts
New Superior Court Courthouse**

Woodland, California

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TABLE OF CONTENTS

LIST OF FIGURES	<i>v</i>
LIST OF TABLES	<i>vi</i>
LIST OF ACRONYMS	<i>vii</i>
1.0 INTRODUCTION	1
1.1 STATUTORY AUTHORITY AND REQUIREMENTS	1
1.2 PURPOSE	2
1.3 INCORPORATION BY REFERENCE	3
1.3.1 Woodland General Plan	3
1.3.2 Downtown Specific Plan	4
1.3.3 Downtown Specific Plan Design Guidelines	4
2.0 PROJECT DESCRIPTION	5
2.1 PROJECT BACKGROUND	5
2.2 PROJECT OBJECTIVES	7
2.3 PROJECT LOCATION	8
2.4 ENVIRONMENTAL SETTING	8
2.4.1 Existing Land Uses	8
2.4.2 Surrounding Land Uses	9
2.4.3 Existing General Plan and Zoning Designation	10
2.5 PROJECT CHARACTERISTICS	10
2.5.1 Real Estate Actions	12
2.5.2 Proposed Courthouse Facility	12
2.5.3 Construction Operations	14
2.5.4 Replacement Water Well Construction and Operation	17
2.6 PROJECT APPROVALS	18
3.0 INITIAL STUDY CHECKLIST	19

3.1	<i>BACKGROUND</i>	19
3.2	<i>ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED</i>	20
3.3	<i>EVALUATION OF ENVIRONMENTAL IMPACTS</i>	20
4.0	<i>ENVIRONMENTAL ANALYSIS</i>	33
4.1	<i>AESTHETICS</i>	33
4.2	<i>AGRICULTURAL AND FOREST RESOURCES</i>	38
4.3	<i>AIR QUALITY</i>	40
4.4	<i>BIOLOGICAL RESOURCES</i>	47
4.5	<i>CULTURAL RESOURCES</i>	49
4.6	<i>GEOLOGY AND SOILS</i>	51
4.7	<i>GREENHOUSE GAS EMISSIONS</i>	56
4.8	<i>HAZARDS AND HAZARDOUS MATERIALS</i>	58
4.9	<i>HYDROLOGY AND WATER QUALITY</i>	63
4.10	<i>LAND USE AND PLANNING</i>	67
4.11	<i>MINERAL RESOURCES</i>	69
4.12	<i>NOISE</i>	69
4.14	<i>PUBLIC SERVICES</i>	81
4.15	<i>RECREATION</i>	83
4.16	<i>TRANSPORTATION/TRAFFIC</i>	83
4.17	<i>UTILITIES/SERVICE SYSTEMS</i>	90
4.18	<i>MANDATORY FINDINGS OF SIGNIFICANCE</i>	94
5.0	<i>REFERENCES -</i>	96

REPORT PREPARATION PERSONNEL	98
7.0 INVENTORY OF MITIGATION MEASURES	99
7.1 Air Quality	99
7.2 Cultural Resources	99
7.3 Geology and Soils	99
7.4 Hazards and Hazardous Materials	100
7.5 Noise	100
8.0 LEAD AGENCY DETERMINATION	102

APPENDIX A - LEED CHECKLIST

APPENDIX B - SOLAR STUDY

APPENDIX C - AIR QUALITY DATA

APPENDIX D - BIOLOGICAL RESOURCES SEARCH

APPENDIX E - CULTURAL RESOURCES SEARCH

APPENDIX F - NOISE MEASUREMENTS

APPENDIX G - TRAFFIC STUDY

APPENDIX H - MITIGATION MONITORING PLAN
[placeholder pending public comment period]

APPENDIX I - PUBLIC NOTICE

APPENDIX J - PUBLIC COMMENTS

APPENDIX K - REVISIONS TO DRAFT REPORT

LIST OF FIGURES

(Figures immediately follow the text)

Figure 1 Site Location Map

Figure 2 Site Vicinity Map

Figure 3 Proposed Site Option

LIST OF TABLES

<i>Table 2.1-1. Superior Court's Current Court Facilities in Woodland, CA to be Relocated to the Proposed New Courthouse</i>	6
<i>Table 3.3-1. Environmental Issues Checklist</i>	22
<i>Table 4.12-1. Location of Nearby Receptors</i>	71
<i>Table 4.12-2A. Maximum Noise Levels of Common Construction Machines</i>	72
<i>Table 4.12-2B. Outdoor Construction Noise Levels</i>	72
<i>Table 4.12-3. Land Use Compatibility for Community Noise Environments</i>	73
<i>Table 4.12-4. Maximum Allowable Noise Exposure</i>	75
<i>Table 4.12-5. Vibration Velocities for Construction Equipment</i>	77
<i>Table 4.12-6. Groundborne Vibration Impact Levels for Annoyance</i>	78
<i>Table 4.12-7. Construction Vibration Damage Thresholds</i>	79

LIST OF ACRONYMS

$\mu\text{g}/\text{m}^3$	Micrograms per cubic meter
ADA	Americans with Disabilities
ADR	Alternative Dispute Resolution
AOC	Administrative Office of the Courts
BGS	Below ground surface
BGSF	Building gross square feet
BMP	Best management practice
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CHRIS	California Historic Research Information System
CNEL	Community noise equivalent
dBA	Decibels on the A-weighted scale
EIR	Environmental Impact Report
ERM	ERM-West, Inc.
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
GHG	Greenhouse gas
gpm	Gallons per minute
HCP	Habitat Conservation Plan
IESNA	Illuminating Engineering Society of North America
Ldn	Day-night average sound level
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development
LOS	Level of service
mgd	Million gallons per day
mph	Miles per hour
NCCP	Natural Community Conservation Plan

NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Service
PM _{2.5}	Particulate matter less than 2.5 microns in diameter
PM ₁₀	Particulate matter less than 10 microns in diameter
PPV	Peak particle velocity
RWQCB	Regional Water Quality Control Board
UD	Unlawful Detainer
USGS	United States Geological Survey
UST	Underground storage tank
VdB	Vibration decibels
WWTP	Wastewater Treatment Plant
YCEHD	Yolo County Health Department, Environmental Health Division
YCTD	Yolo County Transportation District
YSAQMD	Yolo-Solano Air Quality Management District

1.0 INTRODUCTION

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with the California Environmental Quality Act (CEQA; Public Resources Code Section 21000-21177) and pursuant to Section 15063 of Title 14 of the California Code of Regulations (CCR), the Judicial Council of California's Administrative Office of the Courts (AOC), acting in the capacity of the Lead Agency, has prepared this Initial Study to determine if the proposed new courthouse for the Superior Court of California, County of Yolo project (proposed project) will cause significant environmental impacts. If, as a result of the Initial Study, the AOC finds evidence that any aspect of the proposed project may cause a significant environmental effect which cannot be mitigated to a level of insignificance, the AOC shall determine that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the AOC finds no substantial evidence in light of the whole record that the project, either as proposed or modified to include the mitigation measures identified in this Initial Study, may cause a significant effect on the environment, the AOC shall find that the proposed project will not have a significant effect on the environment and may prepare a Negative Declaration. If the AOC identifies and adopts mitigation measures to reduce potential environmental impacts to a level of insignificance, the document will be termed a "Mitigated" Negative Declaration. Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such impacts may occur (Section 21080, Public Resources Code).

The environmental documentation, which will ultimately be approved and/or certified by the AOC in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the proposed project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals will be required.

The environmental documentation and supporting analysis are subject to a public review period. During this review, interested parties must

address their comments on the document relative to environmental issues to the AOC. Following review of any comments received, the AOC will consider these comments as a part of the proposed project's environmental review and include them with the Initial Study documentation.

1.2 **PURPOSE**

The objectives of this Initial Study are to:

1. Identify environmental impacts;
2. Provide the AOC with information to use as the basis for deciding whether to prepare an EIR or Negative Declaration;
3. Enable the AOC to modify the proposed project, to mitigate adverse impacts before preparation of an EIR is required;
4. Facilitate environmental assessment early in the design of the proposed project;
5. Provide documentation of the factual basis for the finding in the Negative Declaration that the proposed project will not have a significant environmental effect;
6. Eliminate needless EIRs;
7. Determine if a previously prepared EIR could be used for the proposed project; and
8. Assist in the preparation of an EIR, if required, by focusing the EIR on effects determined to be significant, identifying the effects determined not to be significant, and explaining the reasons for determining that potentially significant effects will not be significant.

Section 15063 of the CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

1. A description of the proposed project, including location;
2. An identification of the environmental setting;
3. An identification of environmental effects by use of a checklist, matrix or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;

4. A discussion of ways to mitigate significant effects identified, if any;
5. An examination of whether the proposed project is compatible with existing zoning, plans, and other applicable land-use controls; and
6. The name of the person or persons who prepared or participated in preparation of the Initial Study.

1.3 **INCORPORATION BY REFERENCE**

Pertinent documents relating to this Initial Study/Mitigated Negative Declaration have been cited and incorporated in accordance with Sections 15148 and 15150 of the CEQA Guidelines, to eliminate the need for inclusion of voluminous engineering and technical reports within the Initial Study. This Initial Study/Mitigated Negative Declaration has incorporated by reference the *City of Woodland General Plan Policy Document* (“General Plan”; City of Woodland 2002), and the *City of Woodland Downtown Specific Plan* (“Downtown Specific Plan”; City of Woodland 2003). These documents were utilized throughout this Initial Study/Mitigated Negative Declaration and are available for review on the city’s website under the Community Development Department, Planning Division.

1.3.1 **Woodland General Plan**

The city adopted its general plan on 17 December 2002. The General Plan formalizes a long-term vision for the physical evolution of Woodland and outlines policies, standards, and programs to guide day-to-day decisions concerning Woodland development through the year 2020. The General Plan consists of the following two documents:

- *General Plan Summary* – The Summary provides background information about the General Plan and reviews the plan’s guiding principles and major themes and proposals.
- *Policy Document* – The Policy Document contains the city’s formal statements of the General Plan policy in the form of goals, policies, standards, and implementation programs.

The General Plan elements reviewed in the preparation of this Initial Study document include *Land Use and Community Design; Transportation and Circulation; Public Facilities; Health and Safety; Environmental Resources; Historic Preservation; and Recreation, Education and Community Services*.

1.3.2 *Downtown Specific Plan*

The Downtown Specific Plan was adopted by the City Council in August 2003, and is consistent with the direction and policy of the General Plan. The Downtown Specific Plan was developed concurrently with the City's General Plan Update to address:

- Removal or update of concepts that are now considered outdated, e.g., the proposed two-way couplet on Lincoln Avenues and Court Street;
- Addition of information needed to meet current state requirements for a Specific Plan, e.g., the addition of an infrastructure component of the plan;
- Revision of land-use requirements and design guidelines to streamline the development process, e.g., reducing conditional use permits and providing a downtown-oriented sign regulation;
- Provide information on current and future traffic flows in the downtown area and improvements needed to maintain adequate levels of service in the downtown area;
- The review and reformulation of Specific Plan policies to reach the future vision seen for the downtown area; and
- Taking advantage of current market trends and available land/space in the downtown area.

1.3.3 *Downtown Specific Plan Design Guidelines*

The *Downtown Specific Plan Design Guidelines* were developed as part of the Downtown Specific Plan with the aim to guide both renovations and development of new structures and improvements in the downtown area. Implementation of the guidelines is intended to ensure that renovations or new development projects contribute towards the continued economic vitality of downtown Woodland and the Gateway Revitalization Area. The guidance covers design principles such as scale and proportion, texture and pattern, style, mass, and materials.

2.0 **PROJECT DESCRIPTION**

The AOC proposes to acquire property to construct a new 14-courtroom courthouse and the associated parking and operate the courthouse for the Superior Court of California, County of Yolo (Superior Court).

The project proposes to demolish the existing structures on the property (a detailed description of existing buildings proposed for demolition is provided in Section 2.4.1; *Existing Land Uses*), and construct the new courthouse. To accommodate construction of the proposed project, the existing drinking water well (Well #1) will either be designed around and kept in place or will be relocated. In an effort to assist the City, should the well be relocated, a replacement well will be installed in Freeman Park, immediately to the north of the project site. However, efforts may be made to design around the well, leaving the existing infrastructure in place. The project also proposes to install a traffic signal at the Main Street and 5th Street intersection.

The new courthouse will become the courthouse facility for the Superior Court of California, County of Yolo, and will replace seven court facilities in Yolo County. The new courthouse will also provide additional courtrooms for proposed new judgeships; court support space for court administration, the court clerk, court security operations, and holding areas for in-custody detainees; and building support space.

2.1 **PROJECT BACKGROUND**

The Superior Court of California, County of Yolo, currently serves the residents of Yolo County in seven separate facilities. These facilities are in need of security and operational upgrades in order to more efficiently and safely serve the community. In addition, the lack of consolidated facilities exacerbates the functional inefficiencies of the court facilities. The main courthouse is the historic Woodland Courthouse, which was constructed in 1917 as a shared court and county facility, and is a national historic registered property. The county vacated the building in 1985 except for the district attorney's office, which remained in the building until 1993. The historic courthouse has been renovated as the court has grown and now houses eight marginal courtrooms. To meet current space needs, the court operates six other facilities, many with courtrooms, spread throughout the downtown Woodland area (See Table 2.1-1).

Table 2.1-1. Superior Court's Current Court Facilities in Woodland, CA to be Relocated to the Proposed New Courthouse

Facility	Address	Notes
Historic Courthouse	725 Court Street,	45,160 BGSF with 8 courtrooms
Old Jail	213 Third Street	6,730 BGSF with 1 courtrooms
Family Support and ADR	238 W. Beamer Street	3,300 BGSF with 1 courtroom
Family and Designated ADA Courtroom	812 Court Street	2,700 BGSF with 1 courtroom
Fiscal, Human Resources, and Training	601 Court Street	6,120 BGSF
Traffic/Small Claims/UD and Drug	275 First Street	4,100 BGSF with 2 courtrooms
Family Law Facilitator and children's waiting room.	1100 Main Street	7,701 BGSF with 2 courtrooms
PROPOSED PROJECT TOTALS: 75,811 BGSF with 15 courtrooms (existing)		
BGSF - building gross square feet		

As previously described, the new courthouse will consolidate several of the Superior Court's currently dispersed courtrooms and administrative facilities already located in downtown Woodland into the proposed new building, including:

1. The historic Woodland Courthouse located approximately 0.2 miles from the proposed project site. This facility will be available to the county for administrative use once it is vacated by the court;
2. Family and Designated American with Disabilities (ADA) Courtroom located approximately 0.15 miles from the proposed project site;
3. Fiscal, Human Resources, and Training located approximately 0.3 miles from the proposed project site;
4. Traffic/Small Claims/Unlawful Detainer (UD) and Drug Court facilities, located approximately 0.3 mile from the proposed project site;

5. The Old Jail located approximately 0.2 mile from the proposed project site; and
6. The Family Support and Alternative Dispute Resolution (ADR) facility located approximately 1.6 miles from the proposed project site.
7. The Family Law Facilitator and children's waiting room located approximately 150 feet from the proposed project site.

After completion of the new courthouse, the Superior Court will vacate these properties.

The proposed project will serve the Superior Court, local government justice partners, court security operations and holding, and ancillary support services.

The facility will include 14 courtrooms; court support space for court administration, the court clerk, court security operations, and holding; and building support space. Secure parking, a sallyport, and in-custody holding will be located at the basement level. In addition, the project will include 198 parking spaces on site, including secured (restricted) parking spaces for judicial officers. An additional 223 off-street parking spaces would be provided in off-site parking lots provided by the AOC. The AOC is currently negotiating for acquisition or a long-term lease of the parking sites.

2.2 ***PROJECT OBJECTIVES***

The purpose of the proposed project is to provide a new courthouse that meets the needs of the Superior Court and consolidates the existing facilities to ensure safer and more efficient operations in the long-term. The proposed project's objectives are to:

- Consolidate seven overcrowded facilities in poor condition with inadequate security;
- Increase court operational efficiency and improve public service through consolidation of all adult and juvenile court operations in one location; and
- Expand court services by increasing the capacity for judicial proceedings from 13 to 14 courtrooms, including consolidating 13 existing courtrooms and providing for one additional courtroom for

the new judgeship authorized in Assembly Bill 159 in fiscal year 2007-2008.

2.3 *PROJECT LOCATION*

The proposed project site is in the City of Woodland, Yolo County, California, approximately 0.9 mile west of State Route 113, and 1.0 mile west of Interstate 5 (see Figure 1). Main Street, 5th Street, Lincoln Avenue, and 6th Street border the proposed project site. The site is north of the Woodland Police Department, and west of the Woodland Joint Unified School District Offices.

2.4 *ENVIRONMENTAL SETTING*

2.4.1 *Existing Land Uses*

As described in the Phase I Environmental Site Assessment (ESA) for the property (GEOCON, 2009), the proposed project site consists of six contiguous parcels approximately 3.75 acres (160,000 square feet), described as follows, from north to south (see Figure 2):

- **Parcel 1 – 1001-1022 Main Street:** Parcel 1 covers 0.83 acre at the northern end of the proposed project site. The parcel is vacant and undeveloped and is currently used by Hoblit Chrysler to store vehicles for sale. The site has a gravel groundcover with some weeds and seasonal grasses in areas of low traffic. Sidewalks are present along the western, northern, and eastern property lines.
- **Parcels 2 and 3 – 425 5th Street and 430 6th Street:** Parcels 2 and 3 form a contiguous portion of the proposed project site adjacent and to the south of the 100-1022 Main Street parcel and extend from 5th Street to the west to 6th Street to the east. The combined sites cover approximately 0.97 acre. Both parcels have gravel undercover, and are currently vacant and unused. Sidewalks are present along the western and eastern property lines. A row of trees is present along the southern fence line adjacent to the 445 5th Street site parcel.
- **Parcel 4 – 445 5th Street:** Parcel 4 covers 1.07 acres adjacent and to the south of Parcels 2 and 3 and extends from 5th Street to 6th Street across the width of the proposed project site. The parcel is developed with a well/pump house for city water supply on its northern side, two office

structures, a radio room and tower near the southwestern corner of the parcel, and four two-door storage sheds along the southern side of the parcel.

- **Parcel 5 - 1011 Lincoln Avenue:** Parcel 5 covers 0.47 acre adjacent and to the south of Parcel 4 in the southwest corner of the proposed project site. This parcel is adjacent to the 5th Street on the west and Lincoln Avenue on the south. The parcel is currently used by AJ Towing as a storage yard for equipment and towed vehicles, and office space. The site is mostly unpaved with gravel undercover and some asphalt paving and concrete slabs.
- **Parcel 6 - 1021 Lincoln Avenue:** Parcel 6 covers 0.4 acre adjacent and to the south of Parcel 4 in the southeastern corner of the proposed project site. This parcel is adjacent to 6th Street on the east and Lincoln Avenue on the south. Two structures exist on the site: a single-story, brick and concrete, multi-tenant structure on the southern portion of the site and a wood-framed and corrugated metal siding storage shed on the northern portion of the parcel. The area between the main site building and the storage shed, including the area under the covered storage, is entirely concrete paved. An approximately 12-foot-wide landscaped area is present in front of the main building (on the southern side).

Tenants in the main site building from west to east include:

- *The Undresser* - a furniture refinishing shop and art studio;
- *Studio Artist Gallery* - an art gallery and studio; and
- Two contractors' offices.

2.4.2

Surrounding Land Uses

The following land uses are immediately adjacent to the proposed project site:

- North: across Main Street, from west to east includes, Freeman Park, the Woodland Toy Library, and a chain motel (Budget Inn). Adjacent to the Budget Inn to the east is a building that houses an auto glass business and a computer store;
- East: across 6th Street, a multi-tenant, three-story commercial building;
- South: across Lincoln Avenue, the City of Woodland Police Department; and residential properties to the southwest¹.

¹ Constitutes clarifications made to the draft document in response to a comment received.

- West: across 5th Street, from north to south includes, Enterprise Rent-A-Car, Colombara's Cabinet and Millworking, and Elfrink Power Equipment.

The nearest water body is Cache Creek located approximately 3 miles north of the proposed project site.

2.4.3 *Existing General Plan and Zoning Designation*

The AOC is the proposed project's lead agency and is acting for the State of California on behalf of the Judicial Council of California. The State of California is not subject to the local government land-use planning and zoning authorities. However, the AOC refers to the General Plan throughout this document as a guide for decision-making purposes.

As presented in the General Plan (see Figure 1-4 of the General Plan, *General Plan Land Use Diagram*), the proposed project site is in an area designated as Central Commercial. This designation provides for professional and administrative offices (City of Woodland). According to the City of Woodland Zoning Map, the proposed project site's zoning designation is Central Business District. The Central Business District classification includes a variety of uses applicable to the proposed project, such as office, institutional, and government facilities.

The City's General Plan (see General Plan Figure 1-4, *General Plan Land Use Diagram*) classification for the properties adjacent to the proposed project site is Central Commercial. Section 4.10 of this Initial Study document discusses the General Plan and zoning designations related to the proposed project site in more detail.

2.5 **PROJECT CHARACTERISTICS**

The proposed project will include a courthouse surrounded by landscaped and parking areas. The design will be consistent with other downtown facilities recently constructed by the AOC, with location-specific considerations; the AOC anticipates that the courthouse will be an approximately four-story building and will include a basement level.

Since the AOC is the proposed project's lead agency and is acting for the State of California on behalf of the Judicial Council of California, local government land use planning and zoning regulations do not apply to the proposed courthouse project. The AOC's proposed courthouse design will

conform to the specifications of the California Trial Court Facilities Standards (available at:

http://www.courtinfo.ca.gov/programs/occm/documents/06_April_Facilities_Standards-Final-Online.pdf). These principles include:

- Court buildings shall represent the dignity of the law, the importance of the activities within the courthouse, and the stability of the judicial system;
- Court buildings shall represent an individual expression that is responsive to local context, geography, climate, culture, and history and shall improve and enrich the sites and communities in which they are located;
- Court buildings shall represent the best in architectural planning, design, and contemporary thought and shall have requisite and adequate spaces that are planned and designed to be adaptable to changes in judicial practice;
- Court buildings shall be economical to build, operate, and maintain;
- Court buildings shall provide a healthy, safe, and accessible environment for all occupants; and
- Court buildings shall be designed and constructed using proven best practices and technology with careful use of natural resources.

The AOC will apply the following codes and standards: California Building Code (edition in effect as of the commencement of schematic design phase of the proposed project); CCR, Title 24; California Energy Code, Americans with Disabilities Act; American Disability Act Accessibility Guidelines (Section 11); and Division of the State Architect's Access Checklist.

The proposed project will implement sustainable elements throughout its design, operation, and maintenance. The AOC's design will incorporate features that conform to standards of a Leadership in Energy and Environmental Design (LEED) Silver certified building, and the building's design will include features to reduce energy consumption by at least 15 percent from the levels of the California Building Code. The LEED Rating System for New Construction includes criteria for features (see Appendix A) related to sustainability, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation and design processes. The AOC will implement the proposed project in compliance with standard conditions and requirements for state or federal regulations or laws that are independent of CEQA compliance. The

standard conditions and requirements serve to prevent specific resource impacts. Typical standard conditions and requirements include compliance with the provisions of the California Building Code, National Pollutant Discharge Elimination System (NPDES) permit system, Public Resources Code Section 5097 for discovery of unexpectedly encountered human remains, and Yolo-Solano Air Quality Management District Rules.

The AOC's plans for the proposed project will incorporate specific design elements into the construction and operation to reduce to a level of insignificance any potential environmental effects. The proposed project design features are actions that conform to California Trial Court Facilities Standards specifications. For example, the parties implementing the proposed project will use best management practices (BMPs) and technologies aimed to limit the use of natural resources as well as the proposed project's operating cost over the life of the building. Because the AOC is incorporating the proposed project design features into the proposed project, the design features do not constitute mitigation measures as defined by CEQA.

2.5.1 *Real Estate Actions*

A total of six contiguous parcels comprising 3.75 acres bounded by Main Street to the north, 5th Street to the west, 6th Street to the east, and Lincoln Avenue to the south are being considered for the proposed courthouse site. The AOC anticipates acquiring the above-mentioned parcels for the proposed courthouse site from the Woodland Redevelopment Agency (Agency). In addition, the AOC anticipates acquiring off-site property to provide additional off-street parking.

2.5.2 *Proposed Courthouse Facility*

The AOC anticipates the new courthouse will be a four-story building with a basement. The building will be approximately 141,000 building gross square feet, and will include 14 courtrooms and house the following departments and offices:

- Court Administration;
- Courtroom Judicial Support;
- Courtsets/Judiciary;
- Criminal Division;
- Civil/Family/Juvenile Division;

- Family Mediation Unit;
- Court and Building Operations; and
- Other associated judicial services.

As previously discussed, the new courthouse will be located on a city block bounded by Main Street to the north, 5th Street to the west, 6th Street to the east, and Lincoln Avenue to the south.

A site option plan of the proposed project is presented in Figure 3.

The new courthouse will include secured (reserved) parking spaces for judicial officers and court executives, a secured sallyport (secure passageway or tunnel) for transport of in-custody detainees, and an in-custody holding area at the basement level. The courthouse will have an on-site parking lot (198 spaces), and in addition, will have 223 parking spaces for the exclusive use of the courts when the courthouse is open, in nearby off-site locations. The AOC anticipates that on-street parking capacity in the project vicinity will provide any additional spaces needed during the projected peak demand of 480 spaces (i.e., 59 on-street spaces). Public access to the site will be from driveways along 5th Street and 6th Street. The facility will also provide access for the Sheriff's in-custody detainee bus, which will enter the site from a non-public driveway on Lincoln Avenue.

The proposed project will retain existing landscaped areas along the perimeter of the site where possible. Additional landscaping will be provided around the new courthouse.

The AOC will base the design of the new courthouse on its *Principles of Design for California Court Buildings* (AOC 2008). As part of the AOC's compliance with the California Building Code, the proposed project will include preparation of a geotechnical report and utilization of the report's recommendations to prepare design criteria that will comply with code requirements for geological and soil issues.

The AOC's design will incorporate features that comply with the requirements for LEED Silver Certification. The LEED system includes criteria for green practices that incorporate sustainability, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation and design processes. Points are awarded for attaining criteria listed in the LEED checklist (Appendix A).

The AOC will implement a lighting plan that complies with LEED requirements. The requirements (United States Green Building Council 2003) relevant to lighting include:

- Meet or provide lower light levels and uniformity ratios than those recommended by the *Illuminating Engineering Society of North America (IESNA) Lighting for Exterior Environments: An IESNA Recommended Practice* (Illuminating Engineering Society of North America 1999);
- Design exterior lighting such that all exterior luminaries with more than 1,000 initial lamp lumens are shielded and all luminaries with more than 3,500 initial lamp lumens meet the Full Cutoff IESNA Classification;
- The maximum candela value of all interior lighting shall fall within the building (not out through windows) and the maximum candela value of all exterior lighting shall fall within the property; and
- Any luminary within a distance of 2.5 times its mounting height from the property boundary shall have shielding such that no light from that luminary crosses the property boundary.

By meeting LEED requirements, the proposed project will also meet the intent of the Governor's Executive Orders regarding energy efficiency.

In addition to meeting the LEED requirements described above, the proposed project will implement Low Impact Development (LID) measures that include dispersing runoff to landscaped areas, routing runoff to rain gardens, cisterns and swales, and other best management features to filter storm runoff. Furthermore, the proposed project's design will prevent on-site flooding and direct runoff to the city's existing storm drain facilities.

The AOC plans to acquire the proposed courthouse site in 2010, begin construction in the fall of 2011, complete construction by late summer 2013, and begin operation of the courthouse in approximately mid- 2013. After completion of the new courthouse, the Superior Court will vacate the current leased facilities.

2.5.3

Construction Operations

The proposed project will include the construction of the proposed courthouse building and associated parking lots, modification of utilities, and the development of site improvements. There will be no off-site staging areas, but construction personnel will probably park in nearby off-

site areas. The AOC anticipates that construction workers will access the site primarily from Main Street and park in nearby parking lots. When possible, workers will carpool to the site and will report to a designated on-site staging area. The construction contractor will install fencing around the perimeter of the proposed project site.

The proposed project's construction operations will implement BMPs and other measures throughout the construction phase to avoid or minimize potential impacts. These BMPs and other measures will include:

- General measures:
 - Designate a contact person for public interaction.
 - Inform the community through the use of a monthly newsletter or website that identifies the upcoming work and potential impacts to the surrounding communities.
- Storm water, water quality, and soil erosion management measures:
 - Prior to the start of construction activities, the AOC will ensure that the construction contractor prepares a Storm Water Pollution Prevention Plan and secures the Regional Water Quality Control Board's (RWQCB's) approval of the plan.
 - The construction contractor will incorporate BMPs consistent with the guidelines provided in the California Storm Water Best Management Practice Handbooks: Construction (California Stormwater Quality Association. 2003. California Storm Water Best Management Practice Handbooks: Construction. Menlo Park, CA. available at: http://www.cabmphandbooks.com/Documents/Construction/Section_3.pdf).
 - For construction during the rainy season, the construction contractor will implement erosion measures that may include mulching, geotextiles and mats, earth dikes and drainage swales, temporary drains, silt fence, straw bale barriers, sandbag barriers, brush or rock filters, sediment traps, velocity dissipation devices, or other measures.
 - Wherever possible, the construction contractor will perform grading activities outside the normal rainy season to minimize the potential for increased surface runoff and the associated potential for soil erosion.
- Air quality management measures:

- When necessary, apply water or a stabilizing agent to exposed surfaces in sufficient quantity at least two times a day to prevent generation of dust plumes.
- Moisten or cover excavated soil piles to avoid fugitive dust emissions.
- Discontinue construction activities that generate substantial dust blowing on unpaved surfaces during windy conditions.
- Install and use a wheel-washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the proposed project site.
- Cover dump trucks hauling soil, sand, and other loose materials with tarps or other enclosures that will reduce fugitive dust emissions.
- Ensure that all construction and grading equipment is properly maintained.
- Ensure that construction personnel turn off equipment when equipment is not in use.
- Ensure that all vehicles and compressors utilize exhaust mufflers and engine enclosure covers (as designed by the manufacturer) at all times.
- When feasible, use electric construction power for construction operations, in lieu of diesel-powered generators to provide adequate power for man/material hoisting, crane, and general construction operations.
- Suspend heavy-equipment operations during first-stage and second-stage smog alerts.
- Noise and vibration measures:
 - Install sound barriers around the perimeter of the proposed project site when engaging in activities that will produce a prolonged noise exposure exceeding the ambient noise threshold of 65 dB.
 - Ensure that construction operations do not use impact pile drivers.
 - When feasible, for construction operations use electric construction power in lieu of diesel-powered generators to provide adequate power for man/material hoisting, crane, and general construction operations.

- Well abandonment measures, as needed:
 - Abandonment of existing water well(s), which includes plugging the well cavity with impermeable material, will be performed in accordance with state agency requirements.
- Hazardous material management measures:
 - The AOC's construction contractor will have a qualified environmental professional conduct an asbestos survey to determine the presence or absence of asbestos. If asbestos materials are present, the construction contractor will perform asbestos removal by a state-certified asbestos containment contractor in accordance with both the Toxic Substances Control Act, Title 15 of the United States Code, Section 2601 et seq., and Title 2 - Asbestos Hazardous Emergency Response for Handling Asbestos.
 - Hazardous waste will be handled by a licensed hauler for disposal at an appropriate facility in compliance with applicable laws and regulations.

Construction activities will include demolition of surface structures, abandonment of water well(s), excavation, grading, framing, paving, and coating.

All grading will be completed on site, and the construction contractor will reuse and keep on site the maximum amount of material. Excavation operations at the site will export material to an off-site location and replace and compact the remaining material on site. Construction will commence no earlier than 7:00 a.m. and typically cease no later than 6:00 p.m. on weekdays. Construction work might occur on Saturdays; if so, it will commence no earlier than 9:00 a.m. and cease no later than 6:00 p.m.

2.5.4

Replacement Water Well Construction and Operation

As noted previously, to accommodate construction of the proposed project, the existing drinking water well located on-site will either be designed around and kept in place or will be relocated. In an effort to assist the City, should the well be relocated, a replacement well will be installed in Freeman Park, immediately to the north of the project site.

The city has indicated that additional former water wells may also be present on the property, but the AOC has found no documented evidence of their former or current existence or records of their abandonment. The existing well serves the downtown area of Woodland as required (i.e.,

during periods when there is low pressure in the water distribution system for the downtown area). The existing well has an excavation depth of 600 feet and a pumping capacity of 1,700 gallons per minute (gpm).

2.6 **PROJECT APPROVALS**

The AOC is responsible for approving the proposed project. The State of California Public Works Board must also approve the selection and acquisition of real property for the location or expansion of State of California facilities.

The AOC anticipates acquiring the parcels for the proposed site from the Woodland Redevelopment Agency (Agency). The AOC's construction contract will include provisions that require the construction contractor to obtain Central Valley RWQCB approval of a Storm Water Pollution Prevention Plan and to implement the plan.

3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1. **Project title:** New Superior Court Courthouse

2. **Lead agency name and address:**
Judicial Council of California
Administrative Office of the Courts
2860 Gateway Oaks Drive, Suite 400
Sacramento, CA 95833-3509

3. **Contact person and phone number:**
Laura Sainz, Environmental Program Manager
Phone: (916) 263-7992
Fax: (916) 263-2342
Email: Laura.Sainz@jud.ca.gov

4. **Project location:** The proposed project site is located in the City of Woodland, California, along Main Street between 5th Street, 6th Street, and Lincoln Avenue.

5. **Project sponsor's name and address:**
Judicial Council of California
Administrative Office of the Courts
2860 Gateway Oaks Drive, Suite 400
Sacramento, CA 95833-3509

6. **General Plan designation:** Central Commercial

7. **Zoning:** Central Business District

8. **Description of project: (Describe the whole action involved, including, but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)**

Refer to Section 2.5, Project Characteristics.

9. **Surrounding land uses and setting. Briefly describe the project's surroundings:**

The following land uses are immediately adjacent to the proposed project site:

North: Main Street with (from east to west) Budget Inn, Woodland Toy Library, and Freeman Park;

East: 6th Street with multi-tenant commercial building;

South: Lincoln Avenue with City of Woodland Police Department;

West: 5th Street with (from north to south) Enterprise Rent-A-Car, Colombara's Cabinet and Millworking, and Elfrink Power Equipment.

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

State of California Public Works Board.
Central Valley Regional Water Quality Control Board

3.2 **ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The environmental factors checked below will be potentially affected by the proposed project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages. Mitigation measures have been developed to reduce the following impacts to a less-than-significant level:

✓	Air Quality
✓	Cultural Resources
✓	Geology and Soils
✓	Hazards and Hazardous Materials
✓	Noise
✓	Mandatory Findings of Significance

Mitigation measures for these issues are identified in Section 4.0.

3.3 **EVALUATION OF ENVIRONMENTAL IMPACTS**

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agricultural and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Land Use Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

- Hydrology and Water Quality

The environmental analysis in this section makes use of the checklist recommended by the CEQA Guidelines for the environmental review process. As a preliminary environmental assessment, this Initial Study determines whether or not potentially significant impacts exist that warrant additional analysis and comprehensive mitigation measures to minimize the level of impact. On-site, off-site, long-term, direct, indirect, and cumulative impacts are analyzed for the construction and operation of the proposed project. This Initial Study poses questions with four possible responses for each question:

- **No Impact.** The environmental issue in question does not apply to the proposed project, and the proposed project will therefore have no environmental impact.
- **Less-Than-Significant Impact.** The environmental issue in question does apply to the proposed project site, but the associated impact will be below thresholds that are considered to be significant.
- **Potentially Significant Unless Mitigated.** The proposed project will have the potential to produce significant impacts with respect to the environmental issue in question. However, mitigation measures modifying the operational characteristics of the proposed project will reduce impacts to a less-than-significant level.
- **Potentially Significant Impact.** The proposed project will produce significant impacts, and further analysis will be necessary to develop mitigation measures that could reduce impacts to a less-than-significant level.

Table 3.3-1. Environmental Issues Checklist

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
I. AESTHETICS – Will the project:				
a) Have a substantial adverse effect on a scenic vista?				✓
b) Substantially damage scenic resources, such as trees, rock outcroppings, historic buildings, and other features?			✓	
c) Substantially degrade the existing visual character or aesthetic quality of the site and its surroundings?			✓	
d) Create a new source of substantial light or glare that will adversely affect day or nighttime views in the area?			✓	
e) Create a new source of substantial shade that will adversely affect the area?			✓	
II. AGRICULTURAL AND FOREST RESOURCES: 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. Will the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of statewide Importance?				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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?				✓
III. AIR QUALITY – 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. Will the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan due to construction operations?		✓		
b) Conflict with or obstruct implementation of the applicable air quality plan due to courthouse operations and maintenance?			✓	
c) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		✓		
d) 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 that exceed quantitative thresholds for ozone precursors)?		✓		
e) Expose sensitive receptors to substantial pollutant concentrations?		✓		
f) Create objectionable odors affecting a substantial number of people?			✓	
IV. BIOLOGICAL RESOURCES – Will the project:				
a) Have a substantial adverse effect 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 United States Fish and Wildlife Service?				✓

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or United States Fish and Wildlife Service?				✓
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?				✓
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				✓
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			✓	
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?			✓	
V. CULTURAL RESOURCES – Will the project:				
a) Cause a substantial adverse change in the significance of a historic resource as defined in § 15064.5?			✓	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		✓		

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of formal cemeteries?			✓	
VI. GEOLOGY AND SOILS – Will the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault.			✓	
b) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground-shaking?			✓	
c) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?			✓	
d) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?				✓
e) Result in substantial soil erosion or the loss of topsoil?			✓	
f) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving expansive soil?			✓	
g) 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?				✓
h) Destroy a unique paleontological resource or site or unique geologic feature?		✓		

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS – Will the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	
VIII. HAZARDS AND HAZARDOUS MATERIALS – Will the project:				
a) Create a significant hazard to the public or the environment through routine transport, use, emission, or disposal or accidental release of hazardous materials?		✓		
b) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and will it create a significant hazard to the public or the environment?		✓		
c) For a project located within an airport land-use plan, within 2 miles of a public airport or public use airport, or within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area,?				✓
d) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
e) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires?				✓
IX. HYDROLOGY AND WATER QUALITY – Will the project:				
a) Violate any water quality standards or waste discharge requirements?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level?			✓	
c) Substantially alter the existing drainage pattern of the site or area in a manner that will result in substantial erosion or siltation?			✓	
d) Substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that will result in flooding?			✓	
e) Create or contribute runoff water that will exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			✓	
f) Otherwise substantially degrade water quality?			✓	
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?				✓
h) Place structures within a 100-year flood hazard area that will impede or redirect flood flows?				✓
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?				✓
j) Expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?				✓
X. LAND USE AND PLANNING – Will the project:				
a) Physically divide an established community?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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?				✓
XI. MINERAL RESOURCES – Will the project:				
a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?				✓
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?				✓
XII. NOISE – Will the project:				
a) Produce a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
b) Produce a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
c) Expose persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
d) For a project located within an airport land-use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive airport-related noise levels or excessive private airstrip-related noise levels?				✓

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING – Will 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)?			✓	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓
XIV. PUBLIC SERVICES – Will the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities or the need for new or physically altered fire protection facilities in order to maintain acceptable service ratios, response times, or other performance objectives?			✓	
b) Result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities or the need for new or physically altered police facilities in order to maintain acceptable service ratios, response times, or other performance objectives?			✓	
c) Result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities or the need for new or physically altered school facilities in order to maintain other performance objectives?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
d) Result in substantial adverse physical impacts associated with the provision of new or physically altered other public facilities or the need for new or physically altered public facilities in order to maintain performance objectives?			✓	
XV. RECREATION – Will the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?			✓	
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?			✓	
XVI. TRANSPORTATION/TRAFFIC – Will 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?			✓	
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?			✓	
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?				✓

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e) Result in inadequate emergency access?			✓	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such features?			✓	
XVII. UTILITIES AND SERVICE SYSTEMS				
a) Will the wastewater treatment provider that serves or may serve the project determine that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
b) Will the project exceed wastewater treatment requirements of the applicable RWQCB?			✓	
c) Will the project 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?			✓	
d) Will the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which will cause significant environmental effects?			✓	
e) Will the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			✓	
f) Will the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
g) Will the project comply with federal, state, and local statutes and regulations related to solid waste?			✓	
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE – Will the project:				
a) 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?		✓		
b) 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.)		✓		
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

4.0 ENVIRONMENTAL ANALYSIS

4.1 AESTHETICS

a) *Will the project have a substantial adverse effect on a scenic vista?*

No Impact. The proposed project site is mapped on the United States Geological Survey (USGS) 7.5-minute Woodland, California, United States Topographic Quadrangle dated 1981 at an approximate elevation of 62 feet above mean sea level (USGS 1981). The evaluation of aesthetics is based on a site visit of the proposed project area performed by ERM-West, Inc. (ERM) on 22 October 2009, aerial photographs of the site (Google, Inc., 2008), the General Plan (see *Cultural Resources*, City of Woodland 2003), and the Downtown Specific Plan, City of Woodland 2003.

According to the General Plan, there are no distinctive natural features such as major river, or landform within the City of Woodland. The built environment combined with the surrounding cultivated lands constitutes the primary visual attributes of the city. With few tall buildings and in the absence of topographic features, tree cover is considered an important visual element in the city.

The proposed project site is surrounded by the following land uses:

- North: Properties across Main Street to the north of the proposed project site include Freeman Park to the north, a two-story commercial building to the northwest, and a single-story commercial building, motel, and auto glass repair and replacement shop to the northeast.
- West: Properties across 5th Street to the west of the proposed project site include single-story buildings housing light industrial and commercial uses.
- East: Properties across 6th Street to the east of the proposed project site, from north to south, include a three-story, multi-tenant building; single-story Woodland Joint Unified School District buildings; and an old inactive commercial/light industrial structure and storage yard.
- South: Properties across Lincoln Avenue to the south of the site include a two-story building occupied by Woodland Police Department and residential properties to the south^{west}².

² Constitutes clarifications made to the draft document in response to a comment received.

Existing views of Freeman Park from adjacent properties, including the residential properties to the southwest are obscured by existing structures and landscaping on the proposed project site.

The proposed four-story building would partially obstruct views of Freeman Park from the upper story of the Woodland Police Department Building to the south. As previously discussed, there are no designated scenic vistas within the city limits. The proposed project design, however, will include landscaping elements that will most likely enhance, rather than degrade the visual and aesthetic quality of the area, thus maintain the important visual elements in the city. Based on the above considerations, the AOC concludes that the proposed project would not have an impact on a scenic vista.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project substantially damage scenic resources such as trees, rock outcroppings, historic buildings, and other features?*

Less-Than-Significant Impact. The proposed project site is located approximately 0.3 mile from the Historic District of Woodland, which contains several historic buildings (some of which are eligible for listing on the National Register of Historic Places), as well as the city's designated Historic District (see General Plan, Figure 2-1, "Cultural Resources").

The site is approximately 1 mile west of Interstate 5 and State Route 113. According to the California Scenic Highway Mapping System, these roadways are not officially designated or eligible scenic highways. Other than existing landscaping (grassy areas, shrubs) and trees, there are no scenic resources on the site, including natural rock outcroppings.

Mature landscape trees are located along the eastern and western sidewalks surrounding the proposed project site, and on the southern portion of the proposed project site. The street trees on the proposed project site are described in more detail in Section 4.4, *Biological Resources*. The AOC will make efforts to minimize impacts to these existing trees during project construction, and will replace any landscape trees removed during construction.

As previously discussed, there are no scenic resources on the site; therefore, the addition of the proposed project would have a less-than-significant impact in this regard.

The historic courthouse, which the Superior Court is vacating, will continue to be occupied by the county, and therefore there is no impact on this resource.

Mitigation Measures: No mitigation measures are required.

- c) *Will the project substantially degrade the existing visual character or aesthetic quality of the site and its surroundings?*

Less-Than-Significant Impact. The proposed project site consists of six contiguous parcels. The northern portion of the proposed project site contains three vacant and undeveloped parcels with gravel undercover (1000-1022 Main Street, 425 5th Street, and 430 6th Street).

The southern portion of the proposed project site is made up of three developed parcels (445 5th Street, 1011 Lincoln Avenue, and 1021 Lincoln Avenue). The 445 5th Street parcel contains a well/pump house for a city water supply well, two office structures, and a radio room and tower. This parcel is surrounded primarily by chain-link fencing, and sidewalks along the western, northern, and eastern property lines. Mature landscape trees exist along the western sidewalk, and border the 425 5th Street and 430 6th Street parcels to the north. The 1011 Lincoln Avenue parcel contains a storage yard for towed vehicles and equipment, and office space. The 1021 Lincoln Avenue Parcel contains a single story multi-tenant building, and a wood-framed and corrugated storage shed.

The proposed project site is in the southern portion of District A4 - *Eastern Gateway* of the downtown area, and is part of the Gateway Revitalization Area. This area contains most of the vacant or underutilized land in the downtown area. The proposed project site is an area that is not considered to be a designated scenic area or corridor. The Gateway Revitalization Master Plan Concept, developed as part of the Gateway Revitalization Master Plan, envisions this area as containing a mixture of two- and three-story buildings.

The courthouse's design will represent the dignity of the law, the importance of the activities within the courthouse, and the stability of the judicial system. The design will be responsive to local context, geography, climate, culture, and history.

Short-term visual impacts would occur during construction activities from construction debris and construction equipment such as tractors and cranes. However, visual impacts from construction will occur for only an

approximately 24-month period, and will no longer exist after project completion. Therefore, the AOC concludes that the proposed project will not substantially degrade the existing visual character or aesthetic quality of the site's surroundings, and the proposed project's impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

- d) *Will the project create a new source of substantial light or glare that will adversely affect day or nighttime views in the area?*

Less-Than-Significant Impact. As previously discussed, the northern portion of the proposed project site is undeveloped with gravel undercover, while the southern portion of the proposed project site is developed with a well/pump house, office structures, radio room and tower, and storage sheds. The site currently does not produce substantial glare.

The proposed project would create light sources for exterior and interior building lighting on the courthouse grounds. The proposed project will adhere to the California Trial Court Facilities Standards (Judicial Council of California 2006), which will ensure that the building will be appropriate to the surroundings.

The AOC will apply for a Silver Rating certification under the United States Green Building Council's LEED Green Building Rating System for the proposed project, and the AOC intends to implement a lighting plan that complies with LEED requirements. Requirements (United States Green Building Council 2003) relevant to lighting include:

- Meet or provide lower light levels and uniformity ratios than those recommended by the *Illuminating Engineering Society of North America (IESNA) Lighting for Exterior Environments: An IESNA Recommended Practice* (IESNA 1999);
- Design exterior lighting such that all exterior luminaries with more than 1,000 initial lamp lumens are shielded and all luminaries with more than 3,500 initial lamp lumens meet the Full Cutoff IESNA Classification;
- The maximum candela value of all interior lighting shall fall within the building (not out through windows) and the maximum candela value of all exterior lighting shall fall within the property; and

- Any luminary within a distance of 2.5 times its mounting height from the property boundary shall have shielding such that no light from that luminary crosses the property boundary.

Most of the building's interior lighting will be limited to the Superior Court's typical weekday operational hours and the periods immediately before and after court operations. The AOC intends to shield all light sources to minimize light on surrounding properties and existing landscaping will also block light from these properties. Furthermore, light sources are already present on the proposed project site from the street lighting and existing buildings. The courthouse security lighting will not be substantially different from the nearby multi-tenant building east of the proposed project site, thus it will not be a source of substantial light. Implementation of these measures and other LEED guidelines will reduce both the generation of exterior light and the potential for light trespass to affect off-site areas. Because the proposed project will comply with LEED criteria for reducing light pollution, the AOC concludes that the proposed project will not create a new source of substantial light that will adversely affect day- or night-time views in the area. The proposed project will not add building features such as metallic finishes that generate substantial glare.

Mitigation Measures: No mitigation measures are required.

- e) *Will the project create a new source of substantial shade that will adversely affect the area?*

Less Than Significant Impact. The proposed project will create shade and shadow impacts onto nearby properties during different times of the day. Shade and shadow impacts occur when a structure reduces the amount of sunlight reaching another property. The proposed project site is located in an urban area where nearly all properties are currently impacted by shade and shadows from existing buildings and structures.

Significant shade and shadow impacts occur when a building or other structure substantially reduces natural sunlight on public open spaces, measured on winter solstice (December 21st, when the sun is lowest in the sky); the spring equinox (March 21st, when day and night are approximately equal in length); and the summer solstice (June 21st, when the sun is at its highest point in the sky).

AOC analysts prepared shadow pattern simulations for the proposed project (assuming a 4-story building) for the following dates: December

21st (the winter solstice), September 21st (the fall equinox), and June 21st (the summer solstice). Simulations were prepared for six times during each day: 8:00 am; 10:00 a.m.; 12:00 p.m. (noon); 2:00 p.m.; 4:00 p.m. and 6:00 p.m. Shadow pattern simulation figures are provided in the Solar Study in Appendix B.

As illustrated in the Appendix B Figures, Freeman Park, which is north of the proposed project site, is the only public open space area in the vicinity of the proposed project site that the project may potentially affect by shade or shadows. In addition to Freeman Park, the proposed project has the potential to affect a portion of the light industrial buildings to the west of the project site and the multi-tenant building to the east.

The only time periods assessed during the solar study that represent potential shade or shadow impacts to Freeman Park from the proposed project occur during the winter solstice. During this period, shadows from the proposed project during the 8:00 a.m., 10:00 a.m., and 12:00 p.m. winter solstice times reach the park. The shadow impacts are restricted to the southwest portion of the park (during the 8:00 a.m. time) and to the southern portion of the park; i.e., the park entrance (during the 10:00 a.m., and 12:00 p.m. times). However, shadow impacts will affect only a very minor portion of the park, and will not affect the majority of the park during the times of 10:00 a.m., 12:00 p.m., and 2:00 p.m., which are likely periods of higher park use. The solar study did not model shadows from the proposed project as falling within the park during either the summer solstice or the fall equinox.

Based on the modeling, the new courthouse building will affect only a small portion of the park for a limited duration during the winter solstice time. In addition, the new courthouse will affect a portion of the light industrial warehouse, and parking areas of the multi-tenant building and Woodland Joint Unified District offices to the east for a limited period during the summer solstice and fall equinox times. Based on this analysis, the AOC concludes that implementation of the proposed project will lead to less-than significant shade and shadow impacts upon Freeman Park and adjacent properties.

4.2 AGRICULTURAL AND FOREST RESOURCES

- a) *Will the project 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. According to the Farmland Mapping and Monitoring Program of the California Department of Conservation, Division of Land Resource Protection (see Yolo County General Plan, *Yolo County Important Farmland 2006* map), the proposed project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The proposed project site is located within the Urban and Built-Up Land designated areas and surrounded by land developed for office, residential, industrial, and governmental uses. Therefore, the proposed project will not result in impacts to farmland or result in any new or more significant impacts to agricultural resources.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. The proposed project site is in an area designated in the General Plan as Central Commercial (see General Plan Figure 1-4, *General Plan Land Use Diagram*), and zoned on the *City of Woodland Zoning Map* as Central Business District (available at: <http://www.cityofwoodland.org/gov/depts/cd/engineering/development/doc.asp>). These areas are not set aside for agricultural uses, and are not applicable under a Williamson Act contract (see General Plan Figure 1-7 *Status of Williamson Act Property*; available at :). Therefore, the proposed project will have no impact on agricultural uses or a Williamson Act contract.

Mitigation Measures: No mitigation measures are required.

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

No Impact. As previously discussed, the proposed project site is in an area designated in the General Plan as Central Commercial, and zoned as Central Business District. The development of the new courthouse will not conflict with existing zoning for or cause rezoning of forest land. Therefore, the proposed project will have no impact in this regard.

Mitigation Measures: No mitigation measures are required.

- d) *Will the project result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. See Response 4.2 (c).

Mitigation Measures: No mitigation measures are required.

- e) *Will the project 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. The proposed project is consistent with the General Plan and does not involve any changes to the existing environment that could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. The development of the new courthouse will not result in a secondary impact resulting in conversion of farmland in the city. Therefore, the proposed project will not result in the conversion of farmland to non-agricultural uses or conversion of forest land to non-forest use.

Mitigation Measures: No mitigation measures are required.

4.3

AIR QUALITY

The proposed project site is located in the Sacramento Valley, which is part of the Sacramento Valley Air Basin. The Yolo-Solano Air Quality Management District (YSAQMD) along with eight other air quality management districts has responsibility for ensuring that the Sacramento Valley Air Basin attains and maintains compliance with federal and state ambient air quality standards. In particular, the proposed project site is located within the jurisdiction of the YSAQMD. The region is currently in nonattainment with the federal 8-hour ozone standard, state 8-hour and 1-hour ozone standards, and the state annual arithmetic mean and 24-hour standards for particulate matter smaller than 10 microns in aerodynamic diameter (PM₁₀). The attainment status with the federal 24-hour PM₁₀ and 1-hour and 8-hour carbon monoxide standards are unclassified. The federal 24-hour particulate matter smaller than 2.5 microns in diameter (PM_{2.5}) standard was lowered from 65 micrograms per cubic meter (µg/m³) to 35 µg/m³ in 2006 and, as a result, the region is in partial nonattainment of the federal 24-hour PM_{2.5} standard. The proposed project site lies within the nonattainment area. The area has an air quality plan that addresses the attainment of the ozone standards (YSAQMD

1992) and has signed a rate of progress plan, the *Sacramento Regional Nonattainment Plan*, prepared by the Sacramento Metropolitan Air Quality Management District with input by the YSAQMD. (*Sacramento Regional Non-Attainment Plan*, 2006).

- a) Will the project conflict with or obstruct implementation of the applicable air quality plan due to construction?

Potentially Significant Impact Unless Mitigated. The proposed project will not significantly conflict with or obstruct the implementation of the ozone air quality plan. Construction of the proposed project will generate short-term emissions of ozone precursors, PM_{2.5}, and PM₁₀ through the use of construction equipment that burns fossil fuels such as backhoes, generators, and diesel pile-driving hammers. According to the *Sacramento Regional Non-Attainment Plan*, Table 5-1, ozone precursors emitted from construction equipment are included in the emission inventory that forms the basis for the air quality plans. Therefore, ozone precursor emissions from typical construction activities are not expected to impede attainment of the ozone standards.

According to the YSAQMD *Yolo-Solano Handbook for Assessing and Mitigating Air Quality Impacts*, for PM₁₀ emissions, “actual pounds per day of dust generated by proposed project construction can be calculated with an urban air pollution emission modeling software, such as URBEMIS. However, even projects not exceeding district PM thresholds should implement best management practices to reduce dust emissions and avoid localized health impacts” (YSAQMD 2007). YSAQMD considers construction activities that generate more than 80 pounds per day of PM₁₀ as having a significant impact on air quality. During construction, the major source of PM₁₀ would be from fugitive dust emissions during ground-disturbance activities. URBEMIS assumes an average emission rate of 20 pounds per acre disturbed per day. The site covers 3.75 acres, therefore assuming conservatively that the total site undergoes grading in one day, the total daily fugitive dust emission is estimated to be 75 pounds per day, below the 80 pounds per day threshold. The implementation of best management measures identified in the *Yolo-Solano Handbook for Assessing and Mitigating Air Quality Impacts* would minimize emissions during construction (e.g., fugitive dust emission would be reduced by at least 50 percent). These measures are listed below (Air Quality Measures 1 through 5).

Mitigation Measures: The following mitigation measures, as recommended in the YSAQMD *Yolo-Solano Handbook for Assessing and*

Mitigating Air Quality Impacts will reduce PM₁₀ (including PM_{2.5}) impacts to less than significant levels:

AIR QUALITY 1

When weather conditions promote potential generation of fugitive dust, the AOC will control dust emissions by stabilizing all disturbed areas (including spoil piles) that are not being actively utilized for construction purposes. Construction personnel will use water applications, chemical stabilizers or suppressants, tarps, or other suitable covers or vegetative ground covers for dust control.

AIR QUALITY 2

If construction operations transport materials off the proposed project site, the AOC shall ensure that all materials are covered or effectively wetted to limit visible dust emissions. The AOC shall also ensure that transport containers have at least 2 feet of freeboard space from the top of the container.

AIR QUALITY 3

Construction personnel will install and maintain a track out control device or utilize a carryout and track out prevention procedure that achieves an equivalent or greater level of control. Construction personnel will remove track out material at the end of each workday.

AIR QUALITY 4

If construction operations carry visible soil material onto public streets, construction personnel will sweep all paved construction, parking, and staging areas daily with water sweepers.

AIR QUALITY 5

Construction personnel will limit idling of all diesel engines to less than 5 minutes unless such idling is necessary to accomplish the work for which the equipment is designed. Construction personnel will ensure that equipment is maintained properly.

- b) *Will the project conflict with or obstruct implementation of the applicable air quality plan due to courthouse operations and maintenance?*

Less-Than-Significant Impact. The region has an air quality plan for attainment of the ozone standard. In addition, YSAQMD is required to list particulate matter control measures it considers cost-effective and develop a schedule for their implementation.

As part of the proposed project, the AOC will construct a courthouse where an existing parking lot, vacant lot, pump house and storage sheds, towing facility, furniture refinishing shop, and art galleries are located. The proposed project will include existing traffic trips already generated by seven current courthouse facilities in the Project vicinity that will be closed with this project as well as some new trips due to relocation of traffic to the project site. The proposed project anticipates there to be no net change in number of vehicle trips per day as discussed in Section 4.15.

The *Yolo-Solano Handbook for Assessing and Mitigating Air Quality Impacts* specifies that (1) ozone precursors, which include nitrogen oxides, reactive organic gases, and PM₁₀, are of concern when examining operational emissions and (2) that an increase of 10 tons per year of ozone precursors or 80 pounds per day of PM₁₀ will be considered a significant impact. As presented in Appendix C, the *Yolo-Solano Handbook for Assessing and Mitigating Air Quality Impacts* shows that ozone precursor and PM₁₀ emissions are generally considered less than significant if the proposed project size does not exceed 185,000 square feet for a government civic center building, which includes the emissions generated from increased vehicle trips. As discussed in Section 1, the AOC estimates that the proposed project size will be 141,000 square feet, which is well below the District's threshold for ozone precursors and PM₁₀. Therefore, the associated ozone precursors and PM₁₀ from operational sources will not significantly impede the attainment or maintenance of the ozone PM₁₀ standards, and the proposed project's impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

- c) *Will the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Potentially Significant Impact Unless Mitigated. Construction of the proposed project will result in short-term emissions of criteria pollutants. As stated previously in part (a) of this section, the emissions of ozone precursors, PM_{2.5}, and PM₁₀ from construction activity will not be

expected to impede the attainment or maintenance of the ozone, PM_{2.5}, or PM₁₀ standards with appropriate mitigation measures. Construction activities may result in a temporary increase in localized concentrations of PM₁₀ (which includes PM_{2.5}) that may impact nearby sensitive receptors (e.g., nearby residences). PM₁₀ is primarily generated through demolition and ground-disturbance activities, such as grading and vehicles traveling on paved and unpaved roads. These PM₁₀ impacts can be reduced to less-than-significant levels by applying the mitigation measures identified in part (a).

While the proposed project will bring new vehicle trips to the project site, on balance, the effects on vehicle trips to the region is not expected to change appreciably because (1) the pool of individuals traveling to the project site will be comparable; (2) these trips will be diverted from other court-related destinations in the area; (3) it is anticipated that there will be no net increase in the number of new trips; and (4) any county staff increases to the vacated court facilities will be de minimis. After construction, the small increase in vehicle emissions is not expected to result in significant impacts to attainment of any air quality standards. As discussed in part (b) of this section, the increase in ozone precursor emissions will not likely significantly impact the attainment of ozone standards. Also, at nearby intersections, the additional vehicles may increase local carbon monoxide concentrations, which are not only affected by the number of vehicles, but also by the level of congestion. Congestion at intersections can be characterized by the level of service. "Level of service" (LOS) is a qualitative description of intersection operations and is reported using an "A" through "F" rating system, with "A" indicating little or no delay and "F" indicating excessive delay. However, according to the *Yolo-Solano Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD 2007), violations of the carbon monoxide standard are not expected at intersections where the level of service with the proposed project is "D" or better.

As described in Section 4.16, the level of service is predicted to be "C" or better at the nearby intersections analyzed with the exception of the 4th Street and Main Street, and 6th Street and Main Street intersections. The northbound and southbound approaches of the intersection at 4th Street and Main Street have an existing LOS of "F" during the AM and PM peak hours. Both approaches of the intersection are projected to have a base LOS of "F" (with the project) with no change in traffic delay during the AM peak hour, and a decrease in delay during the PM peak hour. The southbound approach of the intersection at 6th Street and Main Street has an existing LOS of "F" during the PM peak hour and is projected to have a

base LOS of “D” during the AM peak hour and of “F” during the PM peak hour. However, the overall LOS ratings of both intersections are expected to achieve an LOS rating better than the current “F” rating.

Mitigation Measures: Implement mitigation measures AIR QUALITY 1 through AIR QUALITY 5.

- d) *Will the project result in a cumulative considerable net increase of any criteria pollutant for which the project region has a non-attainment status under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

Potentially Significant Impact Unless Mitigated. The region currently has a non-attainment status with the federal and state ozone standard, federal PM_{2.5} standard, and state PM₁₀ standard.

As discussed in parts (a) and (b) of this section, the proposed project by itself is not expected to have a significant impact on nonattainment pollutants with the appropriate mitigation measures. However, the slight increase in emissions represented by the proposed project will cumulatively add to the emissions from existing and future development in the region. The YSAQMD CEQA thresholds account for future development, and the proposed project will also be consistent with the land-use designation of the Woodland General Plan. Considering the consistency with the General Plan and the expected less-than-significant increase in emissions associated with the proposed project as described in parts (a) and (b), the cumulative impacts are anticipated to be less than significant with the proposed mitigation measures described below.

Mitigation Measures: Implement mitigation measures AIR QUALITY 1 through AIR QUALITY 5.

- e) *Will the project expose sensitive receptors to substantial pollutant concentrations?*

Potentially Significant Impact Unless Mitigated. As defined by the YSAQMD’s *Yolo-Solano Handbook for Assessing and Mitigating Air Quality Impacts*, sensitive receptors pertain to “a location where human populations, especially children, seniors, or sick persons are found, and there is reasonable expectation of continuous human exposure according to the averaging period for the ambient air quality standards.” The proposed project is located near residences to the southwest and a motel (Budget Inn) to the northwest that could house sensitive receptors. Of

particular concern to nearby sensitive receptors are PM₁₀, PM_{2.5}, and carbon monoxide concentrations.

During construction, the proposed project may result in an increase in PM₁₀ and PM_{2.5} concentrations for nearby sensitive receptors. The closest sensitive receptors to the proposed project site will be (1) the motel to the northeast, approximately 100 feet from the site; and (2) the residences to the southwest, approximately 100 feet from the site. These receptors will receive the greatest impacts from construction-related activities.

According to the *Handbook for Assessing and Mitigating Air Quality Impacts*, application of the mitigation measures identified in part (a) above will reduce construction-related emissions to a level that will be less than significant.

Also, after construction, local carbon monoxide concentrations may increase at nearby intersections. As discussed in parts (b) and (c) herein, with the minimal increase in vehicles and a level of service equal to or greater than C, with the exception of the two aforementioned intersections (as shown in Section 4.16), the congestion will not likely result in significant impacts to nearby sensitive receptors.

Operations impacts will be less than significant; however, mitigation measures below will be needed to reduce construction impacts to less than significant.

Mitigation Measures: Implement mitigation measures AIR QUALITY 1 through AIR QUALITY 5.

f) *Will the project create objectionable odors affecting a substantial number of people?*

Less-Than-Significant Impact. During construction, odors may be generated from the exhaust of diesel-powered equipment. The odors, however, will be temporary in nature and are not expected to significantly affect a substantial number of people. Once the proposed project is constructed, no new significant sources of odors will be generated. Therefore, the overall impacts from odors will be less than significant.

Mitigation Measures: No mitigation measures are required.

4.4 **BIOLOGICAL RESOURCES**

- a) *Will the project have a substantial adverse effect 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 United States Fish and Wildlife Service?*

No Impact. The proposed project site is made up of six contiguous parcels. The northern portion of the site contains undeveloped parcels with gravel undercover, while the southern portion of the proposed project site contains developed parcels with a well/pump house, office structures, radio room and tower, storage sheds, towing facility, furniture refinishing shop and art galleries. Mature landscape trees (e.g., beech [*Fagus ssp.*], willow [*Salix spp.*], and sycamore [*Plantus occidentalis*]) occur on the proposed project site and along the western perimeter of the site.

According to the General Plan (*Chapter 7, Environmental Resources*), natural habitats in and around Woodland include Willow Slough, riparian areas, alkali sinks, and natural oaks. The proposed project site is surrounded by land developed for commercial, office, and public uses that is not suitable to support any candidate, sensitive, or special status species.

A query of the California National Diversity Database, updated 7 January 2010, identified no candidate, sensitive, or special status species. No special status species are known to occur on the proposed project site or in the immediate area (see Appendix D). Therefore the proposed project is expected to have no impact on special status species.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project 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 United States Fish and Wildlife Service?*

No Impact. According to the *Draft Yolo County Habitat Conservation Plan (HCP)*, riparian habitat in the city occurs as alkali sinks southeast of the city (approximately 3 miles from the proposed project site) and Willow Slough (approximately 4 miles southeast of the proposed project site).

As previously discussed, the proposed project site consists of gravel-covered undeveloped parcels and developed parcels with built structures in an area designated for commercial, office, and public uses. As such, no

riparian areas or other sensitive natural community has been identified on or in the vicinity of the proposed project site. Therefore, the proposed project will have no impact on riparian habitat or other sensitive natural community.

Mitigation Measures: No mitigation measures are required.

- c) *Will the project 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. As previously mentioned, no riparian habitat or other sensitive natural community (including wetlands) has been identified on or in the vicinity of the proposed project site. Therefore the proposed project will have no impact on wetlands.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Based on review of the California National Diversity Database, no wildlife nursery sites have been identified at the site or within a 0.5-mile radius of the proposed project site. As noted previously, the site is situated among developed uses. Therefore, the proposed project will not interfere with the movement of any wildlife species, and the AOC concludes that the proposed project will have no impact.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. As previously discussed, the proposed project site is bordered by sidewalks with mature landscape trees. The AOC plans to maintain existing trees on the proposed project site where feasible, but construction operations may remove some of the landscape trees from around the site. If construction personnel remove trees, the AOC will replace any and all trees removed from the site.

With implementation of the plans described above, the AOC concludes that impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Yolo County is undertaking a comprehensive countywide Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) to address the effects of growth throughout the county on biological resources. The HCP/NCCP recognizes agriculture and wetlands as the two main habitat areas in the City of Woodland Planning area (see Yolo County General Plan EIR Figure 7-1 *Habitat Types within the Woodland Planning Area*). Based on the review of this map, the proposed project site does not occur within the areas mapped as containing sensitive habitat types. The AOC therefore concludes that the proposed project will not conflict with the provisions of the HCP/NCCP.

Mitigation Measures: No mitigation measures are required.

4.5 CULTURAL RESOURCES

- a) *Will the project cause a substantial adverse change in the significance of a historic resource as defined in Public Resources Code Section 15064.5?*

Less-Than-Significant Impact. The proposed project includes the demolition of existing structures on the southern portion of the proposed project site. Based on a Phase I ESA conducted for the site (GEOCON 2009), and as confirmed by ERM's site visit, the following permanent structures exist on the site:

- 445 5th Street – Two office structures, four-storage sheds, a radio room, and tower storage. The existing well and pump house will be abandoned and sealed on site.
- 1011 Lincoln Avenue: A single-story brick structure used as an office.
- 1021 Lincoln Avenue: A single-story brick and concrete, multi-tenant structure, and a wood-framed and corrugated metal siding storage shed.

The City of Woodland General Plan Historic Preservation Element does not list the current site structures as city-designated historic resources.

To preserve historic resources, the State Historic Resources Committee conducts the Historic Resources Inventory and maintains the California Register of Historic Resources identifying historic landmarks and points of interest. The statewide Historic Resources Inventory database is included in the California Historic Research Information System (CHRIS) and is maintained by the Office of Historic Preservation. The Northwest Information Center (Information Center) maintains cultural and archaeological records for the Woodland area. The Information Center conducted a search for the Woodland area to determine if any cultural resources exist on and in the immediate vicinity of the project site. In a letter dated 22 January 22, 2010, the Information Center concluded that there were no recorded sites with the Woodland planning area. The historic courthouse, which the Superior Court is vacating, will continue to be occupied by the county, and therefore there is no impact on this resource.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Public Resources Code Section 15064.5?*

Potentially Significant Impact Unless Mitigated. The project site has been heavily disturbed and graded in the past. The possibility of the presence of archaeological resources in the Woodland area is considered strongest in agricultural areas outside the project area that have not been surveyed and in the Cache Creek area.

The Information Center conducted a search for the Woodland area to determine if any archaeological resources exist on and in the immediate vicinity of the project site. In a letter dated 22 January 2010, the Information Center concluded that there were no recorded sites with the Woodland planning area. However, the Information Center indicated that there is a moderate possibility of Native American cultural resources in the Woodland area.

Mitigation Measures: The following mitigation measure will reduce archaeological resources impacts to less than significant levels:

CULTURAL RESOURCES 1

If archaeological resources are encountered during construction of the proposed project, the AOC's contractor will halt construction in that area of the site until a qualified archaeologist performs an evaluation of the find. If the archaeologist determines the find to be significant, the area of discovery shall be protected from disturbance to allow qualified archaeologists and appropriate officials, in consultation with the State Historical Preservation Officer, to determine appropriate measures for conserving the resource.

- c) *Will the project disturb any human remains, including those interred outside of formal cemeteries?*

Less-Than-Significant Impact. The project site has been heavily disturbed and graded in the past. As a result identification of resources from a surface reconnaissance is unlikely. The AOC has no information that indicates discovery of human remains during ground-disturbing activities is likely to occur. Therefore, the AOC concludes that the proposed project will not cause significant impacts related the disturbance of human remains. If the AOC's construction contractor encounters potential human remains during construction, the construction contractor will contact the County Coroner to comply with the procedures for the unanticipated discovery of human remains delineated in Public Resources Code 5097.

Mitigation Measures: No mitigation measures are required.

4.6 **GEOLOGY AND SOILS**

- a) *Will the project expose people or structures to potential substantial adverse effects involving rupture of a known earthquake fault?*

Less-Than-Significant Impact. Surface rupture is considered most likely to occur along an active or potentially major fault trace. According to the *USGS California-Nevada Active Faults Map* (United States Geological Survey [USGS] 2008) (*Alquist-Priolo Earthquake Zones, 2002 California Fault Parameters – San Francisco Bay Region*), the site does not lie in an Alquist-Priolo Earthquake Zone. The only fault in the County that has been identified by the California Geologic Survey to be active, or potentially active, and subject to surface rupture (i.e., delineated as an Alquist-Priolo Earthquake Fault zone) is the Huntington Creek Fault, 34 miles northwest of the proposed project site (Yolo County 2009). The Huntington Creek

Fault is located in the northwest corner of the County, approximately 34 miles northwest of the proposed project site.

Given the distance of mapped active faults from the proposed project site, the probability of ground rupture at the proposed project site is highly unlikely. Therefore, it is unlikely that the proposed project will expose people or structures to substantial adverse effects from ground rupture, and the AOC concludes that the proposed project's impact will be less than significant.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project expose people or structures to potential substantial adverse effects involving strong seismic ground-shaking?*

Less-Than-Significant Impact. Ground-shaking intensity is measured on the Modified Mercalli Scale, which ranges from I (not felt) to XII (widespread devastation) experienced by people, structures, and earth materials. The degree of shaking an earthquake will have on the proposed project site and associated structures depends on a number of factors such as the location of the fault, distance to the epicenter, size of the earthquake, the geology of the area, and the quality of building construction.

As previously discussed, the closest active fault is approximately 34 miles northwest of the proposed project site and shown in *USGS California-Nevada Active Faults Map* (USGS 2008). The Woodland area is mapped as Zone 3 on the Seismic Risk Map of the United States for structure safety, indicating that although the seismic potential is low, there is still the possibility for major damage to occur from a nearby moderate to major earthquake on any of the following fault systems: Antioch (48 miles south), Calaveras (55 miles south), Concord (47 miles southwest), Green Valley (38 southwest), Hayward (58 miles southwest), Healdsburg - Rodgers Creek (50 miles southwest), and San Andreas (70 miles west).

Most of Woodland is located on alluvium deposits of varying depths, which can increase the potential for ground-shaking damage. In the event of an earthquake, Woodland will experience the ground-shaking effects, although the risks associated with this hazard in the Woodland area are low based on historical evidence of earthquake effects.

A maximum expected earthquake intensity map developed by the California Division of Mines shows that Woodland is in a low-severity

zone. The area could potentially experience ground shaking intensities of up to VI Mercalli intensity (i.e., ranging from considerable damage in poorly designed or constructed buildings to negligible damage in buildings of good design and construction) to VIII Mercalli intensity (ranging from great damage in poorly designed or constructed buildings to slight damage in specially designed structures) (Yolo County 2009).

The AOC will conduct a geotechnical investigation of the proposed project site to assess the ground's capability to withstand anticipated ground-shaking and other geological hazards. The proposed building will also be designed to meet the California Building Code's minimum requirements to mitigate seismic shaking and other geological hazards. Therefore the AOC concludes that the proposed project impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

- c) *Will the project expose people or structures to potential substantial adverse effects involving seismic-related ground failure, including subsidence or liquefaction-induced lateral spreading?*

Less-Than-Significant Impact. Liquefaction occurs when saturated, loose, fine-grained sediment temporarily transforms to a fluid-like state due to strong earthquake ground-shaking of Modified Mercalli intensity of VII or greater. Liquefaction is likely to occur in deposits of weak saturated alluvium or similar deposits of artificial fill.

The risk of liquefaction in the Woodland area is considered to be relatively low, based on the historical evidence of a lack of high ground-shaking intensities needed to cause liquefaction. Liquefaction potential within Woodland exists in low-lying areas composed of unconsolidated, saturated, clay-free sands and silts. According to the Web Soil Survey by the National Resources Conservation Service (NRCS 2009), the proposed project site is underlain Reiff soil series. The Reiff series consists of well-drained and very fine sandy loams on alluvium fans.

As part of the proposed project, the AOC will conduct a geotechnical investigation of the proposed project site to assess the ground's capability to withstand anticipated ground failure and other geological hazards. Based on the geotechnical report's recommendations, the AOC will include design measures to meet the California Building Code's minimum requirements to mitigate ground failure and other geological hazards. Therefore, the AOC concludes that the proposed project's impact will be less than significant.

Mitigation Measures: No mitigation measures are required.

d) *Will the project expose people or structures to potential substantial adverse effects involving landslides?*

No Impact. Areas that are susceptible to land sliding include steep slopes underlain by weak bedrock. The proposed project site is in a generally flat area with a 0 to 1 percent slope and no unusual geographical features. (NRCS 2009). The Yolo County General Plan Landslide Susceptibility Map of Yolo County shows that the Woodland area has a low potential for landslides (Yolo County 2009). Therefore, the proposed project would have no impact regarding landslide potential.

e) *Will the project result in substantial soil erosion or the loss of topsoil?*

Less-Than-Significant Impact. The proposed project will involve extensive site preparation and excavation prior to construction. These activities may temporarily expose soils to erosion potential. The proposed project site has flat terrain with a low potential for soil erosion.

Construction activities are expected to occur for a limited time, beginning in the fall of 2011 and ending in late summer 2013 (an approximately 24-month period). The AOC will require its construction contractor to prepare a Storm Water Pollution Prevention Plan, obtain Central Valley RWQCB approval, and implement and maintain the plan. The plan will include soil erosion BMPs to limit soil erosion, particularly during the excavation and grading of soil for the proposed project. Therefore, the AOC expects that the proposed project will not lead to substantial soil erosion or loss of topsoil, and these impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

f) *Will the project expose people or structures to potential substantial adverse effects involving expansive soil, as defined in Table 18-1-B of the California Building Code (2001)?*

Less-Than-Significant Impact. Expansive soils are soils that swell or shrink when they absorb or lose water. This reaction can cause cracking, tilting, and, occasionally, collapse of foundations or structures, and cause structural damage to buildings and infrastructure may occur if the potentially expansive soils were not considered in building design and during construction.

The Expansive Soils Map of Yolo County (Yolo County, 2009) shows that the majority of the Woodland area, (including the area of the proposed project site) has a low expansive soil potential (Yolo County, 2009).

As stated in Section 2.6, the AOC will conduct a geotechnical investigation of the proposed project site to assess the site's expansive soil risk and other geological hazards. This investigation will include soil expansion tests performed by a certified Soils Engineer to evaluate the expansion potential of the soils. Based on the resulting recommendations, the AOC will include design measures to meet the California Building Code's minimum requirements to mitigate expansive soil and other geological hazards. Therefore, the AOC concludes that the proposed project's impact will be less than significant.

Mitigation Measures: No mitigation measures are required.

- g) *Will the project 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 project does not intend to use septic tanks or alternative waste disposal systems. Sanitary sewer services in the area are currently supplied by the city. No further analysis is required.

Mitigation Measures: No mitigation measures are required.

- h) *Will the project destroy a unique paleontological resource or site or unique geologic feature?*

Potentially Significant Impact Unless Mitigated. The proposed project site consists of a mixture of vacant undeveloped and developed commercial property. Unique geologic features are not common in Yolo County, and the County has not developed an inventory of unique geologic features (Yolo County 2009). According to the General Plan Background Report (City of Woodland 1996), a search of the records of recorded prehistoric sites for Yolo County showed no recorded sites within the Woodland area. The lack of records of prehistoric resources does not rule out their existence, either at unknown springs or possibly along the earlier shores of Cache and Putah Creeks.

Mitigation Measures: The following mitigation measure will reduce paleontological resources impacts to a less than significant level:

GEOLOGY AND SOILS 1

If paleontological resources are encountered during construction, the AOC's contractor will halt construction in that area of the site and immediately notify the County. If paleontological resources are determined to be significant, a qualified professional paleontologist shall be retained to evaluate the finds and recommend appropriate mitigation measures.

4.7 GREENHOUSE GAS EMISSIONS

a) Will the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less-Than-Significant Impact. There are currently no formally approved thresholds for measuring the significance of a project's contribution to greenhouse gas (GHG) emissions. Nevertheless, the YSAQMD *Yolo-Solano Handbook for Assessing and Mitigating Air Quality Impacts* recommends that GHG emissions at least be discussed qualitatively.

For this project there are three components that were evaluated regarding potential impacts to greenhouse gas emissions:

- Impacts associated with construction activities;
- Impacts associated with changed traffic patterns; and
- Impacts associated with new courthouse operations as compared to existing operations.

Construction activities are short term in nature, and are not expected to appreciably increase greenhouse gas emissions in the long term; employment of the mitigation measures discussed in Section 3.3 will lessen the potential for impacts in this regard. While the proposed project will bring new vehicle trips to the project site, on balance, the effects on vehicle trips to the region is not expected to change appreciably because (1) the pool of individuals traveling to the project site will be comparable; (2) these trips will be diverted from other court-related destinations in the area; (3) it is anticipated that there will be no net increase in the number of new trips; and (4) any county staff increases to the vacated court facilities will be de minimis. While the overall square footage of the proposed courthouse is greater than that of the combined existing facilities, the LEED design of the new structure is expected to provide much greater energy efficiency than in the existing buildings, and should partially offset impacts from the increased square footage. For these reasons, effects on

total GHG emissions from the proposed project are expected to be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less-Than-Significant Impact. In 2006, the State Legislature passed Assembly Bill 32 that charged the California Air Resources Board (CARB) to develop regulations on how the state will address global climate change. CARB's Scoping Plan (CARB 2008a) presented a comprehensive set of actions designed to reduce overall carbon emissions in California, improve California's environment, reduce dependence on oil, diversify California's energy sources, save energy, and enhance public health while creating new jobs and enhancing the growth in California's economy. For State of California agencies, the Draft Scoping Plan emphasized the state's role of setting an example to meet improved energy standards for new state buildings. CARB concluded that the State of California should set an example by requiring all new state buildings to exceed existing energy standards and meet nationally recognized building sustainability standards such as LEED Gold Certified ratings. Currently, the Green Building Order signed by Governor Schwarzenegger (State of California 2004) requires new buildings to be built to the Silver or higher standard. On 17 July 2008, the California Building Standards Commission adopted green building standards, amending the 2007 California Green Building Standards Code, Title 24 of the CCR, Part 11.

The AOC's proposed design will incorporate features that conform to LEED Silver certification, which complies with the California Building Standards Commission's green building standards in the 2007 California Green Building Standards Code, Title 24 of the CCR, Part 11. Furthermore, by consolidating courthouse operations, traffic associated with court-related operations in the region should also be more efficient, thereby reducing emissions.

The AOC therefore concludes that the proposed project is consistent with the state's plan for reducing GHG emissions and will have less-than-significant impacts on GHG emissions.

Mitigation Measures: No mitigation measures are required.

4.8 HAZARDS AND HAZARDOUS MATERIALS

- a) *Will the project create a significant hazard to the public or the environment through routine transport, use, emission, or disposal, or accidental release of hazardous materials?*

Potentially Significant Impact Unless Mitigated. The proposed project will involve the construction of a new courthouse facility that will not require the routine transport, use, emission, or disposal of hazardous materials in construction or operational activities. The use of hazardous materials will be limited to cleaning products; chemicals such as fuel, oils, and lubricants used for machinery in the building; and pesticides and herbicides that may be infrequently applied to landscaped areas. At times, hazardous materials may be required as evidence for trials; however, such evidence will be handled in accordance with court policy in order to ensure the safety of employees and the public.

Construction activities will include demolition of structures on the 445 5th Street, 1011 Lincoln Ave, and 1021 Lincoln Ave parcels that were constructed prior to the 1970s. Due to the ages of the buildings and the date of occupancy of parcels, it is likely that asbestos and lead-based paint may be present in the buildings. Asbestos was banned in most friable building materials (spray-applied fireproofing and pipe insulation) in 1978, but the Occupational Safety and Health Administration deems these materials as “presumed asbestos-containing materials” if they are present in pre-1980 buildings (Title 29 of the Code of Federal Regulations, Parts 1910.1001 and 1926.1101). Materials that can be considered presumed asbestos-containing materials include thermal system insulation and surfacing materials (including spray-on ceiling material). In addition, lead-based paint was used widely throughout the interiors and exteriors of buildings prior to 1978, primarily due to its strength and overall durability.

As documented in the Phase I report (GEOCON 2009), at least five underground storage tanks (fuel and waste oil) are currently or were historically present on the Site. The AOC is conducting a Phase II investigation to determine whether there are residual impacts in site soils or groundwater due to historical operations associated with these features.

Due to the potential that hazardous waste, including asbestos and lead-based paint waste, short-term impacts could be generated during the demolition of the buildings.

Mitigation Measures: The following mitigation measures will reduce hazards and hazardous materials impacts to less than significant levels during construction:

HAZARDS AND HAZARDOUS MATERIALS 1

Prior to demolition of the structures, a qualified environmental professional shall evaluate paint that is separated from the building material to determine its proper management, and the AOC's construction contractor will dispose of the materials in the manner determined by the environmental professional and in compliance with all applicable laws.

HAZARDS AND HAZARDOUS MATERIALS 2

Prior to demolition activities, the AOC's construction contractor will have a qualified environmental professional conduct an asbestos survey to determine the presence or absence of asbestos. If asbestos materials are present, the construction contractor will perform asbestos removal by a state-certified asbestos containment contractor in accordance with both the Toxic Substances Control Act, Title 15 of the United States Code, Section 2601 et seq., and Title 2 - Asbestos Hazardous Emergency Response for Handling Asbestos.

HAZARDS AND HAZARDOUS MATERIALS 3

The AOC's contractor documents will require the construction contractor to ensure that a licensed hauler transports hazardous waste for disposal at an appropriate facility in compliance with applicable laws and regulations.

HAZARDS AND HAZARDOUS MATERIALS 4

The AOC or the current property owners will remove the underground storage tanks (USTs) and associated piping in accordance with local and state requirements, prior to or during construction. If subsurface impacts associated with these features are observed, the AOC or the current property owner will take responsibility for cleaning up those impacted materials to the satisfaction of an overseeing regulatory agency, as part of the project approval and construction process.

If significant impacts are observed, the AOC's construction contractor will be required to retain a qualified hazardous materials specialist who will (1) educate construction personnel prior to any construction or earth-disturbing activities of the potential to encounter hazardous materials in those areas; and (2) prepare a Soil Management Plan to present the decision framework for properly managing soils associated with future redevelopment of the proposed courthouse parcel (including general protocols and health and safety measures that the AOC and construction personnel will follow if excavation operations encounter contaminated soil or groundwater). If construction operations discover potential contamination during ground-disturbing activities, excavation work shall stop in that area until the qualified hazardous materials specialist can assess the significance of the potential contamination. The qualified hazardous materials specialist will evaluate the discovery, determine its significance, and provide proper management recommendations. The qualified hazardous materials specialist shall summarize related findings in a report prepared to current professional standards.

- b) *Will the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and will it create a significant hazard to the public or the environment?*

Potentially Significant Impact Unless Mitigated. The proposed project site is not included on a list of hazardous materials sites provided by the United States Environmental Protection Agency and the California Department of Toxic Substances Control. In addition, Environmental Data Resources, Inc. provided a recent database search for the proposed project site, which is provided in a Phase I ESA conducted for the site in June 2009 (GEOCON 2009).

The site was listed in the UST database (a facility Inventory Database that contains a listing of active UST facilities gathered from local regulatory authorities), and Historic UST database (a database that lists facilities that have historically operated USTs) as follows:

- The Fifth Street Corporation on the 445 5th Street parcel (Parcel 4) is listed on the Historical UST database for a 1,000-gallon diesel UST installed in 1963. No other information is provided regarding the UST. The Phase I recommended that a Phase II ESA be performed to assess soil and groundwater in the locations of geophysical anomalies (areas where subsurface features may be or may have been present).

- The Tom Fields facility on 1011 Lincoln Avenue site parcel (Parcel 5) is listed on the UST database for the permitted closure of a 500-gallon single-walled petroleum UST. No other information regarding the closure is provided in the database listing. Inclusion on this database does not indicate or imply that a release occurred from the UST. According to the Phase I, two USTs were removed from the 1011 Lincoln Avenue parcel on 08 March 2000 under permit from the Yolo County Health Department, Environmental Health Division (YCEHD). Tank 1 was 1,000 gallons and located in the northeastern corner of the 1011 Lincoln Avenue Parcel, and Tank 2 was 500 gallons, and approximately 25 feet south of Tank 1. Inspection comments for Tank 2 state, "hole in tank rusted through" and "no evidence of contamination in soil." Laboratory analysis results for soil samples collected from stockpiles and the excavation were reported to be non-detect for total petroleum hydrocarbons as gasoline, and benzene, toluene, ethylbenzene, and xylenes.
- The Bob Garner facility on the 1021 Lincoln Avenue parcel (Parcel 6) is listed on the UST database for the permitted closure of a 500-gallon, single-walled petroleum UST. No other information regarding this UST and its removal was found in the YCEHD files.

Based on the active status of businesses at the 1011 Lincoln Avenue and 1012 Lincoln Avenue parcels, and case closure status by the YCEHD, the Phase I recommended preparation of a Soil Management Plan outlining procedures for managing soil during construction activities on all the parcels in the event that impacted soil is encountered during construction during construction grading or excavation.

In addition to these listed USTs, according to the Phase I ESA, interviews with site owners of the 1000-1022 Main Street parcel (Parcel 1), both the 1000 Main Street (western) half of the parcel and the 1022 Main Street (eastern) half of the parcel contained gas stations. Records reviewed (i.e. an underground tank abandonment inspection from the YCEHD dated June 13, 1989) certified the satisfactory completion of the UST removal. The inspection report concluded that "No further assessment or remediation required by Yolo County." No information was available to determine the status of the USTs and other subsurface equipment such as oil, water separators, piping, and sumps, related to the former gas station at 1000 Main Street (northwest corner of the parcel).

As part of the proposed project, the AOC will conduct a Phase II investigation of the proposed project site as recommended in the Phase I

ESA to assess the impact of petroleum hydrocarbons, in soil and groundwater, and the potential presence of USTs. Implementation of mitigation measure HAZARDS AND HAZARDOUS MATERIALS 4 described above will ensure that UST impacts, if any, are reduced to less than significant.

Mitigation Measures: Implement mitigation measure HAZARDS AND HAZARDOUS MATERIALS 4.

- c) *For a project located within an airport land-use plan, within 2 miles of a public airport or public use airport, or within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?*

No Impact. The proposed project site is not in the vicinity of an airstrip (as observed during the site visit) or within 2 miles of any airport. There are currently three public airports within the vicinity of the proposed project site, the Watts-Woodland Airport, Medlock Field, and Yolo County Airport. The Watts-Woodland Airport, located at the corner of County Road 94b and Highway 16, is approximately 5 miles directly west of the proposed project site. Medlock Field located at the corner of County Roads 101 and 27, is approximately 4 miles southeast of the proposed project site. Yolo County Airport, located at the corner of County Roads 29 and 95, is approximately 8 miles southwest of the proposed project. The proposed project site does not fall within either airport land-use plan, and will have no impact on the safety for people residing or working in the proposed project area.

Mitigation Measures: No mitigation measures are required.

- d) *Will the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact. Based on site observations, the nearest fire station is on Court Street, approximately 1,500 feet northwest of the proposed project site, and the nearest police station is on Lincoln Avenue, approximately 50 feet south of the proposed project site.

Given the size of the proposed project and the available room on the proposed project site and adjacent roadways, there are not expected to be impacts on emergency vehicle access in the vicinity of the proposed project site. As standard construction practice, although portions of the adjacent streets may be affected, these streets will not be completely blocked from traffic, and traffic control will be provided by the

construction company. Furthermore, given the availability of emergency services and evacuation routes in various locations around the proposed project site, emergency vehicles will have multiple access routes during an emergency event and will not be obstructed by the proposed project. Therefore, the proposed project will have less than significant impact on emergency response and evacuation.

Mitigation Measures: No mitigation measures are required.

- e) *Will the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires?*

No Impact. The potential for wildland fires is dependent on the vegetation, or surface fuel, that exists in the area. According to the General Plan, the threat of wildland fires resulting from either natural or manmade causes occurs in forest, brush, or grasslands in Woodland is minimal. The proposed project site is in a developed area that is not surrounded by forest, bush, or grassland. The proposed project will therefore have no impacts related to wildland fires.

Mitigation Measures: No mitigation measures are required.

4.9 **HYDROLOGY AND WATER QUALITY**

- a) *Will the project violate any water quality standards or waste discharge requirements?*

Less-Than-Significant Impact. The Central Valley RWQCB regulates waste discharges into waters of the state through the NPDES permit system. Dischargers whose projects result in land disturbance of 1 or more acres of soil are required to obtain coverage under the NPDES permit system by obtaining a General Permit for Discharges of Storm Water Associated with Construction Activity, issued by the RWQCB.

Construction of the proposed project is expected to occur after 1 July 2010, when the new Regional Stormwater NPDES will come into effect. Construction activity such as clearing, grading, and ground disturbances such as stockpiling or excavating will therefore be subject to the new State Water Resources Control Board General Permit Order Number 2009-0009-DWQ.

Under the new Regional Storm Water NPDES Permit, the proposed project will be required to ensure that storm water discharges do not

contain pollutants that cause or contribute to an exceedance of any applicable water quality objective or water quality standard. The proposed project will implement Low Impact Development site design and storm water BMPs to maintain pre-development runoff rates and volumes by using design techniques that infiltrate, filter, store, evaporate, and detain runoff. These practices include the use of bioretention facilities, rain gardens, vegetative swales, rain barrels, and cisterns. Any volume that cannot be addressed using non-structural BMPs will be captured in structural BMPs approved by the RWQCB.

With the implementation of an appropriate NPDES permit under RWQCB oversight, potential water quality impacts from the proposed project will be sufficiently protective of water quality standards and are expected to be less than significant.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater level?*

Less-Than-Significant Impact. Groundwater beneath Carranza's Exxon station at 1123 Main Street, approximately 250 feet northeast of the proposed project site was identified as being approximately 25 to 26 feet below ground surface (bgs) during a groundwater sampling event conducted in December 2008 (ERM 2009). Groundwater flow direction is depicted as being toward the east at a gradient of approximately 0.002.

Groundwater is currently the only source of water supply for the city. According to the General Plan Background Report, groundwater recharge of the aquifer results from rainfall and irrigation water from agricultural lands, and Cache Creek surface water recharge of aquifers in Cache Creek north of the city, infiltrating into the soils. Groundwater travels through the aquifers in a northwest to southeast direction. The proposed project site is in an area designated for development that does not contribute significantly to the recharge of groundwater supplies.

In addition, the proposed project does not involve extraction of groundwater and, therefore, would not deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume. To facilitate construction of the new courthouse, the existing drinking water well (Well #1) will either be designed around and kept in place or will be relocated. In an effort to assist the City, should the

well be relocated, a replacement well will be installed in Freeman Park, immediately to the north of the project site. The existing well has a pumping capacity of 1,700 gpm and serves the downtown area of Woodland as required (i.e. during periods when there is low pressure in the water distribution system for the downtown area).

Mitigation Measures: No mitigation measures are required.

- c) *Will the project substantially alter the existing drainage pattern of the site or area in a manner that will result in substantial erosion or siltation?*

Less-Than-Significant Impact. Based on observations during the site visit on 22 October 2009, the proposed project site has flat terrain with a low potential for soil erosion. The AOC anticipates that new storm drain collection lines may be required to serve the entire proposed project site. These lines will drain the landscape areas, paved areas, and the building roof rain leaders. Water quality regulations will require that the storm water be filtered on site before it can be released into the city's storm drain. This will be accomplished by filtering the storm water through the landscape areas or implementing mechanical treatment devices on the storm drain line outfalls. Also, the AOC will require its construction contractor to prepare a Storm Water Pollution Prevention Plan, obtain RWQCB approval, and implement and maintain the plan. The plan will include soil erosion BMPs to limit soil erosion. Therefore, the AOC expects that the proposed project will not have substantial soil erosion or loss of topsoil, and these impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

- d) *Will the project substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that will result in flooding?*

Less-Than-Significant Impact. As previously stated, runoff from the site will be directed towards the city's storm drain system via existing or new storm drains. Storm water will also be filtered through the landscape areas or by implementing mechanical treatment devices on the storm drain line outfalls. Therefore, the proposed project will not alter existing drainage patterns at the site, nor will it result in increased rates of flooding.

Mitigation Measures: No mitigation measures are required.

- e) *Will the project create or contribute runoff water that will exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?*

Less-Than-Significant Impact. The proposed project proposes an increase in impervious surfaces and will increase the amount of runoff from the site. However, as stated above, the proposed project will adopt Low Impact Development BMPs such as inlet filtration devices to capture potential pollutants from the storm drain runoff and utilize landscape areas and bioretention facilities to reduce the rate of runoff.

With implementation of the practices described above, the AOC concludes that the proposed project will have a less than significant impact on existing storm water capacity.

Mitigation Measures: No mitigation measures are required.

- f) *Will the project otherwise substantially degrade water quality?*

Less-Than-Significant Impact. The proposed project shall provide site drainage facilities to treat runoff as required by the Central Valley RWQCB. The AOC will require its construction contractor to prepare a Storm Water Pollution Prevention Plan, obtain RWQCB approval, and implement and maintain the plan. Any inactive water wells currently on the proposed project site will be properly abandoned in accordance with local and state requirements.

Based on these project requirements, the AOC does not expect the proposed project to create additional impacts that will degrade water quality. Therefore, potential impacts will be less than significant.

Mitigation Measures: No further mitigation measures are required.

- g) *Will the project 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?*

No Impact. Flood zone mapping conducted by the Federal Emergency Management Agency (FEMA) indicates that the proposed project area is not located within the 100-year floodplain (FEMA 2002). Therefore, the proposed project will have no impact with regard to flood hazard areas.

Mitigation Measures: No mitigation measures are required.

- h) *Will the project place structures within a 100-year flood hazard area that will impede or redirect flood flows?*

No Impact. As discussed in item 4.8(g) above, the proposed project site is not located in the 100-year floodplain.

Mitigation Measures: No mitigation measures are required.

- i) *Will the project 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. As shown on the FEMA *Flood Insurance Rate Map*, the proposed project site is not in an area that could be inundated from a breach or overflow event from a nearby body of water, including the Cache Creek Dam, which is approximately 3 miles north of the proposed project site. The AOC concludes that the proposed project will not have a significant impact in this regard.

Mitigation Measures: No mitigation measures are required.

- j) *Will the project expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?*

No Impact. Based on site visit observations and review of aerial photographs, the proposed project site is not near a water body that could potentially create seiche or tsunami hazards. As previously discussed, the nearest water body (Cache Creek) is approximately 3 miles from the proposed project site. Furthermore, given the relatively flat topography of the site and nearby properties, mudflows are not anticipated. The AOC concludes that the proposed project will not have an impact in this regard.

Mitigation Measures: No mitigation is required.

4.10 LAND USE AND PLANNING

- a) *Will the project physically divide an established community?*

Less-Than-Significant Impact. The proposed project site consists of six contiguous parcels approximately 3.75 acres (160,000 square feet). As presented in the General Plan (see General Plan Figure 1-4, *General Plan Land Use Diagram*), the proposed project site is in an area designated as

Central Commercial. This designation provides for professional and administrative offices, and is generally consistent with the proposed land use designation. Surrounding land uses include:

- North: across Main Street, from east to west, Budget Inn, Woodland Toy Library, and Freeman Park;
- East: across 6th Street, a multi-tenant commercial building that currently houses the Superior Court of California Departments 14, 15 and Self Help Center;
- South: across Lincoln Avenue, the City of Woodland Police Station; [residential properties to the southwest](#)³.
- West: across 5th Street, from north to south, Enterprise Rent-A-Car, Colombara's Cabinet and Millworking, and Elfrink Power Equipment.

The nearest residential community is across Lincoln Avenue, approximately 100 feet southwest of the proposed project site. However, because the project is confined to an existing, defined city block, and the parcels in their current condition have already been developed with land uses other than residential, the proposed project will not obstruct existing streets, and will not divide the existing residential community. Therefore, the proposed project will have a less-than-significant impact in this regard.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project 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. Since the AOC is the proposed project's lead agency and is acting for the State of California's Judicial Council, local government land-use planning and zoning regulations do not apply to the proposed courthouse project. Nevertheless, the proposed courthouse project is consistent with the City's General Plan and the parcel's zoning classification. Therefore, the proposed project has no impact.

Mitigation Measures: No mitigation measures are required.

³ Constitutes clarifications made to the draft document in response to a comment received.

4.11 MINERAL RESOURCES

- a) *Will the project result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?*

No Impact. The two mineral resources in the vicinity of the City of Woodland are the aggregate area of Cache Creek (approximately 3 miles from the proposed project site) and 19 gas wells (within 5 miles of city limits). Construction of the new courthouse will have no impact on mineral resources.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project 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 previously discussed in Section 4.11(a), there are no mineral resources in the project vicinity. Therefore, the proposed project will have no impact in this regard.

Mitigation Measures: No mitigation measures are required.

4.12 NOISE

Noise is the term generally given to the “unwanted” aspects of sound and generally characterized in terms of decibels on the A-weighted scale (dBA). Because environmental noise fluctuates over time, most descriptors average the sound level over the time of exposure, and some add “penalties” during the times of day when intrusive sounds will be more disruptive to listeners. The most commonly-used descriptors are:

- **Day-night average sound level (Ldn).** The Ldn is a 24-hour average sound level, but, for the night hours between 10:00 p.m. and 7:00 a.m., 10 dBA is added to the average. This additional 10 dBA accounts for the tendency of people to perceive noise more loudly at night.
- **Community noise equivalent level (CNEL).** The CNEL is similar to the Ldn, except that, in addition to the 10:00 p.m. to 7:00 a.m. 10 dBA penalty, a 5 dBA penalty is applied to noise levels occurring from 7:00 p.m. to 10:00 p.m.

These two descriptors are roughly equivalent in magnitude.

The Woodland Municipal Code contains general limitations on noise in several ordinances, but does not quantify levels that should not be exceeded. For example, the Municipal Code limits construction activity from 6:00 p.m. to 7:00 a.m. on Monday through Saturday and from 6:00 p.m. to 9:00 a.m. on Sunday.

- a) *Will the project produce a substantial temporary increase in ambient noise levels in the project vicinity above levels existing without the project?*

Potentially Significant Impact Unless Mitigated. The proposed project's construction operations will generate substantial noise. Based on prior courthouse construction activities, the project's noise-generating operations may include:

- Demolition of existing structures on the project site with miscellaneous heavy equipment.
- Excavation of the building footprint/foundation may require operation of excavators, loaders, and trucks.
- Trenching operations may occur around the periphery of the proposed courthouse site, and construction personnel may probably utilize jackhammers and backhoes to gain access to existing utilities and prepare alignments for new utilities.
- Foundation operations will occur in the excavated basement area. Foundation operations for the proposed project's tower areas will probably utilize footings, and construction personnel will probably utilize only backhoes for excavation of the footings.
- Assembly of the proposed project's steel frame and installation of its exterior may utilize one or more cranes. Once the construction contractor assembles the building's walls, interior work will generate only minor noise.
- Final grading of the site and installation of driveways, sidewalks, other hard surfaces, and landscaping will occur over most of the site. These operations may require use of backhoe tractors, tractor graders, and concrete trucks.

Adjacent to the proposed project are residential development, commercial and recreational uses, and vacant land. Table 4.12-1 lists nearby government, commercial, and residential buildings and their proximity to the proposed project site.

Table 4.12-1. Location of Nearby Receptors

Building	Address	Approximate Distance (feet) from	
		Proposed Boundary of Proposed Project Site	Proposed Project's Potential Building Site
Enterprise Rental Car	928 Main Street	90	170
Re/Max	927 Main Street	105	210
Freeman Park	1001 Main Street	85	115
Woodland Toy Library	1017 Main Street	150	200
Woodland United Way	1017 Main Street	100	140
Budget Inn	1021 Main Street	80	120
Rainbow Sales Inc.	1033 Main Street	140	180
Autoglass Installation	1033 Main Street	140	185
T & D Computers	1041 Main Street	155	190
LPL Financial	1100 Main Street	135	165
Yolo Superior Court	1100 Main Street	180	200
Premierwest Bank	1100 Main Street	280	310
Woodland Joint Unified School District	435 6 th Street	150	180
Colombara's Cabinet & Millwork Inc.	421 4 th Street	60	90
Elfrink's Power Equipment	446 5 th Street	60	115
TV Christison & Sons	456 5 th Street	60	155
Residential Home	978 Lincoln Avenue	105	335
Woodland Police Department	1000 Lincoln Avenue	145	400
Southern Pacific Depot	450 East Street	200	465

Tables 14.12-2A and -2B list noise levels of common construction equipment and construction operations. Section 2.5.3 lists several project features that the AOC utilizes to control construction sound. These include installation of sound barriers around the perimeter of the proposed project site and using electric construction power instead of diesel-powered generators to provide adequate power for man/material hoisting, crane, and general construction operations. In addition, the proposed project will avoid use of impact pile drivers.

Table 4.12-2A. Maximum Noise Levels of Common Construction Machines

Noise Source	Noise Level (dBA) /a*				
	50 Feet	100 Feet	200 Feet	400 Feet	800 Feet
Jackhammer	81-98	75-92	69-86	63-82	57-76
Pneumatic impact equipment	83-88	77-83	71-77	65-71	59-65
Trucks	82-95	76-89	70-83	64-77	58-71
Backhoe	73-95	67-89	61-83	56-77	50-71
Cranes (moveable)	75-88	69-82	63-76	57-70	51-64
Front loader	73-86	67-80	61-74	56-68	50-62
Concrete mixer	75-88	69-82	63-76	57-70	51-64
Impact pile driver	101	95	89	86	80
Sonic pile driver	96	90	84	81	75

Note: / a/ assumes a 6-dBA decline for noise generated by a "point source" and traveling over hard surfaces.
***Source:** City of Los Angeles. 2003. L.A. CEQA Thresholds Guide. Los Angeles, CA, for 50-foot and 100-foot columns. Noise levels for 200-foot, 400-foot, and 800-foot columns calculated from the assumption that dBA declines by 6 dBA with doubling of the distance between noise source and receptor.

Table 4.12-2B. Outdoor Construction Noise Levels

Construction Phase	Noise Level (dBA)*				
	50 Feet	100 Feet	200 Feet	400 Feet	800 Feet
Grading/excavation	86	80	74	68	62
Foundations	77	71	65	59	53
Structural	83	77	71	65	59
Finishing	86	82	76	70	64

***Source:** City of Los Angeles. 2003. L.A. CEQA Thresholds Guide. Los Angeles, CA for 50 feet and 100 feet columns. Noise levels for 100-foot, 200-foot, 400-foot, and 800-foot columns calculated from the assumption that dBA declines by 6 dBA with doubling of the distance between noise source and receptor.

The noise from construction equipment may be appreciable. The operation of construction equipment is generally expected to result in maximum short-term noise levels ranging from 80 to 95 dBA. These levels may be significant depending on the duration, but mitigation measures will minimize the impacts. Given the short-term nature of the noise, the impacts are expected to be less than significant with the mitigation measures below.

Mitigation Measures: The following mitigation measures will reduce construction noise impacts to less-than-significant levels:

NOISE 1

Restrict construction activities to the hours between 7:00 a.m. and 6:00 p.m., from Monday through Saturday.

NOISE 2

Ensure all construction equipment is properly maintained and operated and equipped with mufflers.

NOISE 3

The AOC contractor will not utilize pile driving during construction.

- b) *Will the project produce a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Potentially Significant Impact Unless Mitigated. The Municipal Code references noise standards described in the Woodland General Plan that the proposed project must meet after construction. In particular, the Woodland General Plan contains noise policies and identifies degrees of acceptable use for new development depending on land use and noise levels as shown on Table 4.12-3. In this table, an acceptable noise exposure applicable to a new courthouse is not specifically identified. However, the most similar land use to the proposed project will be the “Office Buildings, Retail Commercial,” where normally acceptable noise exposure is 65 dBA or less.

Table 4.12-3. Land Use Compatibility for Community Noise Environments

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE					
	Ldn or CNEL, dB					
	55	60	65	70	75	80
Residential, Theaters, Auditoriums, Music Halls, Meeting Halls, Churches						
Transient Lodging - Motels, Hotels						

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE Ldn or CNEL, dB					
	55	60	65	70	75	80
Schools, Libraries, Museums, Hospitals, Nursing Homes, Child Care Facilities						
Playgrounds, Neighborhood Parks						
Office Buildings, Retail Commercial						
Industrial, Manufacturing, Utilities						
Golf Courses, Outdoor Spectator Sports						
FEASIBLE						
	Specified land use is satisfactory. No noise mitigation measures are required.					
PROBABLY FEASIBLE						
	Use should be permitted only after careful study and inclusion of protective measures as needed to satisfy the policies of the noise section of the General Plan.					
USUALLY NOT FEASIBLE						
	Development is usually not feasible in accordance with the goals and policies of the noise section of the General Plan.					

Appendix F contains a summary of noise measurements collected on 05 January 2010 at the proposed project site to characterize the existing noise levels near the roadway. The monitor was located 49 feet from 5th Street, across the street from Colombara’s Cabinet & Millwork Inc., which is immediately west of the proposed site. The measured day-night average noise (Ldn) was approximately 60 dBA and is anticipated to include measured noise from not only traffic but also the nearby commercial facilities. However, the major contributor to noise in the area is vehicles traveling on the nearby roadways. Noise levels on site would be highest closer to the roadway, particularly near Main Street. Portions of the facility may experience outdoor noise levels that exceed the compatibility thresholds specified in Table 4.12-3. However, the mitigation measures below would reduce impacts to less-than-significant levels.

In addition to the land-use compatibility noise thresholds, the General Plan requires an acoustical analysis for any project that may emit non-transportation noises in excess of 50 dB at the property line of noise-sensitive receptors or for projects where the exterior and/or interior noise levels will exceed the thresholds of Table 4.12-4.

Table 4.12-4. Maximum Allowable Noise Exposure

MAXIMUM ALLOWABLE NOISE EXPOSURE Transportation Noise Sources			
Land Use	Outdoor Activity Areas ¹	Interior Spaces	
	Ldn/CNEL, dB	Ldn/ CNEL, dB	Leq, dB ²
Residential	60 ³	45	
Transient Lodging	60 ³	45	
Hospitals, Nursing Homes	60 ³	45	
Theaters, Auditoriums, Music Halls			35
Churches, Meeting Halls	60 ³		40
Office Buildings			45
Schools, Libraries, Museums			45
Playgrounds, Neighborhood Parks	70		
<p>¹ Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB Ldn shall be applied at the building facade, in addition to a 60 dB Ldn criterion at the outdoor activity area.</p> <p>² As determined for a typical worst-case hour during periods of use.</p> <p>³ Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn / CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn / CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.</p>			

In Table 4.12-4, an acceptable noise exposure applicable to a new courthouse is not specifically identified. However, the land use most similar to the proposed project will be the "Office Buildings," where normally acceptable interior noise exposure is 45 dB or less. The building design will incorporate noise mitigation measures to ensure that the noise level of interior spaces within the proposed project falls below 45 dB. These mitigation measures would also result in compliance with the other limits specified previously. Typical buildings reduce interior noise levels by 25 dBA compared to outdoor noise levels. If standard building construction practice is not sufficient, additional noise insulation treatments can be added to reduce noise levels by 5 dBA over typical levels.

With regard to exposure to nearby off-site sensitive receptors, the proposed project will produce a small increase in nearby traffic and therefore add to the existing noise levels. The increase will originate

primarily from passenger vehicles that do not generate as much noise as large transport trucks. Also, these vehicles will likely travel to and from the site during limited times of the day. Most of the arriving vehicles associated with redevelopment conditions (i.e., after courthouse construction) will come during the peak morning traffic hour. These vehicles are expected to leave gradually throughout the afternoon. The traffic assessment discussed in Section 4.16 identifies 414 inbound and 80 outbound new daily trips (round trip) generated by the proposed project during the AM peak hour and 70 inbound and 190 outbound new daily trips (round trip) generated by the proposed project during the PM peak hour. The small increases in traffic will not result in significant increases in noise levels. For example, a conservative noise estimate can be made by making the following conservative assumptions:

- 100 percent of the new vehicles trips are passenger cars traveling on the same roadway (in reality, the vehicles traveling to the proposed site will not all take the same road);
- All vehicles are traveling 25 miles per hour (mph); and
- Existing noise levels at nearby residences are 60 dBA.

Based on these assumptions, the noise day-night noise level at about 50 feet will increase by less than 1 dBA due to the proposed project's traffic effects for receptors adjacent to the site. An increase of 1 dBA is typically not perceivable.

Noise will be generated by operation of the proposed project and increased traffic generated by the proposed project. Noise generated by the mechanical systems of buildings is typically between 50 and 60 dBA at 50 feet. The mechanical system will be designed such that noise emitted will fall below the 50 dB noise threshold at the property line of nearby noise-sensitive receptors.

Mitigation Measures: The following mitigation measures will be implemented to reduce potential impacts to less than significant for this study item.

NOISE 4

Incorporate noise mitigation design elements into the proposed building such that the noise levels of interior spaces within the building falls below 45 dB.

NOISE 5

Incorporate noise mitigation design elements into the building mechanical system such that the noise emitted from the mechanical system does not exceed 50 dB at the property line of nearby noise-sensitive receptors.

- c) Will the project expose persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less-Than-Significant Impact. During construction, groundborne vibration and noise may be generated by large trucks and other heavy equipment during grading and construction of buildings. Generally, the groundborne vibration and noise will have a minimal impact on nearby sensitive receptors; however, during some phases of construction, nearby sensitive receptors may notice groundborne vibration. The vibration will cease when construction is complete. The Federal Transit Authority publishes an assessment of the typical vibration levels from common construction equipment as shown in Table 4.12-5.

Table 4.12-5. Vibration Velocities for Construction Equipment

Equipment		Vibration Level						
		25 Feet	50 Feet	100 Feet	150 Feet	200 Feet	300 Feet	400 Feet
Pile-driving (Impact)	PPV	0.644	0.228	0.081	0.044	0.028	0.015	0.010
	VdB	104	95	86	81	77	72	68
Large bulldozer	PPV	0.089	0.031	0.011	0.006	0.004	0.002	0.001
	VdB	87	78	69	64	60	55	51
Loaded trucks	PPV	0.076	0.027	0.010	0.005	0.003	0.002	0.001
	VdB	86	77	68	63	59	54	50
Jackhammer	PPV	0.035	0.012	0.004	0.002	0.000	0.001	0.001
	VdB	79	70	61	56	52	47	43

PPV= Inches/Second; VdB = Vibration decibels

SOURCE: Federal Transit Authority. May 2006. *Transit Noise and Vibration Impact Assessment*.

As shown in the table above, pile-driving activities have the highest associated vibration level compared to the other construction-related activities, but the AOC will refrain from using pile drivers for the

proposed project. For evaluation of vibration impacts, the AOC chose to evaluate the vibration level associated with large bulldozers and loaded trucks for determining potential maximum project vibrations impacts at the nearby receptors. Vibration levels at distances other than those shown in Table 4.12-5 can be calculated using the equation 4.12-1, shown below, taken from the Federal Transit Authority *Transit Noise and Vibration Impact Assessment*:

$$\text{Eq. 14.12-1} \quad L_v(D) = L_v(25 \text{ ft}) - 30\log(D/25)$$

As shown in Table 4.12-1, the distance of nearby receptors to the proposed project varies between 90 to 465 feet which corresponds to a range of vibrations levels of approximately 48 to 70 Vibration decibels, using the level of 87 VdB for bulldozer activities at distances of 25 feet. The Federal Transit Authority publishes the vibration impact levels for various categories of land use and vibration frequency as shown in Table 4.12-6.

Table 4.12-6. Groundborne Vibration Impact Levels for Annoyance

Land Use Category	Acceptable Ground Bourne Vibration Levels (VdB re 1 micro-inch/sec)		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1: Buildings where vibration will interfere with interior operations.	65 ⁴	65 ⁴	65 ⁴
Category 2: Residences and buildings where people normally sleep.	72	75	80
Category 3: Institutional land uses with primarily daytime use.	75	78	83
Notes: 1. "Frequent Events" are defined as more than 70 vibration events of the same source per day. 2. "Occasional Events" are defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations. 3. "Infrequent Events" are defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines. 4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.			

SOURCE: Federal Transit Authority. May 2006. *Transit Noise and Vibration Impact Assessment*.

The nearby receptors will be classified as Categories 2 and 3. As shown in Table 4.12-1, the nearest Category 2 building, the Budget Inn, will be located approximately 100 feet from the proposed project's building site. Use of a large bulldozer within approximately 100 feet of the Budget Inn will generate a vibration level of 67 VdB, which is within the acceptable thresholds listed in Table 4.12-6. As shown in Table 4.12-1, the nearest Category 3 building, the Colombara's Cabinet & Millwork building, will be located approximately 90 feet from the proposed project's building site. The bulldozer operating on site will generate a vibration level of 70 VdB, which will be within the acceptable thresholds for Category 3 uses.

In addition to vibration-related annoyance thresholds, the Federal Transit Authority lists vibration-related damage thresholds as shown below in Table 4.12-7.

Table 4.12-7. Construction Vibration Damage Thresholds

Building Category	Approximate vibration velocity level (L_v^*)
I. Reinforced-concrete, steel or timber (no plaster)	102
II. Engineered concrete and masonry (no plaster)	98
III. Non-engineered timber and masonry buildings	94
IV. Buildings extremely susceptible to vibration damage	90
* RMS velocity in decibels (VdB) re 1 micro-inch/second	

As previously discussed, the proposed project will not use pile drivers for construction operations, and therefore the highest vibration level perceived at a nearby receptor from a large bulldozer will be approximately 70 VdB, which is below the thresholds for building categories in Table 4.12-7 that surround the proposed site. The AOC therefore concludes that construction vibration damage impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

- d) *For a project located within an airport land-use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive airport-related noise levels or excessive private airstrip-related noise levels?*

No Impact. There is no airport land use plan applicable to the Woodland area. As previously discussed, the following three public airports are within the vicinity of the proposed project site: Medlock Field (approximately 4 miles southeast of the proposed project site); Watts-Woodland Airport (approximately 5 miles directly west of the proposed project site); and Yolo County Airport (8 miles southwest of the proposed project). The proposed project site is not located within the airport land-use plans of any of the three public airports. The proposed project will therefore not expose people working in the proposed project area to excessive airport-related noise.

Mitigation Measures: No mitigation measures are required.

4.13 POPULATION AND HOUSING

- a) *Will the project 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 new courthouse will replace seven court facilities in Yolo County and consolidate several of the Superior Court's currently dispersed courtrooms and administrative facilities into the proposed new building. The project proposes to construct a new courthouse on the 3.75-acre site. Staff at the new facility will be transferred from the existing nearby leased facilities or existing facilities. Due to relocation of the court's staff, the proposed project will not induce substantial population growth or result in a significant increase in employment. Therefore, the potential impact in this regard is less than significant.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No Impact. The proposed project involves construction of a courthouse on a site that currently consists of undeveloped and improved vacant parcels and developed parcels with commercial structures. There are no

residential buildings on the site; therefore, the proposed project will have no impact in this regard.

Mitigation Measures: No mitigation measures are required.

- c) *Will the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. See Response 4.12(b).

Mitigation Measures: No mitigation measures are required.

4.14 PUBLIC SERVICES

- a) *Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities or the need for new or physically altered fire facilities in order to maintain acceptable service ratios, response times or other performance objectives?*

Less-Than-Significant Impact. The nearest fire station (Woodland Fire Station #1) is located at 101 Court Street, approximately 1.0 mile west of the proposed project site. This Fire Station will be serving the same size area currently being served. The proposed project will have a less-than-significant impact on fire protection services.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities or the need for new or physically altered police facilities in order to maintain acceptable service ratios, response times or other performance objectives?*

Less-Than-Significant Impact. The City of Woodland Police Department provides police protection services to the area near the proposed new courthouse. The Department's headquarters are at 1000 Lincoln Avenue, directly south of the proposed project site.

The Yolo County Sheriff Department provides security services at the existing courthouse facilities and will provide protection services at the proposed new courthouse. The new courthouse will have enhanced courthouse security features for its sallyport area, an in-custody detainee holding area, detainee access corridors, a Sheriff's center, and a public

screening area. The proposed project will not rely on the police department staff for security, so it will not affect the availability of police protection services that has been planned for the future build out of the city. The proposed project will therefore have a less-than-significant impact on this public service.

Mitigation Measures: No mitigation measures are required.

- c) *Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities or the need for new or physically altered school facilities in order to maintain other performance objectives?*

Less-Than-Significant Impact. The proposed project will construct and operate a new courthouse facility. Residential development is not a part of the proposed project and there are no residences currently on the parcel. Furthermore, the proposed project will not affect changes in the number of residents in the surrounding area. The proposed project will not create a change in needed school services based on increases or decreases in the number of residents on the parcel or in the vicinity. Therefore, the proposed project's impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

- d) *Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered other public facilities or the need for new or physically altered public facilities in order to maintain performance objectives?*

Less-Than-Significant Impact. The proposed project will construct and operate a new courthouse that will replace leased court facilities currently serving the Woodland area. The proposed courthouse will combine the services currently being provided by the leased facilities, and is expected to be a more efficient use of resources. The proposed project will not produce a substantial increase in population or jobs. Therefore, the proposed project will not substantially increase the need for assistance from public facilities or agencies and the proposed project's impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

4.15 RECREATION

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

Less-Than-Significant Impact. As stated above, the proposed site consists of six contiguous parcels that are a mixture of vacant undeveloped parcels and developed parcels with municipal and commercial structures. Freeman Park is located across (to the north) from the proposed project site and may see an increase in foot traffic due to an increase in nearby Superior Court employees and visitors; however, the increase in use of the park attributed to the proposed courthouse will not produce a negative impact. As noted above, the proposed project would not increase population, and therefore would not increase demand for recreation. Therefore, the AOC concludes that the impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less-Than-Significant Impact. As discussed in the Response to 4.14(a) above, the proposed project site does not currently contain a recreational facility nor will the proposed project require the construction or expansion of recreational facilities. The AOC expects that potential impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

4.16 TRANSPORTATION/TRAFFIC

Introduction

This section describes regional access and circulation routes within the project area, the methods, and results of the traffic study conducted for the proposed project, and the impacts and mitigation measures related to transportation and traffic.

Roadways and Intersections

The State Route (S.R.) 113 freeway and Interstate 5 provide regional access to downtown Woodland. The major roadways described below provide primary circulation routes within the project site vicinity. Most streets provide on-street parking and sidewalks on both sides. Appendix G provides additional information on the AOC's analyses.

- ***Main Street*** provides a connection between commercial uses along Interstate 5, downtown Woodland, and residential neighborhoods west of S.R. 113. It is a four-lane east-west arterial, narrowing to two lanes through the central downtown. The proposed project would front along Main Street and the Main Street access would be the primary public access to the new courthouse. On-street parking is prohibited on Main Street fronting the proposed project site.
- ***East Street*** is a four-lane, north-south, major arterial through the city of Woodland. It extends from north of County Road 25A north to County Road 17A north of Interstate 5 where it becomes S.R. 113. East Street provides access to the Yolo County Fairgrounds, the County Fair Mall, and a range of commercial uses.
- ***Court Street*** is a two-lane, east-west minor arterial that parallels Main Street. Court Street is the location of the most intensive existing courthouse-related uses, with the Historic Courthouse fronting Court Street (at 725 Court Street), and two other major court facilities accessible via Court Street (Department 9 at 213 Third Street, and Traffic/Small Claims/UD and Drug Court at 275 First Street). Court Street also provides access to the City Hall, public library, post office, and County Administration offices.
- ***College Avenue*** is a two-lane, north-south, collector street extending between County Road 24 A on the south and Kentucky Avenue on the north. It provides access to the City Hall, Douglas Junior High School, and residential neighborhoods. It is used by courthouse traffic to reach parking areas on-street and public parking lots, such as the heavily-used public library lot accessible via College Avenue and North Street.
- ***Lincoln Avenue*** is a two-lane, east-west, local street providing access to the Police Station directly south of the proposed project site and the Woodland Community School District offices accessible via the eastern terminus of the street.
- ***5th Street and 6th Street*** are two-lane, north-south, local streets providing access between Main Street and Lincoln Avenue, and local streets to the south. These streets border the east and west sides of the

proposed project site. Sidewalks are provided and on-street parking is permitted on both sides of 5th and 6th streets. Sixth Street currently provides access to the Yolo Superior Court at 1100 Main Street, serving Family and Civil court functions. It occupies the building's third floor with two courtrooms (non-jury courts) and family law facilitators. Sixth Street also provides access to the parking lot serving the Woodland Community School District offices, located east of the proposed project site.

Existing and Future Base Case (Year 2013 - Without Project) Traffic Volumes

Weekday traffic counts were conducted at the request of Crane Transportation Group on a day in mid-November, 2009 from 7:00 – 9:00 AM and 4:00 – 6:00 PM at the following intersections:

1. East Street/ Lemen Avenue (Stop Sign)
2. East Street/ North Street (Stop Sign)
3. Court Street/ 3rd Street (Signal)
4. Court Street/ East Street (Stop Sign)
5. College Avenue/ Main Street (Signal)
6. Main Street/ 3rd Street (Signal)
7. Main Street/ 4th Street (Stop Sign)
8. Main Street/ 5th Street (Stop Sign)
9. Main Street/ 6th Street (Stop Sign)
10. Main Street/ East Street (Signal).
11. College Avenue/ Lincoln Avenue (All-Way Stop)
12. Lincoln Avenue/ 3rd Street (All-Way Stop)
13. Lincoln Avenue /5th Street (Stop Sign)
14. Lincoln Avenue/ 6th Street (Stop Sign)

15. Cross Street/ 3rd Street (All-Way Stop)

16. Cross Street/ East Street (Signal)

Since the courts generally end daily sessions prior to the weekday ambient PM peak traffic hour, court-related traffic volumes are far less during the ambient PM peak hour than during the ambient AM peak hour.

Using the 2010 traffic counts, the AOC developed Year 2013 Base Case (without project) traffic projections at each intersection for the AM and PM peak hours, respectively. This planning horizon was chosen for analysis as it is anticipated that if approved, the court could be constructed and operating by 2013. Growth rates utilized to factor existing counts to year 2013 conditions were based upon a 1 percent per year growth rate, and incorporate two roadway improvement projects that would be constructed in the downtown area by 2013. Appendix G provides additional information on the AOC's analyses.

- a) *Will the project 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. Courthouse-related traffic is irregular and variable on a daily basis primarily due to irregular patterns of juror calls. This analysis is based on a high traffic day (i.e., six jury panels operating on the same day).

The project would be expected to add 360 inbound and 100 outbound vehicle trips during the AM commute peak traffic hour of adjacent street traffic, and about 50 inbound and 165 outbound vehicle trips during the PM peak hour of adjacent street traffic.⁴ Delay due to project traffic increases would be minimal at study intersections. This volume of traffic would not be considered substantial in relation to the existing traffic load and capacity of the street system.

⁴ Peak hours of adjacent street traffic are based upon November 2009 traffic counts conducted for this project.

Tables 4 and 5 of Appendix G show that 2013 Base Case + project operating conditions (levels of service) at each analyzed intersection for the weekday AM and PM peak hours will continue at or better than LOS D at all intersections, with the exception of those operating unacceptably at LOS E or F under base case (without project) conditions. At the intersections with existing and 2013 (without project) unacceptable operation, it is expected that the project's addition of a traffic signal at the Main Street/ 5th Street intersection will provide an attractive alternative route, as drivers may choose to divert by one block east or west to take advantage of lesser delays for turns from this improved intersection. Project traffic would not result in any analyzed intersection currently operating acceptably to operate unacceptably with the addition of project volumes, thus, the project is considered to result in no significant impacts to intersection operation.

The high traffic day analyzed in this study is representative of a reasonable worst-case scenario, and it is on this basis that this study concludes that the projected increase in project-related traffic is less than significant.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project 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. Study area roadways are not included in level of service standards established by Yolo County. Level of service standards for the subject roadways are established by the City of Woodland. Tables 4 and 5 of Appendix G show that 2013 Base Case + project operating conditions (levels of service) at each analyzed intersection for the weekday AM and PM peak hours will continue at or better than LOS D at all intersections, with the exception of those operating unacceptably at LOS E or F under base case (without project) conditions. At the intersections with existing and 2013 (without project) unacceptable operation, it is expected that the project's addition of a traffic signal at the Main Street/ 5th Street intersection will provide an attractive alternative route, as drivers may choose to divert by one block east or west to take advantage of lesser delays for turns from this improved intersection. Project traffic would not result in any analyzed intersection currently operating acceptably to operate unacceptably with the addition

of project volumes, thus, the project is considered to result in no significant impacts to intersection operation.

The proposed project has been designed to comply with the goals, objectives and policies of the city of Woodland as defined in its General Plan and Downtown Specific Plan. The issues identified in this Initial Study pertaining to transportation planning, including transit availability and coordination with city and county agencies, demonstrates this compliance.

Mitigation Measures: No mitigation measures are required.

- c) *Will the project 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. Consolidation of the courthouse facilities in a relocated, new courthouse would have no impact on air traffic patterns or air traffic levels, and would not result in any substantial increase in aviation safety.

Mitigation Measures: No mitigation measures are required.

- d) *Will the project result in inadequate emergency access?*

Less Than Significant Impact. The AOC's development of the project site will conform to recommendations of the Superior Court of California (Yolo County), the Yolo County Sheriff's Department, and the City of Woodland Fire Department to ensure adequate emergency access. The proposed project does not include closure of any public through street that is currently used for emergency services, and would not be expected to interfere with the adopted emergency response plan. Therefore, no significant impacts are anticipated.

Mitigation Measures: No mitigation measures are required.

- e) *Will the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant Impact. The AOC's development of the project site and intersection improvements (new traffic signal at the Main Street/5th Street intersection) will conform to the engineering and design standards of the Superior Court of California (Yolo County), and will comply with the California Building Code (edition in effect as of the commencement of schematic design phase of a particular court project); California

Government Code, California Code of Regulations, Title 24; California Energy Code, Americans With Disabilities Act; American Disability Act Accessibility Guidelines (Section 11); and Division of the State Architect's Access Checklist. It will also reflect work with the Yolo County Sheriff's Department and the City of Woodland to ensure that all design features, including intersections, driveways, drive aisles, and parking stalls meet design and safety standards acceptable to these agencies. No incompatible uses and no significant impacts are anticipated as part of the proposed project.

Mitigation Measures: No mitigation measures are required.

- f) *Will the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such features?*

Less Than Significant Impact. The proposed project would not be expected to conflict with adopted policies, plans, or programs supporting alternative transportation. Bus transportation is available to the project site today, and the AOC will work with the Yolo County Transportation District (YCTD) to determine the appropriate level of transit access and facilities that should be provided at the proposed New Courthouse. Bicyclists would have access to the site via the Class III Bike Route (on-street, signed) along Lincoln Avenue. Bicycle parking would be provided on the site in compliance with city and state standards. Therefore, no significant impacts are anticipated in this regard.

Pedestrian access to and from the site will be a priority, with pedestrian signal and crosswalks provided at the 5th Street/Main Street intersection. Sidewalks shall be replaced and re-designed along the perimeter of the site and pathways would be provided to direct pedestrians through the site. No significant impacts are anticipated in relation to provision of good pedestrian access.

Mitigation Measures: No mitigation measures are required.

4.17 UTILITIES/SERVICE SYSTEMS

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

Less-Than-Significant Impact. The proposed project will use sanitary sewer services provided by the city. According to the General Plan Background Report (Woodland 1996), Wastewater Treatment Plant (WWTP) facilities were designed to handle 6 million gallons per day (mgd) of average dry weather flow and 21 mgd of peak weather flow. The WWTP was designed to allow for capacity expansion to an average dry weather flow of 16 mgd and a peak flow of 35 mgd to accommodate projected growth to 2025 build out.

The proposed project will replace seven existing court facilities within the Woodland area currently served by the City of Woodland WWTP. Wastewater produced by the new courthouse would be limited to restroom facilities for the courthouse during business hours (8:00 a.m. to 5:00 p.m.), and is considered negligible in comparison to the daily maximum capacity 35 mgd. Therefore, the AOC concludes that the proposed project's impacts will be less than significant.

Mitigation Measures: No mitigation measures are required.

- b) *Will the project exceed wastewater treatment requirements of the applicable RWQCB?*

Less-Than-Significant Impact. The amount of wastewater generated daily on a sustained basis after construction of the proposed new courthouse will likely be greater than that for existing uses at the site. Given that only sanitary wastewater will be generated during courthouse operation, the existing wastewater system will be capable of handling the wastewater generated from the proposed new facility. Therefore, a less-than-significant impact is anticipated in this regard.

Mitigation Measures: No mitigation measures are required.

- c) *Will the project 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?*

Less-Than-Significant Impact. The city currently provides wastewater treatment services to the parcels that are currently occupied, i.e., 1011 Lincoln Avenue Parcel and the 1021 Lincoln Avenue parcel.

The city will provide such services to the new courthouse facility on the entire proposed project site. As discussed in 4.16(a), the City of Woodland WWTP is designed to handle 6 mgd of average dry weather flow and 21 mgd of peak flow, and has an expansion capacity of 16 mgd of average dry weather flow and a peak flow of 35 mgd to accommodate projected growth to 2025 build out. The WWTP is not currently at capacity and, therefore, will be able to meet the projected needs of this proposed project. The proposed project will have a less-than-significant impact in this regard.

Mitigation Measures: No mitigation measures are required.

- d) *Will the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which will cause significant environmental effects?*

Less-Than-Significant Impact. The proposed project site is a mixture of undeveloped vacant parcels with gravel undercover and developed parcels with structures and some asphalt paving and landscaped areas. The new courthouse facility will include a parking lot and will therefore add impervious surfaces to the site. However, as discussed in Section 4.9, the project proposes open, landscaped areas that will reduce storm water runoff into the storm sewer system. The city currently operates and maintains a storm water drainage system along the perimeter of the proposed site and will be involved in the approval of all storm water drainage connections and system expansions to accommodate additional drainage from the site.

The proposed project will also be required to comply with NPDES regulations, requiring that impacts to storm water drainage systems are minimized. Therefore, the proposed project will have a less-than-significant impact in this regard.

Mitigation Measures. No mitigation measures are required.

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

Less-Than-Significant Impact. According to the General Plan Background Report (1996), groundwater is the sole source of water supply for the city. The city operates 16 groundwater wells that produce 5 billion gallons of drinking water annually. According to a Water Conservation Report prepared for the Mayor and City Council (City of Woodland 2009), available information indicates that the groundwater aquifer currently has enough water to meet the needs of both urban and agricultural uses.

Although the city's water needs could be met through the groundwater aquifer, the city as with all California municipalities is under the Governor's mandate to achieve a 20 percent reduction in per capita water use by 2020. To achieve this, the city, through its 2005 Urban Water Management Plan has stated its commitment to implementing economically feasible programs that promote efficient water use.

Because the proposed project does not include new housing, and the proposed project's very minor increase in employment will not induce significant population growth, the AOC expects that the proposed project will not require additional water supply needs beyond what has already been anticipated in the General Plan. As discussed in Section 2.5, the AOC's design will incorporate features that comply with the requirements for LEED that incorporate sustainability and water efficiency. Therefore, the proposed project will have a less-than-significant impact.

Mitigation Measures: No mitigation measures are required.

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

Less-Than-Significant Impact: The City of Woodland contracts for refuse collection with Waste Management of Woodland for residential and commercial properties. Wastes are disposed of by the city at the Central Yolo County Landfill located off County Road 28H, near the intersection with County Road 104. The landfill is owned and operated by the Yolo County Department of Public Works and Transportation. According to the General Plan Background Report (Woodland 1996), Yolo County Landfill is not expected to reach capacity until 2025.

In addition, the proposed project's LEED effort (see Appendix A) will reduce solid waste generation at the site through the following measures:

- The proposed project design will incorporate recycling programs through the designation of space and facilities for recycling activities, including an area for recyclable waste to be stored and adequate passage for pick-up vehicles;
- Plants that are less susceptible to drought will be planted for landscaping, which will reduce maintenance activities and yard waste that would otherwise be sent to landfills; and
- The occupants of the proposed courthouse facility will be informed of recycling programs and encouraged to recycle such items as newspapers, glass bottles, aluminum, and metal cans.

Given that there is adequate landfill capacity and measures will be taken to minimize solid waste disposal, the AOC concludes that impacts to solid waste disposal services will be less than significant.

Mitigation Measures: No mitigation measures are required.

- g) *Will the project comply with federal, state, and local statutes and regulations related to solid waste?*

Less-Than-Significant Impact: Adequate solid waste storage areas at the proposed project site will be designated, and waste will be stored in containers in a manner that complies with federal, state, and local statutes and regulations. Solid waste collection vehicles will be given adequate access to the waste storage area. In addition, the proposed project developer(s) will take any necessary measures to comply with CCR, State Department of Health Services, and the Yolo-Solano Air Quality Management District, with respect to handling and disposal of hazardous materials. Therefore, no significant impacts are anticipated with respect to compliance with statutes and regulations.

Mitigation Measures: No mitigation measures are required.

4.18

MANDATORY FINDINGS OF SIGNIFICANCE

- a) *Will 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?*

Potentially Significant Impact Unless Mitigated. The proposed project may have potentially significant impacts on cultural resources (Section 4.5) and geology and soils (Section 4.6). However, implementation of mitigation measures in those sections will reduce these potential impacts to a less-than-significant level.

- b) *Will 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.)*

Potentially Significant Impact Unless Mitigated. The proposed project may have potentially significant impacts on air quality (Section 4.3), cultural resources (Section 4.5), geology and soils (Section 4.6), hazards and hazardous materials (Section 4.8), and noise (Section 4.12). However, implementation of mitigation measures in those sections will reduce these potential impacts to a less-than-significant level.

The probability of construction of other proposed projects in the area and their construction timetables are uncertain due to current economic issues, and the AOC believes that construction of the proposed courthouse will be complete in 2013, before those projects begin construction. Since potential impacts from the proposed project and future projects will be mitigated in accordance with local and state regulations and the construction of other projects will likely occur after completion of the proposed courthouse, the AOC concludes that the cumulative impacts from the proposed project will be less than significant.

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

Potentially Significant Impact Unless Mitigated. The proposed project has the potential to produce significant physical effects on the environment for air quality (Section 4.3), hazards and hazardous materials

(Section 4.8), and noise (Section 4.12). These effects are discussed in their respective sections, and implementation of the required mitigations under the proposed project will reduce the impacts to levels that will be less than significant.

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7.0 **INVENTORY OF MITIGATION MEASURES**

7.1 ***Air Quality***

AIR QUALITY 1

When weather conditions promote potential generation of fugitive dust, the AOC will control dust emissions by stabilizing all disturbed areas (including spoil piles) that are not being actively utilized for construction purposes. Construction personnel will use water applications, chemical stabilizers or suppressants, tarps, or other suitable covers or vegetative ground covers for dust control.

AIR QUALITY 2

If construction operations transport materials off the proposed project site, the AOC shall ensure that all materials are covered or effectively wetted to limit visible dust emissions. The AOC shall also ensure that transport containers have at least 2 feet of freeboard space from the top of the container.

AIR QUALITY 3

Construction personnel will install and maintain a track out control device or utilize a carryout and track out prevention procedure that achieves an equivalent or greater level of control. Construction personnel will remove track out material at the end of each workday.

AIR QUALITY 4

If construction operations carry visible soil material onto public streets, construction personnel will sweep all paved construction, parking, and staging areas daily with water sweepers.

AIR QUALITY 5

Construction personnel will limit idling of all diesel engines to less than 5 minutes unless such idling is necessary to accomplish the work for which the equipment is designed. Ensure equipment is maintained properly.

7.2 ***Cultural Resources***

CULTURAL RESOURCES 1

If archaeological resources are encountered during construction of the proposed project, the AOC's contractor will halt construction in that area of the site until a qualified archaeologist performs an evaluation of the find. If the archaeologist determines the find to be significant, the area of discovery shall be protected from disturbance to allow qualified archaeologists and appropriate officials, in consultation with the State Historical Preservation Officer, to determine appropriate measures for conserving the resource.

7.3 ***Geology and Soils***

GEOLOGY AND SOILS 1

If paleontological resources are encountered during construction, the AOC's contractor will halt construction in that area of the site, and immediately notify the County. If paleontological resources are determined to be significant, a qualified professional paleontologist shall be retained to evaluate the finds and recommend appropriate mitigation measures.

7.4 *Hazards and Hazardous Materials*

HAZARDS AND HAZARDOUS MATERIALS 1

Prior to demolition of the structures, a qualified environmental professional shall evaluate paint that is separated from the building material to determine its proper management, and the AOC's construction contractor will dispose of the materials in the manner determined by the environmental professional and in compliance with all applicable laws.

HAZARDS AND HAZARDOUS MATERIALS 2

. Prior to demolition activities, the AOC's construction contractor will have a qualified environmental professional conduct an asbestos survey to determine the presence or absence of asbestos. If asbestos materials are present, the construction contractor will perform asbestos removal by a State-certified asbestos containment contractor in accordance with both the Toxic Substances Control Act, Title 15 of the United States Code, Section 2601 et seq., and Title 2 – Asbestos Hazardous Emergency Response for Handling Asbestos.

HAZARDS AND HAZARDOUS MATERIALS 3

. The AOC's contractor documents will require the construction contractor to ensure that a licensed hauler transports hazardous waste for disposal at an appropriate facility in compliance with applicable laws and regulations.

HAZARDS AND HAZARDOUS MATERIALS 4

The AOC or the current property owners will remove the USTs and associated piping in accordance with local and State requirements, prior to or during construction. If subsurface impacts associated with these features are observed, the AOC or the current property owner will take responsibility for cleaning up those impacted materials to the satisfaction of an overseeing regulatory agency, as part of the project approval and construction process.

If significant impacts are observed, the AOC's construction contractor will be required to retain a qualified hazardous materials specialist who will (1) educate construction personnel prior to any construction or earth-disturbing activities of the potential to encounter hazardous materials in those areas, and (2) prepare a Soil Management Plan to present the decision framework for properly managing soils associated with future redevelopment of the proposed courthouse parcel (including general protocols and health and safety measures that the AOC and construction personnel will follow if excavation operations encounter contaminated soil or groundwater). If construction operations discover potential contamination during ground-disturbing activities, excavation work shall stop in that area until the qualified hazardous materials specialist can assess the significance of the potential contamination. The qualified hazardous materials specialist will evaluate the discovery, determine its significance, and provide proper management recommendations. The qualified hazardous materials specialist shall summarize related findings in a report prepared to current professional standards

7.5 *Noise*

NOISE 1

Restrict construction activities to the hours between 7:00 a.m. and 6:00 p.m., from Monday through Saturday.

NOISE 2

Ensure all construction equipment is properly maintained and operated and equipped with mufflers.

NOISE 3

The AOC contractor will not utilize pile driving during construction.

NOISE 4

Incorporate noise mitigation design elements into the proposed building such that the noise levels of interior spaces within the building falls below 45 dB.

NOISE 5

~~Incorporate noise mitigation design elements into the proposed building such that the noise levels of interior spaces within the building falls below 45 dB.~~

Incorporate noise mitigation design elements into the building mechanical system such that the noise emitted from the mechanical system does not exceed 50 dB at the property line of nearby noise-sensitive receptors.

8.0 LEAD AGENCY DETERMINATION

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 measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

L F Sainz

Signature

The Administrative Office of the Courts
Agency

Laura Sainz, Environmental Program Manager
Printed Name/Title

4/12/2010
Date

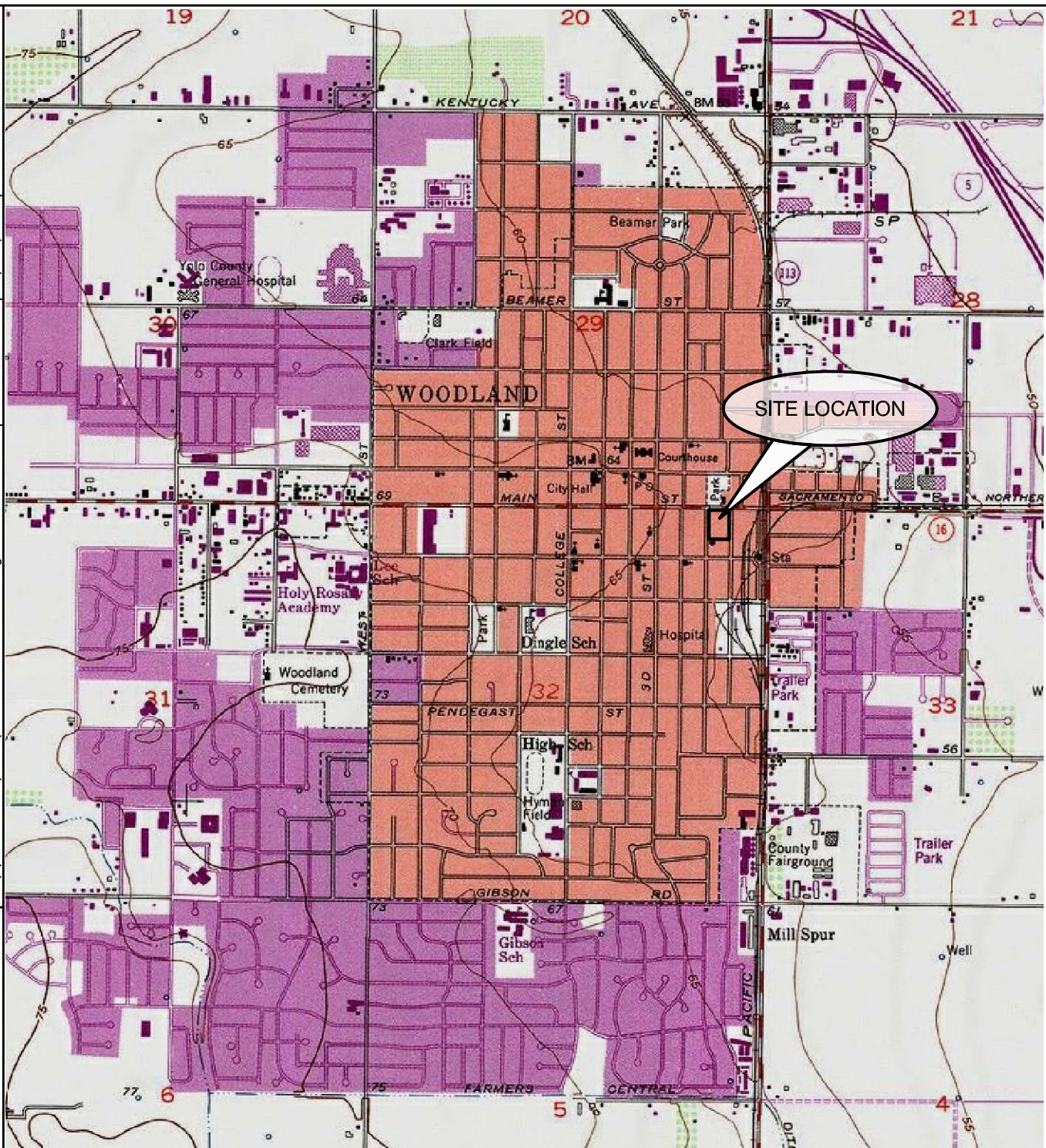
Figures

Project No.
0105673.283

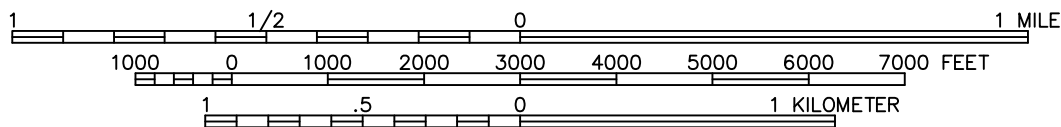
Date:
01/26/10

Drawn By:
R. Olson

CAD File:
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SCALE 1:24,000



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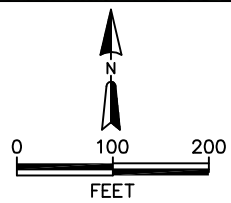
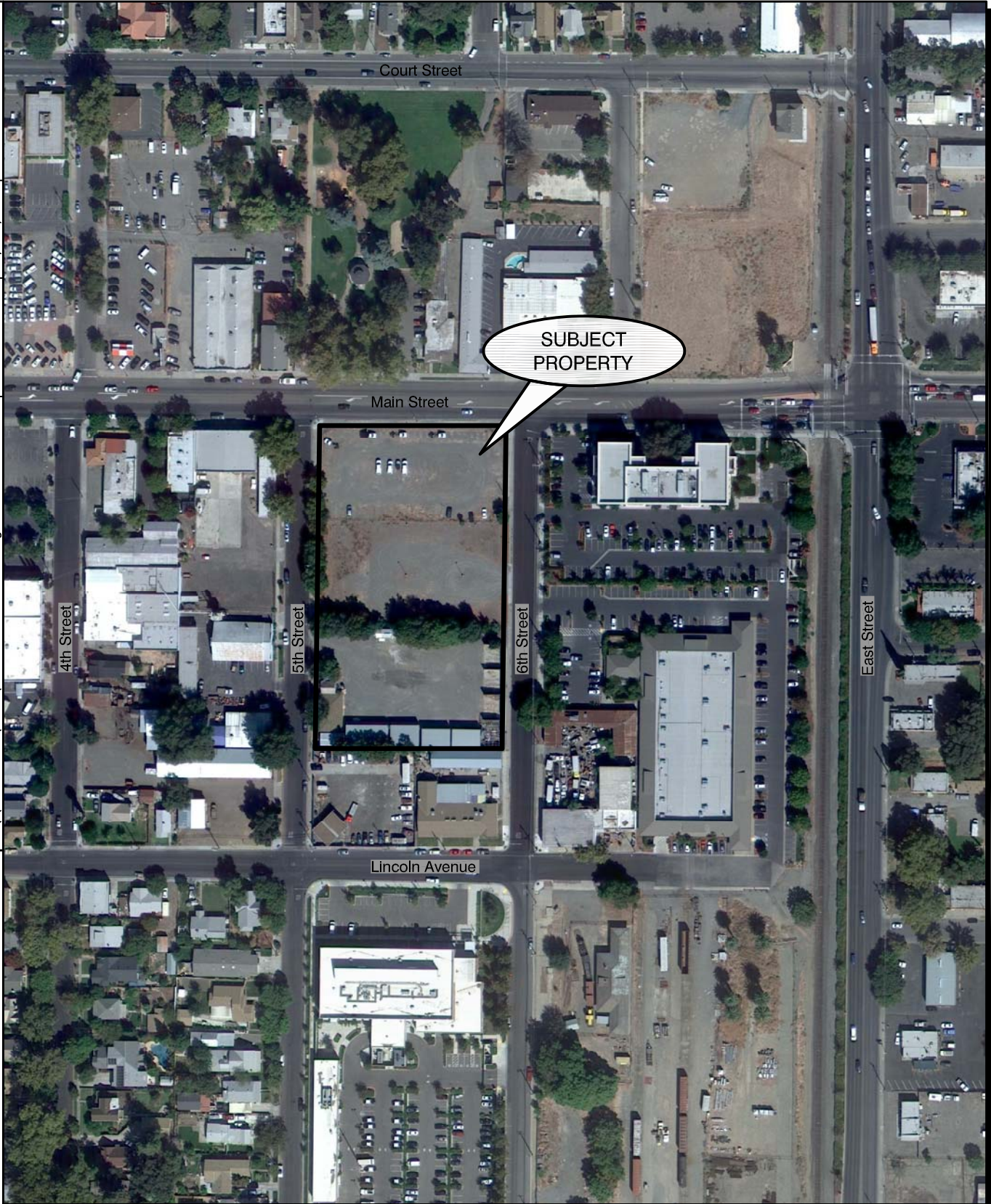
Figure 1
Site Location Map
AOC Woodland
1000-1022 Main Street
Woodland, California

CAD File:
G:\0105673\283\010573283-01.dwg

Drawn By:
R. Olson

Date:
01/21/10

Project No.
0105673.283



Aerial Photo Source: © 2009 Google Earth Pro
Ver 5.0.11733.9347 Date: September 24, 2009

Figure 2
Site Vicinity Map
AOC Woodland
1000-1202 Main Street
Woodland, California



New Woodland Courthouse Site Option

scale 1" = 150' 26 January 2010



Appendix A
LEED Checklist



LEED 2009 for New Construction and Major Renovation

Project Checklist

Project Name _____

Date _____

Sustainable Sites Possible Points: 26

Y	N	?			
Y			Prereq 1	Construction Activity Pollution Prevention	
			Credit 1	Site Selection	1
			Credit 2	Development Density and Community Connectivity	5
			Credit 3	Brownfield Redevelopment	1
			Credit 4.1	Alternative Transportation—Public Transportation Access	6
			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
			Credit 4.4	Alternative Transportation—Parking Capacity	2
			Credit 5.1	Site Development—Protect or Restore Habitat	1
			Credit 5.2	Site Development—Maximize Open Space	1
			Credit 6.1	Stormwater Design—Quantity Control	1
			Credit 6.2	Stormwater Design—Quality Control	1
			Credit 7.1	Heat Island Effect—Non-roof	1
			Credit 7.2	Heat Island Effect—Roof	1
			Credit 8	Light Pollution Reduction	1

Water Efficiency Possible Points: 10

Y	N	?			
Y			Prereq 1	Water Use Reduction—20% Reduction	
			Credit 1	Water Efficient Landscaping	2 to 4
			Credit 2	Innovative Wastewater Technologies	2
			Credit 3	Water Use Reduction	2 to 4

Energy and Atmosphere Possible Points: 35

Y	N	?			
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
			Credit 1	Optimize Energy Performance	1 to 19
			Credit 2	On-Site Renewable Energy	1 to 7
			Credit 3	Enhanced Commissioning	2
			Credit 4	Enhanced Refrigerant Management	2
			Credit 5	Measurement and Verification	3
			Credit 6	Green Power	2

Materials and Resources Possible Points: 14

Y	N	?			
Y			Prereq 1	Storage and Collection of Recyclables	
			Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
			Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
			Credit 2	Construction Waste Management	1 to 2
			Credit 3	Materials Reuse	1 to 2

Materials and Resources, Continued

Y	N	?			
			Credit 4	Recycled Content	1 to 2
			Credit 5	Regional Materials	1 to 2
			Credit 6	Rapidly Renewable Materials	1
			Credit 7	Certified Wood	1

Indoor Environmental Quality Possible Points: 15

Y	N	?			
Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
			Credit 1	Outdoor Air Delivery Monitoring	1
			Credit 2	Increased Ventilation	1
			Credit 3.1	Construction IAQ Management Plan—During Construction	1
			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
			Credit 5	Indoor Chemical and Pollutant Source Control	1
			Credit 6.1	Controllability of Systems—Lighting	1
			Credit 6.2	Controllability of Systems—Thermal Comfort	1
			Credit 7.1	Thermal Comfort—Design	1
			Credit 7.2	Thermal Comfort—Verification	1
			Credit 8.1	Daylight and Views—Daylight	1
			Credit 8.2	Daylight and Views—Views	1

Innovation and Design Process Possible Points: 6

Y	N	?			
			Credit 1.1	Innovation in Design: Specific Title	1
			Credit 1.2	Innovation in Design: Specific Title	1
			Credit 1.3	Innovation in Design: Specific Title	1
			Credit 1.4	Innovation in Design: Specific Title	1
			Credit 1.5	Innovation in Design: Specific Title	1
			Credit 2	LEED Accredited Professional	1

Regional Priority Credits Possible Points: 4

Y	N	?			
			Credit 1.1	Regional Priority: Specific Credit	1
			Credit 1.2	Regional Priority: Specific Credit	1
			Credit 1.3	Regional Priority: Specific Credit	1
			Credit 1.4	Regional Priority: Specific Credit	1

Total Possible Points: 110

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

Appendix B
Solar Study



21 June 8 am



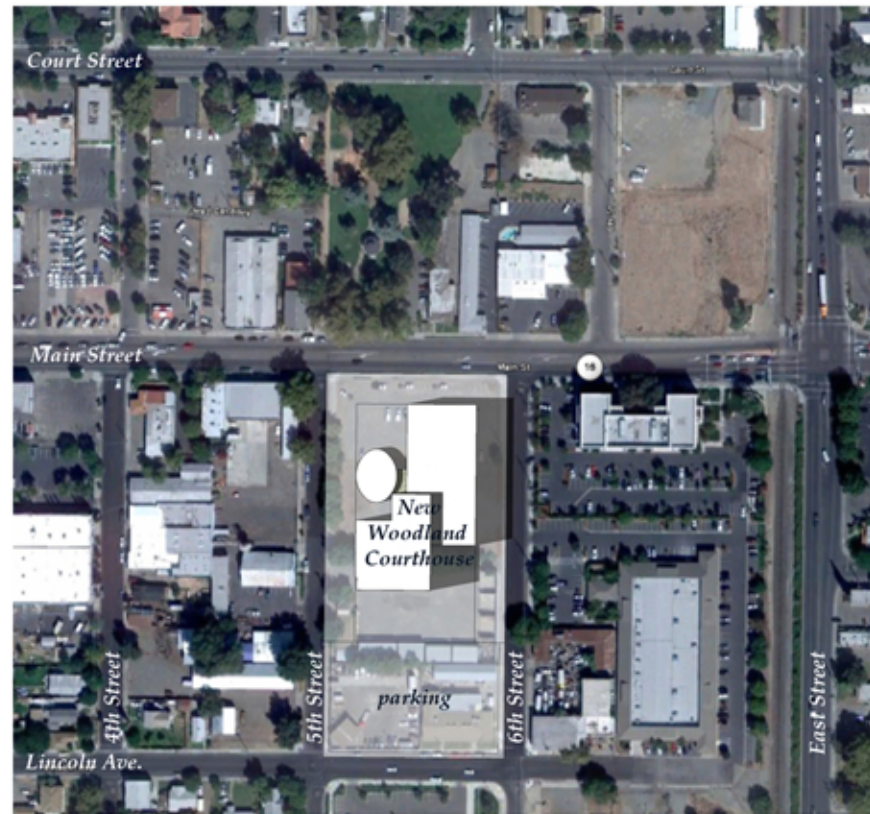
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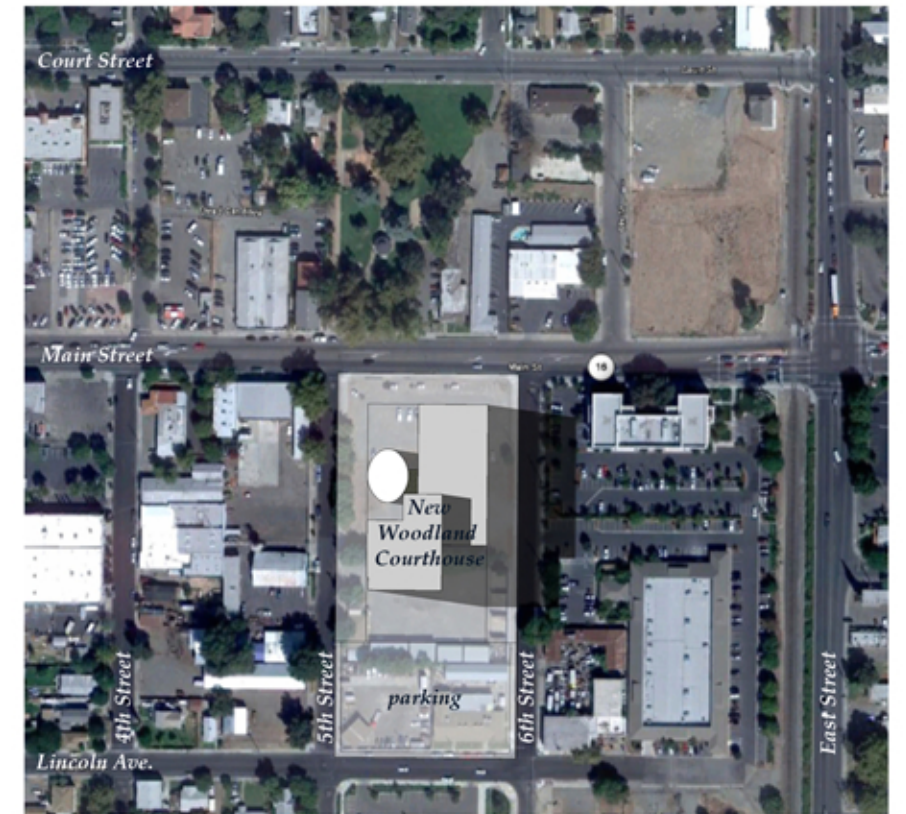
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21 June 2 pm



21 June 4 pm



21 June 6 pm



New Woodland Courthouse Site Option

with shadow study for 21 June

not to scale 26 January 2010 2010 "Daylight Saving Time" standards used





21 September 8 am



21 September 10 am



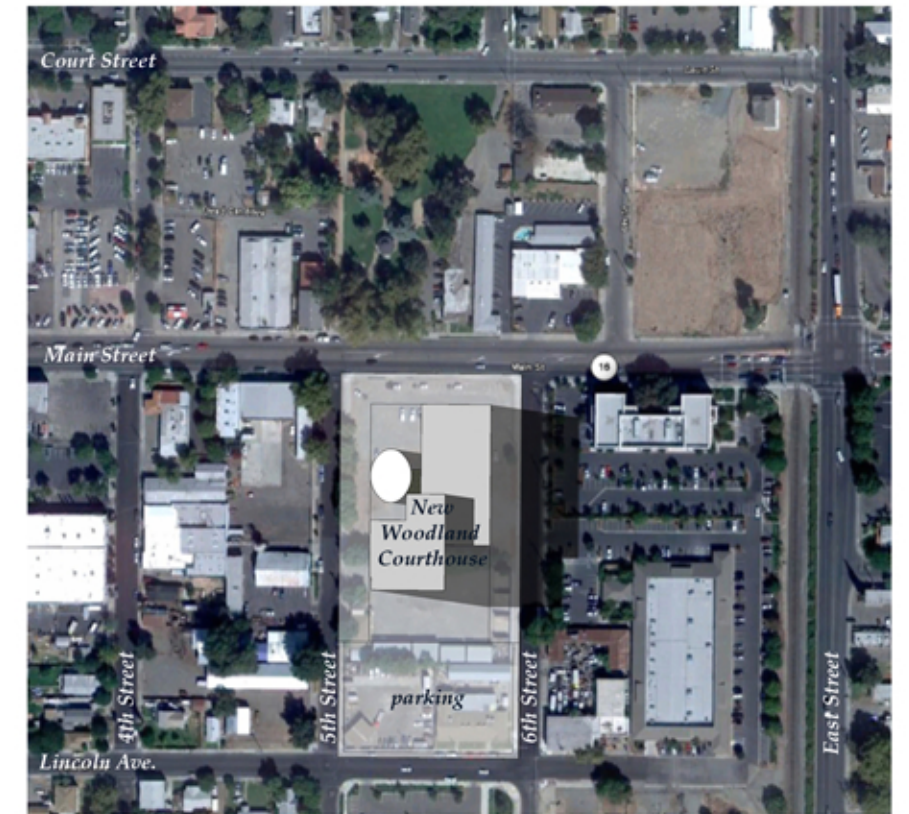
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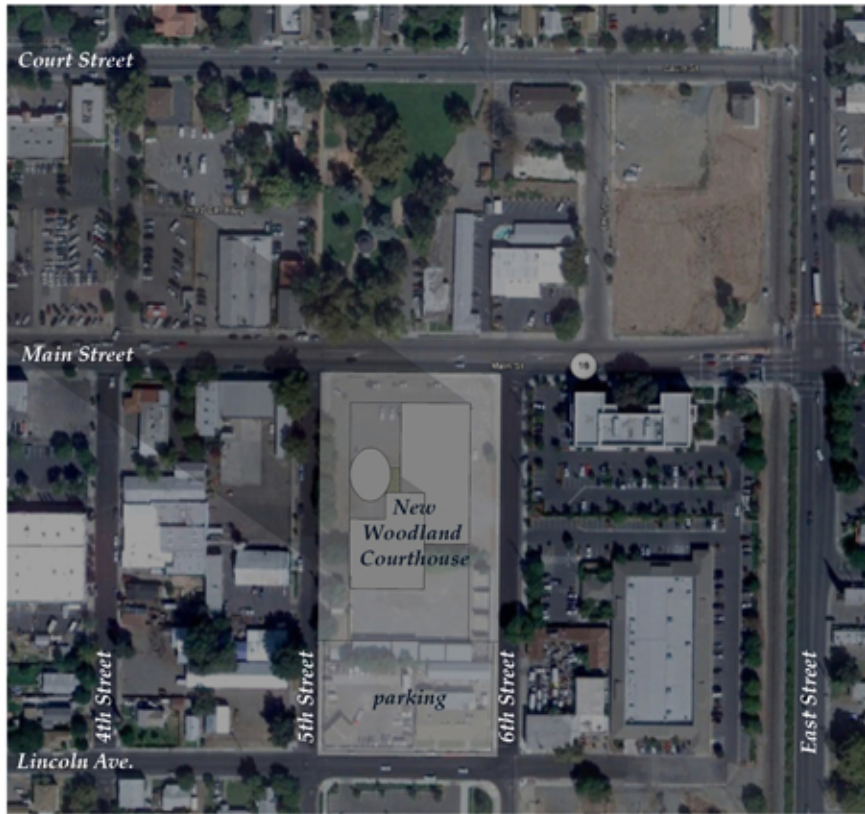


New Woodland Courthouse Site Option

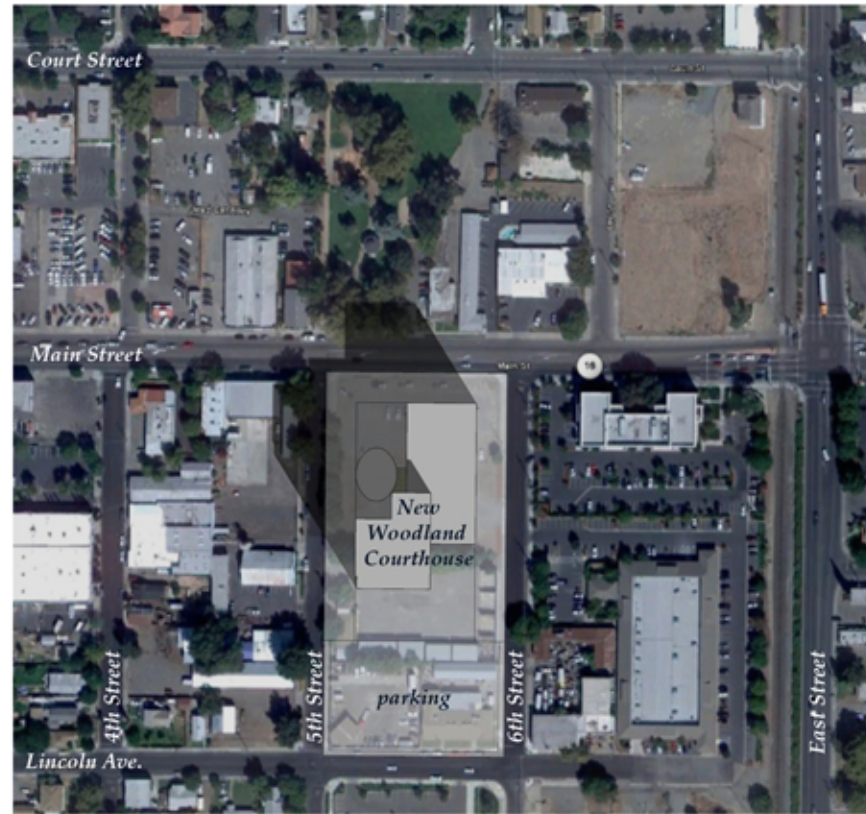
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not to scale 26 January 2010 2010 "Daylight Saving Time" standards used





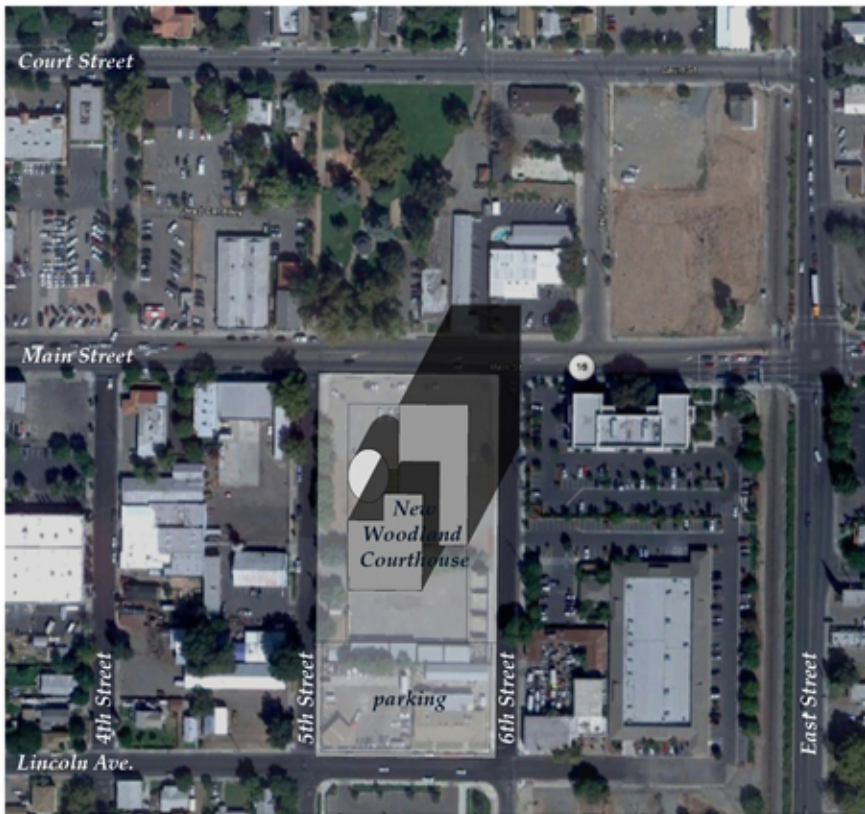
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21 December 10 am



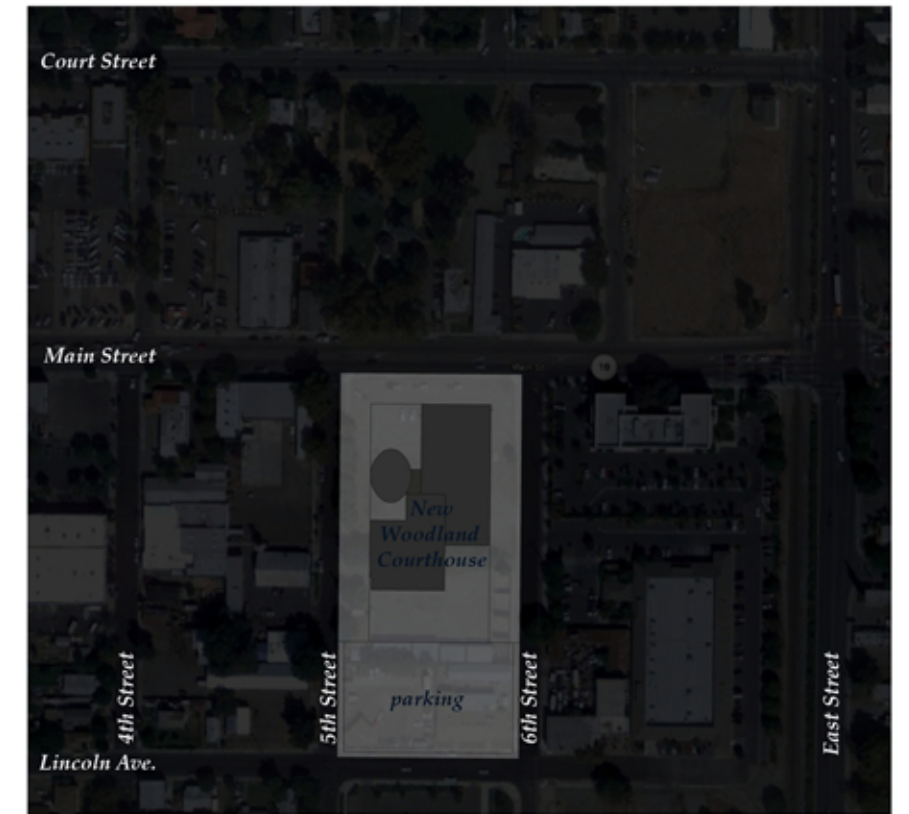
21 December 12 pm



21 December 2 pm



21 December 4 pm



21 December 6 pm



New Woodland Courthouse Site Option

with shadow study for 21 December

not to scale 26 January 2010 2010 "Daylight Saving Time" standards used



Appendix C
Air Quality Data



Handbook for Assessing and Mitigating Air Quality Impacts

Adopted

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The Handbook for Assessing and Mitigating Air Quality Impacts is an update to the 1996 Handbook. Additional modifications may occur as legislative, legal, and technical changes dictate. There are a number of references to specific air quality models in the handbook. These were the most current models available at the time this handbook was prepared and are subject to change. The latest approved versions of these models should always be used for air quality analysis.

This advisory document provides Lead Agencies, consultants, and project applicants with procedures for addressing air quality impacts in environmental documents. Questions on content should be addressed to the Planning Division at (530) 757-3650.

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Table of Contents

1.0 Introduction to the Handbook and the Yolo-Solano Air Quality Management District.....	1
1.1 The District’s Environmental Review Program.....	1
1.2 The District’s Procedure as a Commenting Agency.....	2
1.3 Information needed for District’s Review	2
2.0 When Starting Your Project.....	4
2.1 Land Use, Transportation, and Air Quality Link.....	4
2.1.1 Other Resources	4
2.2 Quantifying Emission Reductions from Project Design.....	4
3.0 Thresholds of Significance	6
3.1 Basis for Thresholds of Significance for Criteria Pollutants	6
3.2 Additional Thresholds of Significance	6
3.2.1 Toxic Air Contaminants (TACs) Threshold	7
3.2.2 Cumulative Impact Threshold.....	7
3.2.3 Plan Consistency Threshold.....	7
3.2.4 Federal Activities Thresholds	7
3.2.5 Offensive Odors Threshold.....	8
4.0 Assessing Air Quality Impacts (Initial Screening)	9
4.1 Project Screening	9
4.1.1 Screening for Operational Ozone and PM ₁₀	9
4.1.2 Screening for CO Impacts.....	10
4.1.3 Screening for Land Use Conflicts and Sensitive Receptors	11
5.0 Full Analysis	15
5.1 Project Description.....	15
5.2 Environmental Setting	15
5.2.1 Sensitive Receptors.....	15
5.2.2 Sources of Air Pollutants in Project Vicinity.....	16
5.2.3 Transportation System	16
5.2.4 Applicable District Rules.....	16
5.3 Full Air Quality Assessment.....	17
5.4 Calculating Construction Emissions.....	18
5.4.1 Calculating Construction Emissions from Roadway Projects	19
5.5 Calculating Operational Emissions.....	19
5.5.1 Calculating Stationary Source Emissions	19
5.5.2 Calculating Area Source Emissions.....	20
5.5.3 Calculating Mobile Source Emissions	21
5.5.4 Estimating CO Impacts.....	21
5.5.5 Evaluating Impacts of TACs.....	22
5.5.6 Evaluating Cumulative Air Quality Impacts.....	23
5.5.7 Evaluating Odors	23
5.5.8 Evaluating Project Alternatives	24
5.5.9 Assessment of Plans and Multiple Phased Projects.....	24
5.5.10 Evaluating Project Greenhouse Gases	24
6.0 Mitigating Air Quality Impacts.....	26
6.1 Construction Dust Mitigation	26

6.2 Construction Equipment Exhaust Mitigation.....	28
6.3 Stationary Source Mitigation	28
6.4 Area Source Mitigation.....	28
6.5 Motor Vehicle Mitigation	29
6.6 Mitigating Impacts of TACs	30
6.7 Mitigating Odor Impacts.....	30
6.8 Mitigating Plan Level Air Quality Impacts	31
6.9 Mitigation of Greenhouse Gases.....	32

List of Figures and Tables

Figure 1. Yolo-Solano Air Quality Management District	1
Table 1. Thresholds of Significance for Criteria Pollutants of Concern.....	6
Table 2. Project Size That May Exceed District Thresholds for ROG, NO _x , and PM ₁₀ ^{1,2}	10
Figure 2. ARB Recommended Minimum Separations	12
Table 3. Recommended Architectural Coatings Emission Factors for URBEMIS ver. 8.7	19
Table 4. District Recommended Area Emission Sources Default Values.	20
Table 5. Construction Dust Mitigation Measures	27

Appendices

APPENDIX A – Background Information for Environmental Setting	A-1
A1 Topography and Meteorology.....	A-1
A2 Air Quality Regulatory Framework	A-1
A2.1 Federal Environmental Protection Agency	A-1
Table A1 Air Quality Management Regulatory Responsibilities	A-2
A2.2 State Air Resources Board.....	A-3
Table A2. Ambient Air Quality Standards	A-4
Table A3. District Status for the California and National Ambient Air Quality Standards.....	A-5
A2.3 Local Air Districts	A-6
A3 Ambient Air Quality and Pollutant Characteristics	A-7
A3.1 Determining Attainment Status	A-7
A3.2 Finding Monitoring Data.....	A-7
A3.3 Characteristics and Health Effects of Air Pollutants	A-8
APPENDIX B – Justification for Thresholds of Significance.....	B-1
B.1 Ozone Precursors (ROG and NO _x) Threshold.....	B-1
B.2 Coarse Particulate Matter (PM ₁₀) Threshold.....	B-1
B.3 Fine Particulate Matter (PM _{2.5})	B-1
B.4 Carbon Monoxide (CO) Threshold	B-2
B.5 Cumulative Impact Threshold.....	B-2
APPENDIX C – VOC Emission Factors from Architectural Coatings for Non-Residential and Residential Projects Using South Coast AQMD Methodology	C-1
C.1 Coating Emission Factor for Non-Residential Projects	C-1
Table C.1 Commercial/Industrial Projects at 150 grams per liter.	C-1
C.2 Coating Emission Factor for Residential Projects.....	C-1
Table C.2 Exterior Coatings for Residential Projects at 150 grams per liter.....	C-1
Table C.3 Interior Coatings for Residential Projects at 100 grams per liter.....	C-1

Abbreviations and Acronyms

AAQS – Ambient Air Quality Standards
AB 2588 – Assembly Bill 2588 Air Toxics “Hot Spots” Program
AQAP – Air Quality Attainment Plan
AQMD – Air Quality Management District
ARB – Air Resources Board
ARB Handbook – Air Resources Board Air Quality and Land Use Handbook
ATC – Authority to Construct
BACT – Best Available Control Technologies
CAAQS – California Ambient Air Quality Standards
Caltrans – California Department of Transportation
CCAA – California Clean Air Act
CEQA – California Environmental Quality Act
CO – Carbon Monoxide
Diesel PM – Diesel Particulate Matter
District – Yolo-Solano Air Quality Management District
EIR – Environmental Impact Report
EMFAC – The EMission FACtor model used to calculate emission rates from all motor vehicles
FCAA – Federal Clean Air Act
H&SC – California Health and Safety Code
Handbook - Handbook for Assessing and Mitigating Air Quality Impacts
LOS – Level of Service
MTIP – Metropolitan Transportation Improvement Plan
NAAQS – National Ambient Air Quality Standards
NO₂ – Nitrogen Dioxide
NOP – Notice of Preparation
NO_x – Nitrogen Oxides
OPR – Office of Planning and Research
Pb - Lead
PERP – Portable Equipment Registration Program
PM₁₀ – Particulate Matter less than 10 micrometer in diameter
PTO – Permit to Operate
ROG – Reactive Organic Gases
SACOG – Sacramento Council of Governments
SIP – State Implementation Plan
SLAMS - State and Local Air Monitoring network
SO₂ – Sulfur Dioxide
SVAB – Sacramento Valley Air Basin
TAC – Toxic Air Contaminants
T-BACT – Toxic Best Available Control Technologies
URBEMIS – URBan EMISsion model used to calculate emissions from land development
USEPA – United States Environmental Protection Agency
VOC – Volatile Organic Compounds

1.0 Introduction to the Handbook and the Yolo-Solano Air Quality Management District

The Yolo-Solano Air Quality Management District (District) has prepared this “Handbook for Assessing and Mitigating Air Quality Impacts” (handbook) as an advisory document to provide Lead Agencies, consultants, and project applicants with procedures for addressing air quality impacts in environmental documents. The handbook contains the following components:

- Preliminary actions Lead Agencies can take to reduce air quality impacts prior to beginning the California Environmental Quality Act (CEQA) process;
- Criteria and thresholds for determining whether a project may have a significant adverse air quality impact;
- Project screening methods, specific procedures and modeling protocols for quantifying and analyzing air quality impacts; and
- Measures that can be implemented to mitigate air quality impacts.

1.1 The District’s Environmental Review Program

The District’s mission is to protect human health and property from the harmful effects of air pollution in its jurisdiction. As part of the ongoing effort to achieve healthy air, the District reviews and comments on the CEQA documents prepared for discretionary development proposals that could significantly affect the District’s air quality. In this way, the District can provide suggestions for reducing emissions of air pollutants and for mitigating potential air quality impacts, and can provide this input relatively early in the planning process.

Figure 1 shows the area over which the District has jurisdiction. As shown in Figure 1, the District’s jurisdiction covers Yolo County and the northeast portion of Solano County.

Figure 1. Yolo-Solano Air Quality Management District



(Source ARB CHAPIS website).

1.2 The District's Procedure as a Commenting Agency

CEQA provides project review opportunities at various times during the environmental process. These include opportunities for review prior to the preparation of the environmental document as well as during public review of the completed document. Review prior to preparation is often done in conjunction with the Notice of Preparation (NOP) or scoping meetings. The District requests that it receive copies of all Environmental Impact Reports (EIRs) and Negative Declarations prepared for projects within the District's boundaries.

Shown below is the procedure that the District follows when it receives a request for input as a commenting agency under CEQA:

- Initially, the District staff evaluates all environmental documents it receives to determine if there is a potential for significant adverse effects to air quality. Projects of concern will receive further review.
- The District's policy is to respond to all projects of concern within the review period established by the Lead Agency. If issues arise that cause the District to need additional time for project review, a staff member will notify the Lead Agency and request additional time.
- For typical projects, the District will advise the Lead Agency on the appropriate level of analysis for the project. The District may also recommend possible mitigation measures.
- For large or unusual projects and at the request of the applicant or Lead Agency, the District staff may meet with the project proponents or Lead Agency staff to discuss the impacts and possible mitigation measures.
- The District may attend scoping meetings for EIRs of projects that may have the potential to generate significant air quality impacts.

1.3 Information needed for District's Review

When a Lead Agency follows the guidance in this handbook to prepare an air quality analysis, it should keep in mind that there are several important things that the District looks for when reviewing analyses. The District will generally review Initial Studies/Negative Declarations and Draft EIRs for the following items:

- the accuracy of the air quality setting data;
- appropriateness of modeling assumptions, if applicable;
- whether air quality impacts are adequately described;
- the extent to which recommended mitigation measures are incorporated into the project to reduce impacts; and
- whether the District agrees with the overall conclusions regarding impacts on air quality.

In order for the District to provide meaningful review, the Lead Agency should also send a complete project description and location, preferably including a map (i.e., site plans, tentative tract or parcel maps). For Negative Declarations, the Lead Agency should include a copy of the Initial Study that documents reasons supporting the Negative Declaration. Where an air quality study was prepared for a project at the Initial Study level, it should be summarized and the results reported in the Initial Study. All assumptions used in the modeling analysis for any

project should be clearly described, and any mitigation measures included in the project to avoid potentially significant effects should be identified.

Draft EIRs prepared for any project in the District should be sent to the District for review and comment. Sometimes, Lead Agencies choose to prepare supplemental air quality studies in addition to the basic analysis in the environmental document. Any additional air quality studies prepared for a project should report all results in the Draft EIR, and should be included as an appendix or as a separate report.

A Lead Agency's response to the District's comments on a Draft EIR may be in the form of the final EIR or may be a separate letter. The District would appreciate that all responses include the date, time, and location of when the Lead Agency proposes to certify the EIR. After the project is approved, the District would appreciate receiving a copy of the Lead Agency's findings for the project.

2.0 When Starting Your Project

To a certain extent, the long-term air quality impact of a project is a function of its design. The layout of streets, the mix of land uses, and the placement of homes and business can all affect overall project emissions. Yet in many instances, the air quality impacts of a project are not considered until well after a project has been designed. At such a late stage, it can be very difficult to make any substantial changes to the project to reduce the project's air quality impact. Thinking about air quality during the initial design phase can help an applicant to implement design features that will reduce that impact. This section provides information that can be used by an applicant during the beginning stages of a project.

2.1 Land Use, Transportation, and Air Quality Link

Mobile source emissions are responsible for a majority of smog-forming emissions in the Sacramento Region. While tailpipe emissions have been decreasing over the last 40 years, these reductions have been offset by increases in total vehicle miles driven. New development projects create new vehicle trips, which in turn add to overall emissions. To help reduce emissions from mobile sources, land use projects can be designed to provide people living and working in a project area with trip options that do not involve driving. By incorporating such strategies in local plans and addressing them during initial discussions with developers, lead agencies increase the likelihood of reducing air pollution resulting from increased dependence on automobiles. Shown below are several examples of land use concepts that can reduce motor vehicle use and emissions.

- Provide pedestrian and bicycle facilities
- Develop concentrated activity centers
- Increase density near transit corridors and transit stations
- Strengthen central business districts
- Encourage vertical mixed-use development
- Develop interconnected street network
- Encourage infill and densification
- Provide strategic parking facilities

2.1.1 Other Resources

Web sites that can provide applicants and lead agencies with additional ideas on land use and design strategies that would benefit air quality can be found in the CEQA section of the District's website.

Also, in 2003 the District, in partnership with regional transportation agencies of Yolo and Solano Counties, prepared a "Best Practices" handbook titled "Transportation and Land Use Toolkit" to provide examples of land use projects and alternative transportation projects that can be implemented to help reach attainment of the air quality standards. This *Transportation and Land Use Toolkit* can be downloaded from the District's website.

2.2 Quantifying Emission Reductions from Project Design

Although it is difficult to quantify reductions from individual strategies applied at specific sites, combinations of strategies implemented community-wide can achieve meaningful reductions in

vehicle use and emissions. Listed below are computer tools that can assist in analyzing indirect and mobile source emission reductions as a result of mitigation through site design. More information on these models can be found by visiting the model's web pages. Links to these web pages can be found in the CEQA section of the District's website.

- URBEMIS
- Place³s
- INDEX

3.0 Thresholds of Significance

CEQA encourages public agencies to adopt thresholds of significance for determining whether projects have significant adverse impacts. The CEQA Guidelines §15382 defines “significant effect on the environment” as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including ... air.” This section presents the District’s recommended thresholds of significance for air quality, which have been adopted by the District’s Governing Board.

3.1 Basis for Thresholds of Significance for Criteria Pollutants

The Air Quality Section of Appendix G of the CEQA Guidelines (Environmental Checklist Form), published by the State Office of Planning and Research (OPR), contains a list of effects that may be considered potentially significant. These are:

- a) Conflict with or obstruct implementation of the applicable air quality plan;
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project is non-attainment under applicable federal or state ambient air quality standards (including releasing emissions, which exceed quantitative thresholds for ozone precursors);
- d) Expose sensitive receptors to substantial pollutant concentrations; or
- e) Create objectionable odors affecting a substantial number of people.

The District’s thresholds of significance are based on this environmental checklist.

Table 1 shows the project-level thresholds of significance as established by the District for particulate matter less than 10 micrometers in diameter (PM₁₀), carbon monoxide (CO), and the precursors to ozone, which are reactive organic gases (ROG) and nitrogen oxides (NO_x). The thresholds apply to both construction and operational impacts.

Table 1. Thresholds of Significance for Criteria Pollutants of Concern.

Pollutant	Thresholds of Significance
ROG	10 tons/year
NO _x	10 tons/year
PM ₁₀	80 lbs/day
CO	Violation of a state ambient air quality standard for CO

3.2 Additional Thresholds of Significance

Besides setting thresholds for criteria pollutants, the District has adopted several other thresholds for toxics, odors (which also fall under the purview of the District), and cumulative impacts. The District has also set thresholds for certain special types of projects such as general plans and federal projects.

3.2.1 Toxic Air Contaminants (TACs) Threshold

Proposed development projects that have the potential to expose the public to TACs from stationary sources in excess of the following thresholds would be considered to have a significant air quality impact. These thresholds are based on the District's Risk Management Policy.

- Probability of contracting cancer for the Maximally Exposed Individual (MEI) equals to 10 in one million or more.
- Ground-level concentrations of non-carcinogenic toxic air contaminants would result in a Hazard Index equal to 1 for the MEI or greater.

While the District's Risk Management Policy provides a basis for a threshold for TACs from stationary sources, this policy does not cover TACs from mobile sources. The District has no permitting or other regulatory authority over mobile sources. While the district continues to evaluate a threshold of significance for mobile source TAC, no specific mobile source TAC threshold is proposed at this time.

3.2.2 Cumulative Impact Threshold

An air quality analysis should address a project's cumulative impact on ozone and localized pollutants. Any proposed project that would individually have a significant air quality impact (see above for project level Thresholds of Significance) would also be considered to have a significant cumulative impact. See Appendix B for the basis of this threshold.

CO impacts are cumulatively significant when modeling shows that the combined emissions from the project and other existing and planned projects (i.e., background concentration) will exceed air quality standards. The cumulative impact should be evaluated using the screening criteria mentioned in the next section for the project level thresholds to determine if cumulative development could cause a violation of the California Ambient Air Quality Standards (CAAQS).

3.2.3 Plan Consistency Threshold

In regards to environmental documents prepared for local or regional plans, the State CEQA Guidelines, Section 15125(d), states that an EIR shall discuss "any inconsistencies between a proposed project and applicable general plans and regional plans. Such regional plans include, but are not limited to, the applicable air quality attainment or maintenance plan or State Implementation Plan [SIP]...". General Plans of cities and counties must show consistency with the District's Air Quality Attainment Plan (AQAP) and SIP strategies in order to claim a less than significant impact on air quality. This is because the air quality planning process estimates growth in emissions based on different indicators and emission growth is offset by regional controls on sources of air pollution. General plan amendments, redevelopment plans, specific area plans, annexations of lands and services, and similar planning activities should receive the same scrutiny as general plans with respect to consistency with the AQAP and SIP.

3.2.4 Federal Activities Thresholds

District Rules 10.2 - Transportation Conformity and 10.3 - General Conformity incorporate by reference the Code of Federal Regulations, Title 40, Transportation Conformity and General Conformity Rules. This requires that a federal action must not adversely affect the timely attainment and maintenance of national air quality standards. In other words, Transportation

Conformity requires that federal transportation actions conform to the SIP. The Sacramento Area Council of Governments, through an interagency consultation process, makes transportation conformity determinations when it compares the Metropolitan Transportation Improvement Plan (MTIP) to the motor vehicle emission budgets of the SIP. The MTIP includes, but is not limited to, transportation plans, projects, and programs that receive federal funds. If the estimated emissions from MTIP projects are less than the vehicle emission budgets in the SIP, the Plan is considered to have a less than significant impact.

The General Conformity Rule applies to federal activities not covered by the Transportation Conformity Rule. The Rule covers all “direct” and “indirect” emissions that are a “reasonably foreseeable” result of a federal action. In an area with a SIP (non-attainment), conformity can be demonstrated in one of four ways:

- By showing that the emission increases caused by an action are included in the SIP,
- By demonstrating that the State agrees to include the emission increases in the SIP,
- Through offsets,
- Through mitigation.

In creating de minimis emission levels, U.S. Environmental Protection Agency (USEPA) sought to limit the need to conduct conformity determinations for actions with minimal emission increases. When the total direct and indirect emissions from the project/actions are below the de minimis levels, the project/action would not be subject to a conformity determination. Under the existing regulations, de minimis emission levels are listed for each criteria pollutant. Annual emission rates per calendar year are used. The defined *de minimis* level is 25 tons/year for ozone (VOC or NO_x). Federal actions with emissions below this minimum threshold are not obligated to perform a conformity determination.

3.2.5 Offensive Odors Threshold

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the District. The general nuisance rule (H&SC §41700 and District Rule 2.5) is the basis for this threshold. A project may reasonably be expected to have a significant adverse odor impact where it “generates odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property.”

4.0 Assessing Air Quality Impacts (Initial Screening)

This section provides methods for screening projects to determine whether a proposed project has the potential to exceed any District threshold of significance. Lead Agencies have wide latitude in deciding the level of detail they will use to analyze and describe air quality impacts. This section will provide lead agencies with an idea of the appropriate level of analysis needed for their project.

4.1 Project Screening

In some cases the Lead Agency may know that an EIR is the appropriate environmental document for a project. In such cases, the Lead Agency may immediately begin preparing an EIR without preparing an Initial Study [CEQA Guidelines, §15060 (d)]. In most cases, (provided that the project does not qualify for statutory exclusion or categorical exemption) however, the Lead Agency will need to prepare an Initial Study to determine whether any of the thresholds of significance could be exceeded.

When considering a project's impact on air quality, the Lead Agency must consider all phases (i.e., construction and operation) and provide evidence to support its conclusions. The Lead Agency is encouraged to use the URBEMIS emissions model to perform quantified, screening-level air quality analyses. URBEMIS estimates indirect source emissions from land use developments based on vehicle trip generation and land use-related area source emissions. It also provides estimates from construction activities. The Lead Agency can also use the District as an additional resource in preparing the air quality analysis of Initial Studies.

4.1.1 Screening for Operational Ozone and PM₁₀

To help identify projects requiring an increased level of analysis, Table 2 presents examples of projects by size and land use type that would likely exceed the District's thresholds of significance for analysis years 2007 and 2010. These analysis years were chosen because project PM₁₀ emissions, rather than ROG and NO_x, generally trigger significance thresholds after 2010. The values provided were derived using URBEMIS version 8.7 and should not be considered absolute thresholds of project significance. If there is any question about whether a project could exceed any threshold, the Lead Agency should undertake a full air quality analysis. Projects falling considerably (i.e., more than 10%) under these sizes, however, may be safely assumed to need no quantification of ozone precursor emissions; although other factors such as TACs, asbestos, and odors still need to be analyzed. In addition, emissions from construction activities are not accounted for in Table 2. Industrial land use types are not represented in the table because these land use types require more information such as truck fleet and activity data.

Note that even if a project is below the values on the list, it does not relieve the Lead Agency from assessing a project for other potentially significant air quality impacts. Projects containing sensitive receptors such as residential subdivisions, schools, or hospitals, must especially be assessed for exposure to pollutants from existing or planned industrial and commercial development.

Table 2. Project Size That May Exceed District Thresholds for ROG, NO_x, and PM₁₀^{1,2}

URBEMIS 8.7 Land Use Categories	Project Size	
	Year 2007	Year 2010
Residential (dwelling units)		
Single Family	280	325
Apartments, Low Rise	345	390
Apartments, High Rise	395	445
Condominiums/Townhouse, General	345	390
Retirement Community	430	475
Commercial (square feet)		
General Office Building	870,000	1,100,000
Office Park	250,000	320,000
Government Office Building	55,000	75,000
Government (Civic Center)	140,000	185,000
Medical Office Building	110,000	150,000
Hospital	195,000	255,000
Retail (square feet)		
Free Standing Discount Store ³	125,000	160,000
Discount Club Store	100,000	135,000
Regional Shopping Center	100,000	130,000
Supermarket ³	70,000	90,000
Convenience Market (w/ gas pumps) ³	13,000	16,500
Recreational		
Racquet/Health Club (square feet)	125,000	165,000
City Park (acres)	2,500	3,100
Quality Restaurant	45,000	60,000
Fast Food Restaurant (w/ drive-through)	8,000	11,000
Hotel (rooms)	440	585
Motel (rooms)	640	800
Educational (square feet)		
Day Care Center ³	110,000	140,000
Elementary School	245,000	310,000
Junior High School	255,000	325,000
High School	295,000	380,000
Place of Worship	440,000	560,000

¹ Thresholds are 10 tons per year for ROG and NO_x, and 80 lbs/day for PM₁₀.

² URBEMIS 8.7, emissions from area and operation sources with no mitigation selected and with following default edits: rural setting selected, architectural coatings emission factors 0.0049 lbs/sf for residential and 0.0069 lbs/sf for non-residential, 0% open hearth fireplaces and 45% wood stoves.

³ Pass-by trips option switched on where pass-by and diverted-linked trips dominate the percentage of trips assumed with each land use.

4.1.2 Screening for CO Impacts

A screening approach, originally developed by San Joaquin Valley Unified Air Quality Management District (AQMD), can be used to estimate whether or not a project's traffic impact would cause a potential CO hotspot at any given intersection. If either of the following criteria is

true of any intersection affected by the project traffic, then the project can be said to have the potential to create a violation of the CO standard.

- 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.

4.1.3 Screening for Land Use Conflicts and Sensitive Receptors

The location of a project in relation to other uses should also be analyzed to determine if there is the potential for localized air quality impacts. Localized air pollution impacts generally 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 amount of emissions, the proximity between the emissions source and the nearest receptor, the direction of prevailing winds, and local topography can all influence the severity of a localized impact. All of these factors should be evaluated by the Lead Agency when assessing the potential for an impact. While impacts on sensitive receptors are of particular concern, localized impacts are generally not limited only to sensitive receptors. Thus, any evaluation of potential air quality impacts should consider all members of the nearby population.

While a number of pollutants can produce localized impacts, the most frequent impacts are those related to:

- TACs
- Odors
- Construction Dust

Screening assessments for each of these potential impacts are discussed below.

TACs

In April 2005, Air Resources Board (ARB) published the “Air Quality and Land Use Handbook: A Community Health Perspective” (ARB Handbook) to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial, commercial and mobile sources of air pollution. The ARB Handbook indicates that mobile sources continue to be the largest overall contributors to the State’s air pollution problems, representing the greatest air pollution health risk to most Californians. The most serious pollutants on a statewide basis include diesel exhaust particulate matter (diesel PM), benzene, and 1,3-butadiene, all of which are emitted by motor vehicles. A copy of the guide can

be obtained from the ARB website. A link to this ARB web page can be accessed from the CEQA section of the District’s website. The ARB Handbook recommends minimum separations between new sensitive land uses and eight categories of existing sources as shown in Figure 2 below (Table 1-1 in ARB Handbook).

Figure 2. ARB Recommended Minimum Separations

Table 1-1
 Recommendations on Siting New Sensitive Land Uses
 Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities*

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.¹
Distribution Centers	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	<ul style="list-style-type: none"> Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	<ul style="list-style-type: none"> Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

¹ Rural area as defined in §50101 of the H&SC, an urban area as defined in §50104.7 of the H&SC

*Notes:

1. These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

2. Recommendations are based primarily on data showing that the air pollution exposures addressed here (i.e., localized) can be reduced as much as 80% with the recommended separation.
3. The relative risk for these categories varies greatly. To determine the actual risk near a particular facility, a site-specific analysis would be required. Risk from diesel PM will decrease over time as cleaner technology phases in.
4. These recommendations are designed to fill a gap where information about existing facilities may not be readily available and are not designed to substitute for more specific information if it exists. The recommended distances take into account other factors in addition to available health risk data (see individual category descriptions).
5. Site-specific project design improvements may help reduce air pollution exposures and should also be considered when siting new sensitive land uses.
6. This table does not imply that mixed residential and commercial development in general are incompatible. Rather it focuses on known problems like dry cleaners using perchloroethylene that can be addressed with reasonable preventative actions.
7. A summary of the basis for the distance recommendations can be found in Table 1-2.

The ARB Handbook is useful in calling attention to incompatible land uses. However, while the ARB Handbook makes distance recommendations where possible, it has not provided specific thresholds of significance for TACs. Therefore, the following will serve as the basis for comments provided on project reviews to local jurisdictions.

Housing and other facilities accommodating sensitive receptors in new development projects that are located more than the ARB recommended distances from any source category identified in the ARB Handbook (Table 1-1) are not considered to be at elevated risk.

For projects that are located nearer a source than recommended by the ARB Handbook, the District's comments will be based on the following:

Housing and other facilities accommodating sensitive receptors in new development projects located within the ARB recommended distance from the source categories identified in Table 1-1 of the ARB Handbook are considered to be exposed to an elevated risk. Lead Agencies should conduct further analysis to estimate the health risk.

The Lead Agency should consider the recommendations of the ARB Handbook and should avoid placing sensitive receptors in the area immediately adjacent to the source of air toxics. Also, a Lead Agency should examine whether the project would place receptors near any potential TAC sources not listed in the ARB Handbook. An environmental document should include discussion of the potential for project receptors to be exposed to an elevated risk.

Odors

Offensive odors are another source of concern where incompatible land uses are located in proximity to each other. Odor impacts on residential areas and other sensitive receptors warrant close scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas. 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 list below shows some common types of facilities that are known producers of odors. This list of facilities is not meant to be all-inclusive. However, it will assist Lead Agencies in recognizing the types of facilities where more analysis may be warranted or where greater distance should separate a project from the odor source.

- Wastewater Treatment Facilities
- Chemical Manufacturing
- Sanitary Landfill
- Fiberglass Manufacturing
- Transfer Station
- Painting/Coating Operations (e.g. auto body shops)
- Composting Facility
- Food Processing Facility
- Petroleum Refinery
- Feed Lot/Dairy
- Asphalt Batch Plant
- Rendering Plant

If the project would locate receptors and known odor sources in proximity to each other (up to one mile) a full analysis, as described in Section 5, should be undertaken.

Construction Dust/PM

Most land use projects require some earthmoving during the project's construction phase. Without control, dust emissions from grading, trenching, or land clearing can create nuisances or localized health impacts. Actual pounds per day of dust generated by project construction can be calculated with URBEMIS. However, even projects not exceeding district PM thresholds should implement best management practices to reduce dust emissions and avoid localized health impacts. Best management practices for dust can be found in Section 6.1 of this document.

5.0 Full Analysis

Lead Agencies should prepare a full air quality analysis for all projects where there is an obviously significant air quality impact, or where a screening analysis shows that the project may exceed the thresholds and cannot mitigate air quality impacts to less than significant levels. Elements needed to prepare an adequate analysis are described in this section.

5.1 Project Description

To allow for an adequate review of the potential air quality impacts of a project, the environmental document should include a comprehensive project description. The project description will most likely be in one of the introductory chapters of the environmental document. The description should include one or more maps showing the location of the project on both a local and regional scale.

5.2 Environmental Setting

In order for a full air quality analysis to be considered adequate, an environmental setting should be included. The Environmental Setting portion of the air quality impact analysis should describe ambient air quality conditions as they exist before the start of the proposed action from both a local and regional perspective, and should also provide information on the regulatory environment and describe pollutants of concern. The setting should provide sufficient information to permit independent evaluation by reviewers.

The following information should be included in the setting discussion of an air quality analysis:

- Topography and meteorology,
- Regulatory status and state and national Ambient Air Quality Standards (AAQS), including attainment status for each,
- Summary of ambient air quality, including exceedance of state and national AAQS for the previous three years,
- Existing emissions on the project site,
- Existing and reasonably foreseeable sensitive receptors near the project site (preferably shown on a map), and
- Characteristics and health impacts of the pollutants of concern.

Background information covering these areas that can be used in a full air quality analysis can be found in Appendix A of this document.

5.2.1 Sensitive Receptors

Some receptors are considered more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emission sources, or the duration of exposure to air pollutants. For CEQA purposes, a sensitive receptor is generically defined as a location where human populations, especially children, seniors, or sick persons are found, and there is reasonable expectation of continuous human exposure according to the averaging period for the AAQS (e.g., 24-hour, 8-hour, 1-hour). Examples of sensitive receptors include residences, hospitals, and schools. Locations of sensitive receptors may or may not correspond with the location of a source's maximum off-site concentration. The location of

sensitive receptors should be explained in terms that demonstrate the relationship to the project site and the potential air quality impacts (e.g., proximity, topography, or upwind or downwind location).

In addition to considering existing receptors, the analysis should also identify reasonably foreseeable sensitive receptors. This would include future receptors if development were pending, as well as potential receptors that could reasonably be sited nearby based on permitted zoning or land use designations. Land uses in the vicinity of the project site should be described in the Land Use Section of an EIR. If no sensitive receptors are in the project vicinity, the Land Use Section may be referenced. If sensitive receptors are in the project vicinity, the Land Use Section may also be referenced, but the description of any sensitive receptors should be expanded upon as necessary for air quality impact analysis purposes.

5.2.2 Sources of Air Pollutants in Project Vicinity

In order to evaluate the cumulative impact of a project, it is necessary to identify sources of air pollutants on or near the project site. The description of existing air pollution sources should include sources that produce criteria pollutants, toxic air contaminants, and nuisance emissions such as odors and dust. More detailed information regarding existing emissions, including emissions of odors and toxic air contaminants, may be obtained by contacting the District.

5.2.3 Transportation System

Mobile source emissions usually contribute a large part of a project's long-term operational emissions. To understand how the project will fit into the existing transportation infrastructure, the environmental document should describe the transportation system serving the project site. Discuss traffic conditions, including traffic volumes and levels of service; transit service; and other relevant transportation facilities such as bicycle facilities, shuttle services, telecommuting centers, etc. The discussion of the existing transportation system should describe both current conditions and future conditions with the project. Much of this information may be located in the Traffic and Circulation section of the environmental documents. However, many traffic and circulation sections do not adequately describe bicycle facilities, telecommuting centers, and other alternative transportation forms. The traffic and circulation information may be referenced and/or summarized, but any additional information relative to non-motorized trip reduction alternatives not discussed should be described for the project in the air quality setting.

5.2.4 Applicable District Rules

The Lead Agency should include a list of District rules with which the project would be required to comply. Compliance with these rules is independent of the CEQA process. Listed below are descriptions of District rules that would be applicable to typical development projects.

- Visible emissions from stationary diesel-powered equipment are not allowed to exceed 40 percent opacity for more than three minutes in any one-hour, as regulated under District Rule 2.3, Ringelmann Chart.
- Dust emissions must be prevented from creating a nuisance to surrounding properties as regulated under District Rule 2.5, Nuisance.
- District Rule 2.9, Open Burning, Certain Materials prohibits outside fires for the purpose of disposing petroleum waste, demolition debris, construction debris, tires or other rubber

materials, materials containing tar, or for metal salvage or burning of vehicle bodies. Any open burning requires approval and issuance of a burn permit from the District and shall be performed in accordance with District Rule 2.8, Open Burning, General.

- Portable equipment greater than 50 horsepower, other than vehicles, must be registered with either the ARB Portable Equipment Registration Program (PERP) (<http://www.arb.ca.gov/perp/perp.htm>) or with the District.
- Architectural coatings and solvents used at the project shall be compliant with District Rule 2.14, Architectural Coatings.
- Cutback and emulsified asphalt application shall be conducted in accordance with District Rule 2.28, Cutback and Emulsified Asphalt Paving Materials.
- In the event that demolition, renovation or removal of asbestos-containing materials is involved, District Rule 9.9 requires District consultation and permit prior to commencing demolition or renovation work.
- All stationary equipment, other than internal combustion engines less than 50 horsepower, emitting air pollutants controlled under District rules and regulations require an Authority to Construct (ATC) and Permit to Operate (PTO) from the District.
- District Rule 2.40 Wood Burning Appliances prohibits installation of any new traditional “open hearth” type fireplaces.

Lead Agency staff is encouraged to coordinate directly with the District on issues such as applicable regulatory requirements. Copies of rules and regulations can be accessed at www.yaqmd.org/rules-gen.php or may be requested by contacting the District at the mailing address, email address, or main phone number shown on the cover sheet.

5.3 Full Air Quality Assessment

The impact analysis of an environmental document should address a project's primary impacts on air quality. Primary impacts are directly related to the project, including short-term, temporary effects from construction and long-term emissions from its operation. This includes other impacts that may affect air quality (e.g., energy use that produces emissions).

An impact analysis should support its conclusions by providing explicit reasoning. A quantitative approach should be used whenever possible, particularly when there are quantitative significance thresholds. An air quality analysis should conclude whether each impact is considered significant or less than significant prior to application of mitigation measures. The analysis should address the pollutants appropriate to the project; at a minimum, this should include the non-attainment pollutants for the District: ozone-precursors ROG and NO_x and PM₁₀. The results should be compared to the appropriate unit(s) of measurement based on the applicable standard or threshold (e.g., pounds per day or tons per year).

The basic method for calculating project emissions is to apply specific emission factors to sources of air pollutants. The URBEMIS model includes emission factors for estimating emissions from construction activities, motor vehicles, and area sources, and offers conservative mass emissions computation in a user friendly Windows® environment. Therefore, the District recommends the Lead Agency use the URBEMIS model where practical. There are certain instances, explained in greater detail below, where other models or other emission estimating sources are more appropriate. Since URBEMIS is frequently updated, Lead Agencies should

make sure they are using the most up-to-date version of the model. A link is available on the CEQA section of the District's website where users can access to determine the most current version of URBEMIS. While the use of URBEMIS is the preferred approach for calculating project emissions, the Lead Agency is not precluded from using other approaches for estimating project emissions provided that the CEQA document includes a full explanation of the approach used to estimate project emissions.

5.4 Calculating Construction Emissions

Construction activities can generate a substantial amount of air pollution. In some cases, the emissions from construction represent the largest air quality impact associated with a project. While construction-related emissions are considered temporary, these short-term impacts can contribute to the pollution load recorded at monitoring stations. Emissions from construction should be assessed to determine whether the thresholds of significance would be exceeded. Appropriate mitigation strategies should be described.

The most common construction activities include site preparation, earthmoving and general construction. General construction includes adding improvements such as roadway surfaces, structures and facilities. Earthmoving activities include cut and fill operations, trenching, soil compaction, and grading. Site preparation includes activities such as general land clearing and grubbing. In some cases, a project requires existing buildings and other obstacles to be demolished as part of site preparation.

The emissions generated from these common construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. URBEMIS can be used to quantify PM₁₀ emissions associated with grading and earthmoving. During construction, fugitive dust, the dominant source of PM₁₀ emissions, is generated when wheels or blades disturb the soil. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Demolition and renovation of buildings can also generate PM₁₀ emissions, and is of particular concern if the building(s) contain any asbestos-bearing materials. An asbestos survey of the existing structure may be required prior to any renovation or demolition activity. If you have any questions concerning asbestos related requirements, please contact the District.

Off-road construction equipment is often diesel powered and can be a substantial source of NOx emissions. Typical construction equipment would be scrapers, tractors, dozers, graders, loaders, and rollers. The URBEMIS construction equipment defaults are considered a conservative approach. Where specific information concerning construction activities is known at the time the CEQA document is being prepared, the District recommends modifying the construction equipment assumptions to reflect real-world conditions. All changes to defaults should be clearly identified and supported.

The District recommends revising the URBEMIS 2002 version 8.7 default emission factors for the architectural coatings component of the construction module. Table 3 shows the recommended architectural coatings emission factors for residential and nonresidential structures

using updated District regulated Volatile Organic Compounds (i.e., ROG)¹ limits for Flat and Non-Flat Coatings and the South Coast AQMD revised equation. Appendix C shows the South Coast AQMD revised equations which are based on current construction survey information. The next URBEMIS upgrade will include the revised emission factors, effectively making Table 3 obsolete.

Table 3. Recommended Architectural Coatings Emission Factors for URBEMIS ver. 8.7

Structure Use	Default ROG Emission Factor (lbs/sf)	Revised ROG Emission Factor (lbs/sf)
Residential	0.0185	0.0049
Nonresidential	0.0185	0.0069

Source: South Coast AQMD URBEMIS 2002 version 8.7 Model Update (August 2005) and District Rule 2.14.

5.4.1 Calculating Construction Emissions from Roadway Projects

The URBEMIS program has shortcomings when used for new road construction, road widening, pipeline construction, and bridge and overpass construction projects. Therefore, the Roadway Construction Emissions Model commissioned by the air districts of the Sacramento Region is recommended for estimating emissions from these types of projects. This Excel-based model is available for download from the Sacramento Metropolitan AQMD web site. The Sacramento Metropolitan AQMD 2004 Guide to Air Quality Assessment contains a methodology for quantifying the emissions impact of road construction projects. Links to the model and the Sacramento Metropolitan AQMD Guide are available on the CEQA section of the District's website.

5.5 Calculating Operational Emissions

Three types of sources: stationary sources, area sources, and mobile sources collectively make up the project's operational emissions. Information on how to calculate operational emissions from stationary, area, and mobile sources is presented below.

5.5.1 Calculating Stationary Source Emissions

The term stationary source emissions usually refers to equipment or devices operating at industrial and commercial facilities. Examples of facilities with stationary sources include manufacturing plants, quarries, print shops and gasoline stations. The air quality analysis should identify anticipated equipment and processes, and estimate their emissions. The URBEMIS model does not account for these types of stationary source emissions. The following assumptions, at a minimum, are required to estimate emissions:

- quantity of equipment
- type of equipment
- rate and quantity of fuel consumed and/or process throughput
- number of hours of operation per day

¹ For purposes of this document, volatile organic compounds (VOCs) are equivalent to (ROG). VOC emissions are generally slightly less than ROG, because the VOC definition excludes certain compounds such as ethane, acetone, methyl acetate and perchloroethylene, which do not contribute to ozone formation.

- reduction in emissions from District requirements (e.g., Rule 3.4, New or Modified Source Review; Rule 3.20, Ozone Transport Mitigation, and Rule 3.13 Toxics New Source Review)

If specific information on stationary sources is not available, the analysis should assume the most conservative approach. Where specific information is available, the analysis should use maximum daily emissions expected during the year. The latest emission factors in USEPA AP-42 (Volume I) may be used to calculate daily emissions from stationary sources unless more accurate emission data are available (e.g., actual stack test data). For equipment and processes that are not addressed in AP-42, procedures for emission calculations should be determined in consultation with the District.

As a note, stationary sources complying with applicable District regulations pertaining to Best Available Control Technologies (BACT) and offset requirements usually will not be considered a significant air quality impact. This qualification does not exempt projects with any special circumstances such as emitting objectionable odors that cause a nuisance to nearby receptors, having significant cumulative effects, or emissions associated with construction of the stationary source.

5.5.2 Calculating Area Source Emissions

Water and space heaters, fireplaces, wood burning heaters, lawn maintenance equipment, and application of paints and lacquers are examples of area source emissions which individually emit small quantities of air pollutants, but when considered collectively, represent large quantities of emissions. The URBEMIS model can estimate area-source emissions for natural gas fuel consumption from space and water heating, wood stove and fireplace combustion, landscape maintenance equipment, architectural coatings, and consumer products. Consumer products include only ROG emissions released through the use of products such as hair sprays and deodorants. Table 4 shows the District’s recommended changes to default values for the area source emission module. These changes need to be made because District Rule 2.40 bans open hearth fireplaces for new developments. To assume a worst case scenario, the 10 percent default value for wood fireplaces was added to the wood stove percentage. When the Lead Agency uses values other than the District’s recommended values and the URBEMIS default values, the environmental document should justify the changes. Section 5.4 includes explanation for the revised Architectural Coatings emission factors. As the same case for Table 3, the next URBEMIS upgrade will include the revised values, effectively making Table 4 obsolete.

Table 4. District Recommended Area Emission Sources Default Values.

Area Emission Sources	Default Value	Revised Value
Hearth Fuel Percentages		
Wood fireplace	10%	0% ¹
Wood stove	35%	45% ¹
Architectural Coatings		
Residential	0.0185 lbs/sf of ROG	0.0049 lbs/sf of ROG ²
Nonresidential	0.0185 lbs/sf of ROG	0.0069 lbs/sf of ROG ²
¹ Because District Rule 2.40 bans open hearth fireplaces for new developments, the 10% default value was added to the wood stove percentage to assume a worst case scenario. ² Pursuant to South Coast AQMD URBEMIS 8.7 Model Update (August 2005) methodology and District Rule 2.14 flat and non-flat high gloss coatings content.		

5.5.3 Calculating Mobile Source Emissions

The source of emission factors for most California motor vehicle emission models is the ARB program EMFAC. EMFAC calculates vehicle emissions based on average emissions for each vehicle type (light duty passenger cars, light and medium duty trucks, heavy-duty diesel trucks, etc.), vehicle speed, starting conditions, temperature, year, and other factors. EMFAC generates an output in grams per mile of the various pollutants. The output can then be used in other models such as URBEMIS and DTIM, or in manual calculations, to arrive at project level emissions. URBEMIS 2002 version 8.7 calculates emissions of ROG, NO_x, CO and PM₁₀ and provides results either in pounds per day (summer or winter) or tons per year.

Mobile source emissions are dependent on a large number of variables, but there are several that are critical. These variables are trip length, average speed, and trip generation rates. Another variable, vehicle fleet mix, is important for projects that may have a larger share of truck traffic than average, such as distribution centers. URBEMIS contains default values for these variables, but they are very general. The defaults may be used in these instances. However, the District encourages the use of project specific data whenever it is available. Typically, this information can be found in the traffic study prepared for the project.

Transportation analyses for projects consisting of two or more types of land uses often adjust the number of anticipated trips to account for internal trips. These adjustments reflect the fact that some trips at multi-use projects will occur internally to the project. As a result, the total number of trips associated with the project would be less than the sum of trips expected from all of the land uses individually. URBEMIS contains a component that accounts for internal trips and allows the user to change the assumptions. Traffic studies for such projects may be used to identify internal trip capture rates. The air quality analysis should include a clear explanation of all internal trip capture rate assumptions unless the URBEMIS default values are used.

Traffic studies for commercial projects often distinguish between primary trips and pass-by and diverted linked trips. The air quality analysis for such projects may include emission reductions from pass-by and diverted linked trips. The emissions from these trips will be lower than for primary trips (due to shorter trip lengths), resulting in lower emissions. Adjustments can be made in the URBEMIS model to trip length and cold start/hot start assumptions for pass-by and diverted linked trips. Assumptions regarding pass-by and diverted linked trips should be clearly identified and the underlying rationale should be explained.

5.5.4 Estimating CO Impacts

As mentioned in the CO screening discussion of Section 4, there are two criteria for CO impact screening. If either is true of any intersection affected by the project with traffic mitigation incorporated, the applicant/consultant may conduct a full CO Protocol Analysis. The CO Protocol was developed by the Institute of Transportation Studies at the University of California, Davis and entitled *Transportation Project-Level Carbon Monoxide Protocol*.² This is a project-level protocol for use by agencies for evaluating the potential local level CO impacts of a project. Instructions for conducting this analysis are found in section 4.7.2 of the CO Protocol. If the

² Copies of the Protocol can be obtained on Caltrans' Air Quality website at <http://www.dot.ca.gov/hq/env/air/coprot.htm>

results of this analysis demonstrate no potential for significance, the Lead Agency should include the protocol analysis results in the environmental document. If the results demonstrate that the project will potentially have a significant effect on any intersection, the Lead Agency should conduct a CO dispersion modeling analysis using a program such as CALINE-4. The CALINE-4 dispersion model used to estimate local CO concentrations resulting from motor vehicle emissions was developed by California Department of Transportation (Caltrans) and is available from Caltrans Environmental Division's web page at <http://www.dot.ca.gov/hq/env/air/index.htm>. As a note, the quantitative screening in the CO Protocol should not be used, since the screening was developed using outdated EMFAC 7F.

CALINE-4 requires the user to supply certain input parameters. The inputs should be as recommended in the CO Protocol, except for CO background values unique to the District, which are one and zero parts per million for one and eight-hour CO background concentrations, respectively. If inputs other than those recommended in the Caltrans CO Protocol are used, they should be documented in the environmental document.

5.5.5 Evaluating Impacts of TACs

When evaluating potential impacts relating to TACs, Lead Agencies should consider both of the following situations:

- 1) a new or modified source of TACs is proposed for a location near an existing residential area or other sensitive receptor, and
- 2) a residential development or other sensitive receptor is proposed for a site near an existing source of TACs.

The District limits public exposure to TACs through a number of programs. The District reviews the potential for TAC emissions from new and modified stationary sources through the District permitting process. TAC emissions from existing stationary sources are limited by:

- 1) District adoption and enforcement of rules aimed at specific types of sources known to emit high levels of TACs;
- 2) Implementation of the Air Toxics "Hot Spots" (AB 2588) Program; and
- 3) Implementation of the federal Title III Toxics program.

Lead Agencies should be aware that many facilities such as solvent-based dry cleaners and gasoline stations emit toxic emissions. Under most circumstances, however, existing controls reduce impacts from these sources to less than significant levels. Therefore, it would be inappropriate to automatically reject such facilities just because they are near a sensitive receptor. More detailed analysis to determine the potential risk and feasible control measures would be appropriate in these cases. Facilities and equipment that require permits from the District are screened for risks from toxic emissions and are required to install Toxic Best Available Control Technology (T-BACT) to reduce the risks to below significance. If a significant impact remains after T-BACT is implemented, an air permit may not be issued unless it meets the discretionary approval criteria of the District's Risk Management Policy for Permitting New and Modified Sources.

While stationary TAC sources are regulated under District permitting programs, mobile sources of TAC are largely unregulated and can contribute to elevated health risks when located near receptors. Primary mobile TAC sources include freeways that experience truck traffic, or sources that attract diesel truck traffic such as warehousing facilities or truck stops. As discussed in Section 4, the ARB Handbook provides screening distances for many TAC sources. If a project would place one or more receptors near a TAC source at a distance that is less than that indicated in the ARB Handbook, the project would be considered to have an elevated risk. In these cases, it is advisable to conduct a health risk assessment using a dispersion model to calculate this increased risk.

5.5.6 Evaluating Cumulative Air Quality Impacts

CEQA defines cumulative impacts as two or more individual effects which, when considered together, are either significant or “cumulatively considerable,” meaning they add considerably to a significant environmental impact. Cumulative impacts can result from individually minor but collectively significant projects (CEQA Guidelines §15355). An adequate cumulative impact analysis considers a project over time and in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. The Cumulative Impact and Plan Consistency thresholds discussed in section 3 and Appendix B.3 describe the District’s basis for performing this analysis for ozone and PM₁₀. In short, project emissions that are not consistent with the AQAP, SIP, or exceed District thresholds will have a significant cumulative impact unless offset.

Cumulative CO impacts are accounted for in the CO hotspot analysis described earlier in this section. The CALINE-4 model uses background concentrations that include CO contributions from other sources. Traffic levels used in the model should include all reasonably foreseeable projects that will contribute traffic to the intersections and road segments being analyzed.

Cumulative analyses for TACs focus on local impacts to sensitive receptors. A single source of TACs may be small, but when combined with emissions from neighboring sources, it could expose sensitive receptors to significant pollutant levels. Cumulative analysis of TACs can be accomplished by identifying all sources of these pollutants near the project site. If dispersion modeling is found to be appropriate after initial screening, as discussed earlier, the applicant should include all TAC sources in the vicinity that may influence receptors.

5.5.7 Evaluating Odors

The District is responsible for enforcing the provisions of California Health and Safety Code Section 41700 which prohibits the discharge of anything that could endanger the comfort or health of the public. Nuisance odors are regulated by this section, although certain odors are exempted, such as odors from agricultural activities and composting facilities. The District enforces Section 41700 through its nuisance rule. Any actions related to odors are based on citizen complaints to local governments and the District. Lead agencies can make a determination of significance based on a review of the District complaint records for the odor source in question. For a project locating near an existing source of odors, the impact is potentially significant when the project site is at least as close as any other site that has already experienced significant odor problems related to the odor source.

For projects locating near a source of odors where there is currently no nearby development and for odor sources locating near existing receptors, the determination of significance should be based on whether odor complaints from the public have occurred in the vicinity of a similar facility at a similar distance.

Although distance between an odor source and a receptor is the primary factor in determining the significance of an odor impact, the prevailing wind direction should also be considered. Since odors more or less travel downwind of a source, a receptor that is upwind of a source may not experience the same impact as a receptor that is at a similar distance from the source, but is downwind.

5.5.8 Evaluating Project Alternatives

An analysis of alternatives should discuss whether any of the alternatives would eliminate or reduce any significant impacts on air quality to less-than-significant levels. Conversely, if an alternative creates a new significant impact, the impact must be addressed, though in less detail than in the project analysis. If a quantitative analysis for a particular project impact was performed, a quantitative analysis of one or more alternatives may be performed for purposes of comparison.

5.5.9 Assessment of Plans and Multiple Phased Projects

Planning documents such as city and county general plans, specific area plans and redevelopment plans should also be evaluated for their potential air quality impacts. For general plans, the evaluation of the plan's air quality impacts should focus on an analysis of the plan's consistency with the most recently adopted AQAP and/or SIP. To evaluate local plan consistency with the regional air quality plans, the Lead Agency should consider the following: the local plan's consistency with AQAP and SIP population and vehicle use projections, the extent to which the plan implements AQAP and SIP transportation control measures, and whether the plan provides buffer zones around sources of odors and toxics.

A Program EIR is appropriate for phased projects or a series of individual projects that comprise a larger project with significant impacts. A Program EIR ensures consideration of the cumulative impacts of the entire project, as opposed to a case-by-case analysis of the project's individual components. The air quality analysis for a phased project should analyze the temporary impact of construction activities for each phase of the larger project. For the operational air quality impact analysis of phased projects or specific plans, the full analysis may have to rely on assumptions regarding actual specific land uses. In many cases, specific uses are not necessarily known. The Lead Agency should use its best judgment to forecast the most likely land uses that will be built during each phase of the project. Emissions should be estimated for these forecasted uses. Emissions for all phases of a project should be totaled to determine the project's total impact upon build-out.

5.5.10 Evaluating Project Greenhouse Gases

In AB 32, the Legislature recognized California's particular vulnerability to the effects of global warming, making legislative findings that global warming will "have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry." (H&SC section 38501, subd. (b)). Residents of the District

will be affected by many of these climate change effects, particularly given the importance to Yolo and Solano Counties of their agricultural economy, economic dependence on tourism, recreational fishing, and recreational boating. The Legislature also found that global warming will “increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the State.” (H&SC, section 38501, subd. (b)). Since Yolo and Solano Counties are among the parts of the State that experience hot weather, this area is at a greater likelihood of suffering from any electricity shortages that are manifestations of global warming. It may also experience economic and public health damages related to changes in vegetation and crop patterns, lower summer reservoirs, and increased potential for flooding and air pollution that hotter temperatures can produce.

AB 32 mandates that emissions of greenhouse gases must be capped at 1990 levels (H&SC, section 38530). Considering that about 40% of greenhouse gas emissions come from motor vehicles, projects that generate new vehicle trips can be in conflict with AB 32 goals. While there are no specific thresholds associated with greenhouse gases, it is still recommended to at least include a qualitative discussion of greenhouse gases in air quality analyses for sizable projects. The issue of greenhouse gases is increasingly becoming an area of comment on draft environmental documents. The EIR’s for several transportation plans and general plans have received comments from the State Attorney General asking that an analysis of greenhouse gases be included. In order to pro-actively address this issue, Lead Agencies should consider preparing such an analysis for larger projects as part of their full analysis.

6.0 Mitigating Air Quality Impacts

CEQA §21002.1(b) requires lead agencies to mitigate or avoid significant environmental impacts associated with discretionary projects. Environmental documents for projects that have one or more significant environmental impacts must identify feasible mitigation measures or alternatives to reduce the adverse impacts below a level of significance. According to CEQA, “Feasible’ means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors” (CEQA Guidelines §15364). In cases where significant impacts are not at least avoided or substantially lessened, the Lead Agency may approve the project if it first adopts a “statement of overriding considerations.” The statement of overriding considerations sets forth the specific reasons why the Lead Agency found that the project’s benefits outweigh its unavoidable adverse environmental effects (CEQA Guidelines §15043).

In addition to being a CEQA requirement, mitigation of impacts is needed to achieve federal and state air quality standards. All incremental emission sources, including those associated with land development must be mitigated to the greatest extent possible in order to achieve and maintain ambient air quality standards and greenhouse gas reductions. What the District considers to be feasible mitigation is discussed below. However, the District recognizes that the final determination of feasibility for a project will be determined by the Lead Agency.

The URBEMIS model includes a mitigation component that can calculate emission reductions for various mitigation measures. URBEMIS provides mitigation for construction activities, area sources and motor vehicle use related to a project. The URBEMIS user’s guide provides instructions regarding the use of the mitigation component. The mitigation measures discussed below compliment those found in URBEMIS. By no means are these the only measures the Lead Agency can use. The Lead Agency is encouraged to explore and incorporate additional feasible mitigation measures where appropriate.

6.1 Construction Dust Mitigation

Fugitive dust PM₁₀ emissions from construction can vary greatly depending on the activity taking place, the equipment being operated, local soils, weather conditions and other factors. Despite this variability in emissions, experience has shown that there are a number of control measures that can be reasonably implemented to significantly reduce construction fugitive dust PM₁₀ emissions. Common measures include watering, chemical stabilization of soils or stockpiles, and reducing surface wind speeds with windbreaks. Table 5 includes feasible mitigation measures for controlling dust and summarizes the sources of emissions that would be affected, the effectiveness of the measure in mitigating emissions, and the references for the assumptions.

Table 5. Construction Dust Mitigation Measures

Mitigation Measure	Source Category	Effective	References
Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.	Fugitive emissions from active, unpaved construction areas	50%	U.S. EPA, "AP-42, Vol. I." Pg. 11.2.4-1.
Haul trucks shall maintain at least 2 feet of freeboard.	Spills from haul trucks	90%	Monterey Bay Unified APCD
Cover all trucks hauling dirt, sand, or loose materials.	Spills from haul trucks	90%	Monterey Bay Unified APCD
Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area.	Wind erosion from inactive areas	Up to 80%	U.S. EPA, "AP-42, Vol. I." Pg. 11.2.4-1.
Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).	Wind erosion from inactive areas	Up to 80%	South Coast AQMD, "SIP for PM ₁₀ in the Coachella Valley" 1990. Pg. 5-15
Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.	Wind erosion from inactive areas	4% (15% for mature trees)	South Coast AQMD, "SIP for PM ₁₀ in the Coachella Valley" 1990. Pg. 5-15
Plant vegetative ground cover in disturbed areas as soon as possible.	Wind erosion from inactive areas	5%-99% (based on planting plan)	South Coast AQMD, "SIP for PM ₁₀ in the Coachella Valley" 1990. Pg. 5-15
Cover inactive storage piles.	Wind erosion from storage piles	Up to 90%	U.S. EPA "AP-42, Vol. I." Pg. 11.2.3-4)
Sweep streets if visible soil material is carried out from the construction site.	On-road entrained PM ₁₀	14%	U.S. EPA Report Number EPA-600/R-95-171
Treat accesses to a distance of 100 feet from the paved road with a 6 to 12 inch layer of wood chips or mulch.	Mud/dirt carryout on-road entrained PM ₁₀	27-33%	U.S. EPA Report Number EPA-600/R-95-171
Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel.	Mud/dirt carryout on-road entrained PM ₁₀	42-52%	U.S. EPA Report Number EPA-600/R-95-171
Note: The effectiveness of 2 or more mitigation measures that address the same source of emissions would not be the sum of both measures.			

Mitigation measure effectiveness can be quantified by identifying the source of PM₁₀ that would be affected, estimating emissions from the source, and applying a mitigation effectiveness factor to those emissions. For example, watering active, unpaved construction areas with full coverage can reduce fugitive PM₁₀ from construction activities by 50%. When multiple measures are applied to the same source of PM₁₀, the effectiveness of a second measure would be based on the amount of PM₁₀ that remains after implementing the first or primary mitigation measure.

6.2 Construction Equipment Exhaust Mitigation

Mitigation of construction equipment exhaust should focus on strategies that reduce NO_x, ROG, and PM₁₀ emissions. These strategies may include restricting unnecessary vehicle idling to 5 minutes, using reformulated and emulsified fuels, incorporating catalyst and filtration technologies, and modernizing the equipment fleet with cleaner repower and newer engines, among others. Many of the heavy-duty diesel mitigation measures may qualify for state and District incentive funding programs. Contact the District if interested in knowing more about our incentive funding programs.

The Lead Agency is encouraged to explore and incorporate other mitigation measures as technology advances and less emissive products become available at lower costs. As a resource and emission reduction calculator, the URBEMIS construction mitigation component includes pre-defined measures with specific emission reduction effectiveness. The District is available to assist in developing a customized construction mitigation program that is appropriate for the project.

6.3 Stationary Source Mitigation

Emissions from new and modified stationary sources are generally controlled through the District's permitting process. Most new and modified stationary sources will be subject to BACT requirements. However, any stationary source not regulated by District rules may also apply BACT if they so choose. The District is available to assist sources in determining which technologies are available to control facility emissions.

6.4 Area Source Mitigation

Land development projects produce pollution from area-wide sources such as consumer product use, fireplaces, water and space heaters, house paints, and landscape equipment. The URBEMIS program provides area source emission mitigation measures and their associated emission reductions.

The District encourages residential and commercial projects to help offset area source emissions through "green" building designs. Such projects benefit air quality by using energy more efficiently. Green buildings incorporate location, design, construction and energy systems to reduce the use of non-renewable energy resources. Energy conservation measures are available for projects to reduce the need for natural gas and electricity. These should be incorporated into project building plans where appropriate. Some potential green building measures are listed below:

- Duct system within the building thermal envelope, or insulated to R-8³
- Passive cooling strategies including passive or fan-aided cooling planned for or designed into structure, a cupola or roof opening for hot air venting or underground cooling tubes
- Outdoor lighting designed for high efficiency, solar-powered or controlled by motion detectors
- Natural lighting in buildings
- Building siting and orientation to reduce energy use
- Summer shading and wind protection measures to increase energy efficiency
- Use of concrete or other non-polluting materials for parking lots instead of asphalt
- Use of landscaping to shade buildings and parking lots
- Photovoltaic and wind generators
- Installation of energy efficient appliances and lighting
- Installation of mechanical air conditioners and refrigeration units that use non-ozone depleting chemicals

More information about incorporating the features mentioned above can be found at California's Consumer Energy Center web site. A link to the site is available on the CEQA section of the District's website.

6.5 Motor Vehicle Mitigation

The URBEMIS model includes a motor vehicle mitigation component that quantifies the emission reductions achieved at the development level. Reducing vehicle activity can generally mitigate the emissions from motor vehicles that travel to and from residential, commercial, institutional, and some industrial land uses (i.e., indirect sources). The URBEMIS motor vehicle mitigation component is the most complex of the three mitigation components, and is designed to be quantitative and less subjective. The URBEMIS help feature (press F1 button) of the appropriate operation provides instruction for the mitigation component. Given that changes in travel behavior are variable and influenced by numerous parameters, URBEMIS excludes some mitigation measures even though they are likely to have an impact on travel behavior. This is because they either cannot be readily quantified, or because it would risk double counting mitigations already quantified elsewhere (see below).

In Section 2 of this document, it is noted that many mitigation measures that can help reduce vehicle emissions are a function of project design, and that in order to incorporate these measures into the project design, the measures should be considered as early as possible in the process. However, even after the project design phase, there are still mobile emission-reduction measures that can be implemented by a Lead Agency. When these concepts are implemented, they can increase the use of alternative travel modes, and consequently reduce mobile emissions.

- Street trees
- Direct pedestrian connections

³ R-value: A measure of a material's resistance to heat flow in units of Fahrenheit degrees x hours x square feet per Btu. The higher the R-value of a material, the greater its insulating capability. The R-value of some insulating materials is 3.7 per inch for fiberglass and cellulose, 2.5 per inch for vermiculite, and more than 4 per inch for foam. All building materials have some R-value. For example, a 4-inch brick has an R-value of 0.8, and half-inch plywood has an R-value of 0.6.

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- Zero building setbacks
 - Pedestrian signalization and signage
 - Street furniture and artwork
 - Street lighting
 - Availability of bicycle parking
 - Design safe routes to schools
 - Ensure that infrastructure is provided to accommodate transit. This may include:
 - Transit route signs and displays
 - Transit stop amenities
 - Bus turnouts and bulbs
 - Design building elevations maximizing visual interest for pedestrians.

Please see Section 2 of this document for more information on how to effectively implement and quantify measures such as these.

6.6 Mitigating Impacts of TACs

Specific mitigation measures should be identified and considered for those projects that may release TACs to the atmosphere in amounts that may be unhealthy for nearby receptors. Mitigation measures should consider both routine and non-routine TAC releases. Mitigation measures may involve handling, storage, and disposal methods that minimize release of TACs to the atmosphere. In some cases, air pollution control devices or modifications to processes can be employed. Furthermore, facilities that may release TACs to the atmosphere should be located as far as possible from sensitive receptors such as residences, schools, day-care centers, extended-care facilities, and hospitals.

Land use conflicts are best addressed on an individual basis. The District is available to assist cities and counties in evaluating local government options and strategies for minimizing existing pollution exposure problems. Options may include relocation, redevelopment, rezoning, process changes, incentive programs, and others.

As discussed, while stationary source projects are mostly regulated by the District, mobile sources are not. Consequently, projects where significant numbers of diesel powered vehicles will be operating such as truck stops, transit centers, and warehousing may create risks from toxic diesel particulate emissions. These facilities and vehicles are not subject to District permit and so may need mitigation measures adopted by the Lead Agency to reduce their impact. Measures are available such as idling limits, electrifying truck stops to power truck auxiliary equipment, use of diesel particulate filters, and use of alternative fuel heavy-duty trucks. As mentioned above, the most effective strategy may be to place these types of projects as far as possible from sensitive receptors.

6.7 Mitigating Odor Impacts

Probably the most effective mitigation measure available to reduce odor impacts is the establishment of a buffer between the odor source and the nearest receptor. The dimensions of the buffer zone should ensure that the project does not expose the public to nuisance levels of odorous emissions. In establishing the appropriate dimensions of the buffer zone, the Lead Agency should consider actions currently being taken at the facility to control odors, as well as

any future actions to which the facility is firmly committed. A safety margin also should be considered in establishing a buffer zone to allow for future expansion of operations at the source of the odors. In order to determine the appropriate buffer distance, a Lead Agency can research similar facilities to ascertain whether odor complaints have been registered by nearby receptors.

In order to reduce the dimensions of the buffer zone, add-on control devices (e.g. filters or incinerators) and/or process modifications implemented at the source of the odors may be feasible, depending on the specific nature of the facility. Lead Agencies should consult the District for further information regarding add-on controls and process modifications to control odors. Odor mitigation measures for receptors (e.g. residential areas) that rely on sealing buildings, filtering air, or disclosure statements are not considered by the District to be appropriate mitigation measures to be used in place of buffer zones or technical controls.

6.8 Mitigating Plan Level Air Quality Impacts

General plans, community plans, specific plans and policy documents often set the pattern of new development for the next twenty or more years. The District encourages local agencies to incorporate policies that support strategies for reduced growth in motor vehicle use. Listed below are four ways that local agencies can assist air quality officials in reducing emissions from motor vehicle use.

1. Develop policies to shift travel behaviors away from single-occupant vehicle use to modes such as transit, carpools, bicycling, and walking;
2. Eliminate the need for trips and reduce the distances traveled through the design, mix, and location of land uses and roads;
3. Change fleet vehicles to those using cleaner burning fuels; and
4. Support the District's programs to reduce emissions from mobile sources.

There is increasing recognition that land use pattern and site design are critical to the success of measures implementing the first two strategies. Additional strategies the District recommends that cities and counties can implement to make their communities more transit, bicycle, and pedestrian-friendly, and avoid land use conflicts that lead to toxics and nuisance problems are summarized as follows:

- Integrate land use plans, transportation plans, and air quality plans;
- Plan land uses in ways that support a multi-modal transportation system;
- Take local action to support programs that reduce congestion and vehicle trips;
- Plan land uses to minimize exposure to toxic air pollutant emissions from industrial and other sources.

Implementation of these strategies on an individual project basis can still be beneficial, even absent a community-wide strategy, but the benefits will be greater if implemented broadly.

Quantifying plan level mitigation measures is difficult, but possible. The most effective method to calculate mobile source reductions would be to use a mode split traffic model (e.g., SACOG's SACMET model) to show the difference in trips, vehicle miles traveled and emissions based on projected increases in carpooling, transit, bicycling, and walking. The benefits of community

programs to reduce area source emissions from sources such as residential water and space heating, landscape maintenance, and woodburning can be quantified based on population growth projections and estimates of program penetration. Emission factors for the standard equipment and for the less polluting alternatives can then be used to calculate emissions under the different scenarios.

6.9 Mitigation of Greenhouse Gases

The Governor has recognized, “mitigation efforts will be necessary to reduce greenhouse gas emissions and adaptation efforts will be necessary to prepare Californians for the consequences of global warming.” (Executive Order S-3-05, June 1, 2005.) The Lead Agency can require mitigation measures through alterations of its building codes or permit requirements; e.g., it might require solar heating capabilities for all new development, or require that carbon sequestration credits be purchased for developments exceeding a certain size. The Lead Agency could take direct action to offset its own carbon emissions, or those of its residents, by providing for increased public transportation service, increased support of alternative fuels and technologies, or other measures to reduce the impacts of CO₂.

APPENDICES

APPENDIX A – Background Information for Environmental Setting

A1 Topography and Meteorology

The District is located within the boundaries of the Sacramento Valley Air Basin (SVAB). The SVAB encompasses eleven counties including all of Shasta, Tehama, Glenn, Colusa, Butte, Sutter, Yuba, Sacramento, and Yolo Counties, the westernmost portion of Placer County and the northeastern half of Solano County. The SVAB is bounded by the North Coast Ranges on the west and Northern Sierra Nevada Mountains on the east. The intervening terrain is relatively flat.

Hot dry summers and mild rainy winters characterize the Mediterranean climate of the SVAB. During the year the temperature may range from 20 to 115 degrees Fahrenheit with summer highs usually in the 90s and winter lows occasionally below freezing. Average annual rainfall is about 20 inches, and the rainy season generally occurs from November through March. The prevailing winds are moderate in strength and vary from moist clean breezes from the south to dry land flows from the north.

The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants under certain meteorological conditions. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells collect over the Sacramento Valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with temperature inversions that trap pollutants near the ground.

The ozone season (May through October) in the Sacramento Valley is characterized by stagnant morning air or light winds with the delta sea breeze arriving in the afternoon out of the southwest. Usually the evening breeze transports the airborne pollutants to the north out of the Sacramento Valley. During about half of the days from July to September, however, a phenomenon called the “Schultz Eddy” prevents this from occurring. Instead of allowing for the prevailing wind patterns to move north carrying the pollutants out, the Schultz Eddy causes the wind pattern to circle back to the south. Essentially, this phenomenon causes the air pollutants to be blown south toward the District. This phenomenon has the effect of exacerbating the pollution levels in the area and increases the likelihood of violating federal or state standards. The eddy normally dissipates around noon when the delta sea breeze arrives.

A2 Air Quality Regulatory Framework

Responsibility for protecting air quality is given to both federal, State, regional, and local government agencies. Table A1 summarizes the responsibilities of each agency with jurisdiction over air quality. The regulatory framework is described in more detail below.

A2.1 Federal Environmental Protection Agency

The USEPA is responsible for implementing national air quality programs established under the Federal Clean Air Act (FCAA). The first FCAA was enacted in 1963 and empowered the Secretary of Health, Education, and Welfare to define air quality criteria. The FCAA was

amended in 1970. With this amendment, the President decided to establish an autonomous regulatory body to oversee the enforcement of environmental policy. Thus, the USEPA was created. The FCAA was again substantially amended in 1977, and again in 1990.

Table A1 Air Quality Management Regulatory Responsibilities

Govt. Level	Legislation Implementing	Agency	Responsibilities
Federal	Clean Air Act	Environmental Protection Agency	Enforce FCAA, establish national ambient air quality standards, regulates emission sources such as aircraft, ships, and certain types of locomotives
State	California Clean Air Act (H&S § 39600 et seq.) AB 1807, Air Toxics Contaminants Act	California EPA and Air Resources Board, Office of Environmental and Health Hazard Assessments	Implement CCAA, meet state requirements of FCAA, establish state ambient air quality standards, set CA vehicle emission standards
Regional	California Health and Safety Code §39000 - §44474 Local Resolutions	Yolo-Solano AQMD	Monitor air quality, design programs to attain and maintain state and federal ambient air quality standards, developed air quality rules that regulate point source, area source and certain mobile source emissions, establish permitting requirements for stationary sources, enforce air quality rules through inspections, education, training, or fines.
Local	Local Ordinance Air Quality Element of a General Plan	Public Agencies including Local Governments and County Transportation Commissions	Control or mitigate air pollution through police powers and land use decision-making authority, General Plan air quality elements, congestion management program, local ordinances, administrative actions, CEQA review and mitigation monitoring

The USEPA is involved with global, international, national, and interstate air pollution issues. Its primary role at the state level is one of oversight of state air quality programs. The USEPA sets federal vehicle and stationary source emission standards and provides research and guidance on air pollution programs.

The FCAA required the USEPA to set National Ambient Air Quality Standards (NAAQS) for several problem air pollutants on the basis of human health and welfare criteria. Very simply, an ambient air quality standard is the definition of “clean air.” Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction. Primary NAAQS were established for the following “criteria” air pollutants (so called because they were established on the basis of health criteria):

- Ozone,

-
- Particulate Matter (PM₁₀, PM_{2.5}),
 - Nitrogen Dioxide (NO₂),
 - Carbon Monoxide (CO),
 - Sulfur Dioxide (SO₂),
 - Lead (Pb).

The primary NAAQS standards are intended to protect, with an adequate margin of safety, those persons most susceptible to respiratory distress, such as people suffering from asthma or other illness, the elderly, very young children, or people engaged in strenuous work or exercise. Table A2 presents the NAAQS. The NAAQS as shown in Table A2 were current as of the printing of this document, but may be changed over time. Current NAAQS may be found on the ARB's website. A link to this portion of the ARB website can be found on the CEQA section of the District's website.

The FCAA required each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The FCAA 1990 Amendments (FCAAA) added requirements for states containing areas that exceed the NAAQS to revise their SIPs in order to incorporate additional control measures to reduce air pollution. The District is part of the USEPA's designated Sacramento Area Federal Ozone Non-attainment Area. The SIP is a living document that is periodically modified to reflect the latest emission inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The USEPA has responsibility to review all state SIPs to determine if they conform to the mandates of the FCAAA and will achieve air quality goals when implemented. If the USEPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the non-attainment area and may impose additional control measures. Failure to obtain an approved SIP or to implement the plan within mandated timeframes can result in limitations being applied to transportation funding and sanctions being placed on stationary air pollution sources in the air basin.

A2.2 State Air Resources Board

The California Air Resources Board (ARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing its own air quality legislation, called the California Clean Air Act (CCAA), adopted in 1988. The ARB has primary responsibility in California for developing and implementing air pollution control plans designed to achieve and maintain the NAAQS established by the USEPA. Whereas the ARB has primary responsibility and produces a major part of the SIP for pollution sources that are statewide in scope, it relies on the local air districts to provide additional strategies for sources under their jurisdiction. The ARB combines its data with all local district data and submits the completed SIP to the USEPA. The SIP consists of the emissions standards for vehicular sources and consumer products set by the ARB, and attainment plans adopted by the air districts and approved by the ARB.

States may establish their own standards, provided the state standards are at least as stringent as the NAAQS. California has established California Ambient Air Quality Standards (CAAQS) pursuant to H&SC §39606(b) and its predecessor statutes. Table A2 also presents the CAAQS.



In addition to the eight criteria pollutants established by the NAAQS, the CAAQS includes Hydrogen Sulfide, Vinyl Chloride, and Visibility Reducing Particles.

Table A2. Ambient Air Quality Standards

Pollutant Unit	of Measure	California ¹	National ²
Ozone	1-Hour	0.09 ppm	—
	8-Hour	0.07 ppm	0.08 ppm
Carbon Monoxide	1-Hour	20.0 ppm	35.0 ppm
	8-Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide	1-Hour	0.18 ppm	—
	Annual	0.30 ppm	0.05 ppm
Sulfur Dioxide	1-Hour	0.25 ppm	—
	24-Hour	0.04 ppm	0.14 ppm
	Annual	—	0.03 ppm
Coarse Particulate Matter (PM ₁₀)	24-Hour	50 µg/m	150 µg/m
	Annual Average	20 µg/m	—
Fine Particulate Matter (PM _{2.5})	24-Hour	—	35 µg/m
	Annual Average	12 µg/m	15 µg/m
Sulfates	24-Hour	25 µg/m	—
Lead ⁴	30-Day Average	1.5 µg/m	—
	Calendar Quarter	—	1.5 µg/m
Hydrogen Sulfide	1-Hour	0.03 ppm	—
Vinyl Chloride ⁴	24-Hour	0.010 ppm	—
Visibility Reducing Particles	8-Hour	³	—

¹ California standards for Sulfates, Lead, Hydrogen Sulfide, and Vinyl Chloride are values that are not to be equaled or exceeded. All others are not to be exceeded.

² Only the primary standards are established to protect the public health and are the most stringent federal standards. The levels of air quality necessary, with an adequate margin of safety to protect the public health.

³ In sufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70 percent.

⁴ The ARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

ppm = parts per million
µg/m³ = micrograms per cubic meter
Sources: California Air Resources Board (02/22/07), for more information please call ARB-PIO at (916) 322-2990.

The H&SC §39608 requires the ARB to “identify” and “classify” each air basin in the state on a pollutant-by-pollutant basis. Subsequently, the ARB has designated areas in California as non-attainment based on violations⁴ of the CAAQS. Table A3 shows the District’s designations. These designations were current at the time this document was published, but are subject to change. Applicants should check designations on the ARB website.

⁴ A violation is different than an exceedance. An exceedance is a day with a maximum ozone concentration that is higher than the standard. An exceedance does not necessarily cause a violation. A violation occurs when enough exceedances have occurred for the area to be considered not in attainment of the standard according to ARB methodology.

Table A3. District Status for the California and National Ambient Air Quality Standards.

Pollutant	Averaging Time	State Standards	National Standards
Ozone	1-Hour	Non-attainment	N/A
	8-Hour	Non-attainment	Non-attainment
Carbon Monoxide	1-Hour	Attainment	Unclassified/Attainment
	8-Hour	Attainment	Unclassified/Attainment
Nitrogen Dioxide	1-Hour	Attainment	N/A
	Annual	N/A	Attainment
Sulfur Dioxide	1-Hour	Attainment	N/A
	24-Hour	Attainment	Attainment
	Annual	N/A	Attainment
Coarse Particulate Matter (PM ₁₀)	24-Hour	Non-attainment	Unclassified
	Annual Average	Non-attainment	N/A
Fine Particulate Matter (PM _{2.5})	24-Hour	N/A	Unclassified
	Annual Average	N/A	Unclassified
Sulfates	24-Hour	Attainment	N/A
Lead	30-Day Average	Attainment	N/A
	Calendar Quarter	N/A	Attainment
Hydrogen Sulfide	1-Hour	Attainment	N/A
Vinyl Chloride	24-Hour	Attainment	N/A
Visibility Reducing Particles	8-Hour	Attainment	N/A

Notes: N/A – not applicable, state or federal standard does not exist for the combination of pollutant and averaging time. Unclassified areas are those for which air monitoring has not been conducted but which are assumed to be in attainment. Source: California Air Resources Board State and National Area Designation Maps (www.arb.ca.gov/desig/adm/adm.htm)

For all non-attainment categories except particulate matter, attainment plans are required to demonstrate a five-percent-per-year reduction in non-attainment air pollutants or their precursors, averaged over consecutive three-year periods, unless an approved alternative measure of progress is developed. In addition, the air districts in violation of CAAQS are required to prepare an Air Quality Attainment Plan (AQAP) that lays out a program to attain and maintain the CCAA mandates.

The ARB also has some responsibility for monitoring air quality. The ARB has established and maintains, in conjunction with the air districts, a network of sampling stations called the State and Local Air Monitoring (SLAMS) network that monitor actual pollutant levels present in the ambient air. The ARB website lists monitoring stations active in the District. In addition, it indicates which pollutants are monitored and the agency responsible for site operations. The ambient air monitoring program in the District serves three primary goals:

1. Collect accurate real-time measurements of ambient pollutant levels at the four sites located in the District. The data can be used to issue timely health advisories, when necessary.
2. Generate data to determine both the State and federal attainment status of the District.
3. Generate data to evaluate the effectiveness of State and District rules and regulations.

The ARB also sets emissions standards for new motor vehicles, consumer products, small utility engines, and off-road vehicles. In many cases, California standards are the toughest in the nation.

State law recognizes that air pollution does not respect political boundaries and therefore requires the ARB to divide the state into separate air basins that have “similar geographical and meteorological conditions” while still making “considerations for political boundary lines whenever practicable” [H&SC §39606(1)]. Originally, air pollution was regulated separately by county. Although this is still the practice in many counties in California, the District was established in 1971 by a joint powers agreement between the Yolo and Solano County Board of Supervisors. The District is governed by a Board of Directors composed of representatives from both the county boards of supervisors and city council members from the cities within the District. The District has jurisdiction over all of Yolo County and the northeast portion of Solano County, from Vacaville on the west, to Rio Vista on the South. The District includes about 1,600 square miles and a population of approximately 325,000 people.

A2.3 Local Air Districts

The District is tasked with achieving and maintaining healthful air quality for its residents. This is accomplished by establishing programs, plans, and regulations enforcing air pollution control rules in order to attain all state and federal ambient air quality standards and minimize public exposure to airborne toxins and nuisance odors.

The District has adopted several attainment plans to achieve state and federal air quality standards and comply with CCAA and FCAA requirements. The District continuously monitors its progress in implementing attainment plans and must periodically report to the ARB and the USEPA. The District, in partnership with the five air districts in the Sacramento Metropolitan Area, ARB, and SACOG, periodically revises its attainment plans to reflect new conditions and requirements in accordance with schedules mandated by the CCAA and FCAA.

The 1994 Sacramento Area Regional Ozone Attainment Plan is the current federal ozone plan (SIP) for the District, and sets out stationary source control programs and statewide mobile source control programs for attainment of the 1-hour ozone standard. The districts of the Sacramento Region have also prepared an 8-hour Ozone Rate of Progress Plan that shows a 3% per year emission reduction in volatile organic compounds (or the NO_x equivalent) for 6 years (through 2008). This plan continues the strategies found in the 1-hour ozone SIP. The USEPA’s June 2005 revocation of the 1-hour ozone standard and enacting the 8-hour ozone standard required the air districts and ARB to prepare a new attainment demonstration SIP. An 8-hour ozone attainment demonstration plan for the Sacramento Metropolitan Area is currently under development and will contain additional control measures to demonstrate that the region will attain the 8-hour standard by the target date, 2013. Please review the Sacramento Metropolitan Air Quality Management District’s website for the most current information on the most recent ozone plan. A link to this portion of the Sacramento website can be accessed from the CEQA section of the District’s website.

The CCAA requires districts to adopt air quality attainment plans and to review and revise their plans to address deficiencies in interim measures of progress once every three years. The

District's AQAP was adopted in 1992 and most recently updated in 2003. The current plans used to comply with CCAA and FCAAA requirements can be downloaded from the District web site.

The District's primary means of implementing air quality plans is by adopting rules and regulations. The H&SC §42300 et. seq. authorizes districts to adopt rules and regulations and to pursue civil and criminal penalties for violations. The District rulebook contains more than 85 rules. Some new rules adopted by the District apply to sources never before regulated, such as Rule 2.40 - Wood Burning Appliances, which prohibits installation of any new traditional "open hearth" type fireplaces within the District's jurisdiction.

In addition to the District's primary role of controlling stationary sources of pollution, the District is required to implement transportation control measures and identify indirect source control programs to reduce mobile source emissions. To accomplish this, the District works closely with cities and counties and with regional transportation planning agencies. The District has also enhanced its participation in CEQA where it actively reviews and comments on prepared environmental documents. Also, the District encourages cities and counties to include air quality policies for reducing emissions generated by indirect sources in their General Plans. The District coordinates with the transportation planning agencies [e.g., Sacramento Area Council of Governments (SACOG), Yolo County Transportation District, UC Davis Transportation and Parking Services and Unitrans, and Solano Transportation Authority] to help them comply with pertinent provisions of the federal and State Clean Air Acts, as well as related transportation legislation (such as the Safe, Accountable, Flexible, Efficient Transportation Equity Act for the 21st Century – A Legacy for Users, Congestion Management Act, Transportation Improvement Plans, etc.).

A3 Ambient Air Quality and Pollutant Characteristics

As discussed in Section 5, the environmental setting discussion of an EIR or Negative Declaration should summarize ambient air quality by summarizing the District's attainment status for federal and State AAQS and by identifying exceedences of CAAQS and NAAQS for the previous three years using data from the closest ambient monitoring station to the project site.

A3.1 Determining Attainment Status

At publication date, the District is in non-attainment of State and federal ozone standards and non-attainment of the State standard for PM₁₀. When an area is designated by the government as "non-attainment" for an air quality standard, it means that the standard is not achieved. The District is in attainment for all other criteria pollutant standards. ARB's website gives current information about the District's attainment status for federal and State ambient air quality standards. A link to this portion of the ARB site can be accessed on the CEQA section of the District's website.

A3.2 Finding Monitoring Data

Ambient air quality in the District is monitored at four monitoring stations. Some stations monitor ozone, PM₁₀, and carbon monoxide or a combination thereof. Other stations monitor only one specific pollutant. There may be some variation in monitoring stations from year to year as new stations may be added, discontinued, or relocated. The air quality monitoring data

may be obtained from the ARB web site, including data from monitoring stations located within the Sacramento Metro 8-hour Ozone Planning Area. A link to this portion of the ARB site can be accessed from the CEQA section of the District's website.

A3.3 Characteristics and Health Effects of Air Pollutants

Ozone

Ozone in the lower atmosphere is one of the main components of smog. It is not directly emitted but is formed in the atmosphere over several hours from combinations of various precursors in the presence of sunlight. Reactive organic gases (ROG) and Nitrogen Oxides (NO_x) are considered to be the primary compounds, or precursors, contributing to the formation of ozone. Ozone is viewed as both a secondary pollutant and a regional pollutant because ozone can form far from where precursors are emitted.

Short-term exposure to ozone can result in injury and damage to the lungs, decreases in pulmonary function, and impairment of immune mechanisms. Chronic lung disease can occur as a result of longer-term exposure. Symptoms of ozone irritation include shortness of breath, chest pain when inhaling deeply, wheezing, and coughing. Children and persons with pre-existing respiratory disease (e.g., asthma, chronic bronchitis, and emphysema) are at greater risk.

ROG are photochemically reactive hydrocarbons whose primary sources include mobile sources, consumer products, petroleum marketing (e.g., gas dispensing), coatings and solvents, and agricultural related activities. NO_x is a family of gaseous nitrogen compounds whose emissions result primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicle fuel combustion is the major source of this air pollutant. In 2005 daily emissions of ROG and NO_x in the District were estimated at 22 and 35 tons, respectively, with on road sources making up 29% of ROG and 52% of NO_x emissions⁵.

Particulate Matter

The term "particulate matter" (PM) includes both solid particles and liquid droplets found in air. Many manmade and natural sources emit PM directly or emit other pollutants that react in the atmosphere to form PM. These solid and liquid particles come in a wide range of sizes.

Particles less than 10 micrometers in diameter (PM₁₀) pose a health concern because they can be inhaled into and accumulate in the respiratory system. Particles with diameters between 2.5 and 10 micrometers are referred to as "coarse." Sources of coarse particles include crushing or grinding operations, and dust from paved or unpaved roads. Particles less than 2.5 micrometers in diameter (PM_{2.5}) are referred to as "fine" particles and are believed to post the largest health risks. Because of their small size, fine particles can lodge deeply into the lungs. Sources of fine particles include all types of combustion (motor vehicles, power plants, wood burning, etc.) and some industrial processes. In 1997, the USEPA adopted a fine particulate matter standard

⁵ ARB Almanac Emission Projection Data (published in 2006), 2005 Estimated Annual Average Emissions for Yolo-Solano AQMD. All emissions are represented in Tons per Day and reflected the most current data provided to ARB (11/17/06).

for particles 2.5 microns or less in diameter (PM_{2.5}) for the first time, and revised the standard for PM₁₀. The ARB adopted an annual PM_{2.5} standard in 2002.

Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of particulate matter in the air. Non-health-related effects include reduced visibility.

Carbon Monoxide

Carbon monoxide is formed by the incomplete combustion of carbon-containing material. Under most conditions, CO does not persist in the atmosphere and is rapidly dispersed. Elevated levels of CO are most likely to occur in the winter, when inversion levels trap pollutants near the ground and concentrate the CO. Since CO is somewhat soluble in water, normal winter conditions of rainfall and fog can suppress CO concentrations. Motor vehicles are the dominant source of CO emissions and adverse localized impacts can be created in areas of heavy traffic congestion.

When CO combines with hemoglobin in the blood, the oxygen-carrying capacity of the blood is reduced and the release of oxygen is inhibited or slowed. This condition places angina (uncomfortable pressure, fullness, squeezing or pain in the center of the chest) patients, persons with other cardiovascular diseases or with chronic obstructive lung disease, asthma, and persons with anemia at risk. At higher levels, CO also affects the central nervous system. Symptoms of exposure may include headaches, dizziness, sleepiness, nausea, vomiting, confusion, and disorientation.

In 2004 motor vehicles contributed approximately 71% of total CO emissions in the Sacramento Valley. Residential and agricultural burning and other mobile and miscellaneous sources contribute to the remainder. There have been no recorded violations of the federal or state CO AAQS at District monitoring stations.

Other Criteria Pollutants

The standards for NO₂, SO₂, and Lead are being met in the District, and the latest pollutant trends suggest that these standards will be attained for the foreseeable future. Ambient levels of airborne Lead are well below the state and federal standards and are expected to continue to decline. Since the phase-out of leaded gasoline, ambient lead concentrations have decreased dramatically and lead inhalation is no longer a significant health concern.

Greenhouse Gases

The California Global Warming Solution Act of 2006 (AB 32), a law to control and reduce the emissions of global warming gases in California, requires both reporting of greenhouse gas emissions and their reduction. AB32 requires the reduction of greenhouse gas emissions such as carbon dioxide (CO₂) to 1990 levels by 2020. Local governments are called upon to help carry out the provisions of AB32. Because global warming is perhaps the most serious environmental

threat currently facing California, environmental documents should address the issue by providing full disclosure of the effects on greenhouse gas emissions that the project will cause, and by adopting mitigation measures to reduce those effects.

Climate change results from the accumulation in the atmosphere of “greenhouse gases” produced by the burning of fossil fuels for energy. Because greenhouse gases (primarily, CO₂, methane and nitrous oxide) persist and mix in the atmosphere, emissions anywhere in the world impact the climate everywhere. The impacts on climate change from greenhouse gas emissions have been extensively studied and documented⁶. See the CEQA section of the District’s website for links to more information on climate change.

Toxic Air Contaminants

In addition to the criteria air pollutants, TACs are another group of airborne substances known to be highly hazardous to health, even in small quantities. TACs are capable of causing short-term (acute) and long-term (chronic or carcinogenic) adverse human health effects. TACs can be emitted from a variety of common sources, including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. Agricultural and construction activities can also contribute to toxic air emissions. In 1998, the ARB has also identified diesel exhaust particulate matter (diesel PM) as a TAC.

The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) requires stationary sources to report the types and quantities of toxic substances their facilities routinely release into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, and to notify nearby residents of significant risks. The ARB web site includes a Facility Search Tool to find information about toxic and criteria pollutants, including health risk information, for a specific facility. See the CEQA section of the District’s website for a link to the Facility Search Tool.

Regulation of TACs is achieved through federal and State controls on individual sources. The FCAAA offers a comprehensive plan for achieving significant reduction in both mobile and stationary source emissions of certain designated TACs. All major stationary sources of designated TACs are required to obtain an operating permit and pay the required fees.

New sources that require a permit from the District, or existing sources that are being modified, will be analyzed by the District based on their potential to emit toxics. If it is determined that the project will emit toxics resulting in a lifetime cancer risk above one in one million, or the non-cancer risk Hazard Index greater than one, sources may have to implement BACT for toxics, or “T-BACT,” in order to reduce toxic emissions. In addition, if the analysis shows risk greater than one in one million, a formal risk assessment should be conducted. If a source cannot reduce the risk below the ten in one million level or the non-cancer risks Hazard Index less than one even after T-BACT has been implemented, the permitting authority may have cause to deny the permit required by the source. This program helps to prevent new toxics problems, and reduces

⁶ NASA and Department of Energy scientists state that emission of CO₂ and other heat-trapping gases have warmed the oceans and are leading to energy imbalance that is causing, and will continue to cause, significant warming, increasing the urgency of reducing CO₂ emissions.

increases in toxics from existing older sources by requiring them to apply new technology when retrofitting.

If any new or modified source of toxics is located within 1,000 feet of a school, the District is required by H&SC§42301.6(a) to send a notice to the parents of all students attending the school, as well as to all residences within 1,000 feet of the source. If the source locating near a school is a gas station, and initial screening indicates that the risk of cancer exceeds one in a million, the District will perform a T-BACT analysis.

Projects that will not emit any toxics themselves but will locate near a source of toxics should also evaluate whether they will be impacted by the nearby source. The District can assist in determining whether there is a toxic source in the vicinity of a proposed project. Since the District's permitting process does not address land use compatibility or siting issues, Lead Agencies that are deciding whether or not to grant a land use permit to potential sources of toxics should consider additional factors as well. These factors should include not only what the health risk may be to populations adjacent to the facility, but how granting a discretionary permit for a significant toxic source will affect future land use.

While TACs are produced by many different sources, the largest contributor to inhalation cancer risk in California is diesel PM. Exposure to diesel PM can result in an increased risk of cancer and an increase in chronic noncancer health effects including a greater incidence of cough, labored breathing, chest tightness, wheezing and bronchitis. These risks generally affect sensitive receptors near the emission source. Figure 2 (Section 4 of this document) includes the ARB Handbook recommended minimum separations between new sensitive land uses and eight categories of existing sources.

The ARB reports that the average cancer risk statewide from exposure to diesel PM was estimated to be over 500 potential cases per million in 2000⁷. Diesel PM was estimated to be responsible for about 70% of total risks from all toxics⁸. On a local scale, diesel PM can present varying cancer risks to the public, which can be greater or less than the statewide average. The ARB's risk map includes maps showing statewide trends in estimated inhalable cancer risk from estimated air toxic emissions between 1990 and 2010. A link to this ARB map has been made available on the CEQA section of the District's website. The risk from diesel PM is expected to decrease over time. The ARB has developed the "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles," which sets a goal of 75% reduction of diesel PM by 2010 and an 85% reduction by 2020.

Currently, the ARB is in the process of implementing the control measure phase of the diesel PM program. During this phase, specific statewide regulations designed to further reduce diesel PM emissions from diesel-fueled engines and vehicles will be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art

⁷ California Environmental Protection Agency, California Air Resources Board, [Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles](#), October 2000, page 1.

⁸ California Environmental Protection Agency, California Air Resources Board, [Air Quality and Land Use Handbook: A Community Health Perspective](#), April 2005, page 12.

technology requirements or emission standards to reduce diesel PM emissions. Upcoming and proposed state and federal regulations will address the following emission sources:

- New On-Road, Off-Road and Marine Engine Standards;
- Diesel Fuel Standards;
- Retrofit Requirements; and
- After market add-on controls.

When federal and State diesel PM regulations and programs are fully implemented, the human health risks related to diesel exhaust emissions are expected to significantly decrease. Where diesel PM is considered a pollutant of concern for a project, the Lead Agency should consider diesel PM reduction strategies that are currently being implemented and strive to develop diesel PM emission control technologies that would minimize diesel risk.

APPENDIX B – Justification for Thresholds of Significance

B.1 Ozone Precursors (ROG and NO_x) Threshold

What is important for determining ozone impacts is the “substantial contribution” of a project. The District defines “substantial contribution” for ozone precursor emissions in terms of California Clean Air Act (CCAA) requirements and implements it through Rule 3.20 - Ozone Transport Mitigation. By comparing a project’s ozone precursor emissions with emission levels considered significant under state law, a project-level threshold of significance can be established. In the past, the District used Rule 3.4 – New Source Review: Offset Requirements that set emission thresholds above which stationary pollution sources must offset emissions. However, Rule 3.20 is more restrictive and accounts for the transport problem associated with ozone as a regional pollutant.

As required by California Health and Safety Code (H&SC) §40912, districts responsible for air pollutant transport shall provide for attainment and maintenance of the state standards in the downwind districts. The ARB identified the District, as part of the “Broader Sacramento Area,” as transporting to the Upper Sacramento Valley, the Mountain Counties, the San Joaquin Valley, and the San Francisco Bay Area. Therefore, pursuant to requirements of the Transport Mitigation Regulation, the District implements Rule 3.20, Ozone Transport Mitigation, which requires a 10 tons per year “no net increase” program for nitrogen oxides (NO_x) and volatile organic compounds (VOCs). For purposes of this document, VOCs are equivalent to reactive organic gases (ROG). Since stationary sources are not allowed to contribute more than 10 tons per year of NO_x or VOC under Rule 3.20, this number serves as the project-level threshold of significance as well.

B.2 Coarse Particulate Matter (PM₁₀) Threshold

Particulate matter (PM) larger than 2.5 microns and less than 10 microns, often referred to as coarse PM, is mostly produced by automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. Particulate emissions from these activities can lead to adverse health effects as well as nuisance concerns such as reduced visibility. Because the District exceeds the State PM₁₀ Ambient Air Quality Standards (AAQS), the District’s New Source Review program requires Best Available Control Technologies (BACT) to be applied where new or modified emissions exceed 80 lbs/day for PM₁₀. Therefore, a project’s PM₁₀ emissions that trigger the District’s BACT threshold for PM₁₀ would result in substantial air emissions and have a potentially significant impact on local air quality.

B.3 Fine Particulate Matter (PM_{2.5})

In contrast, PM less than or equal to PM_{2.5} is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary combustion sources. The particles are either directly emitted or are formed in the atmosphere from the combustion of gases, such as NO_x and Sulfur Oxides (SO_x) combining with ammonia. PM_{2.5} can also be present when dust is generated, with the amount of PM_{2.5} varying between locations with different soils. Since EPA has not yet officially proposed a PM_{2.5} designation for the District, there is no threshold of significance proposed at this time.

B.4 Carbon Monoxide (CO) Threshold

Unless the project would cause a violation of State AAQS [9 parts per million (ppm) (8-hour average) or 20 ppm (1 hour average)] at existing or reasonably foreseeable receptors, the project would not have a significant impact on local air quality. CO modeling can be used to determine whether a project may cause a violation of the State AAQS for CO. Localized high levels of CO, or CO “hotspots”, is the District’s concern with this pollutant. Hotspots are usually associated with roadways that are congested and have heavy traffic volume. The District has accepted San Joaquin Valley Air Pollution Control District’s screening approach to determine whether the effect would have a potential for significance. The screening approach is discussed in greater detail under Section 4, Assessing Air Quality Impacts - Initial Screening.

B.5 Cumulative Impact Threshold

For ground level ozone, the District prepares air quality plans that address attainment of the State and federal ozone AAQS. These plans accommodate growth by projecting growth in ozone precursor emissions based on different indicators. Through the air quality planning process, ozone precursor emission growth is offset by regional controls on stationary, area, and transportation sources of air pollution. Project ozone emissions above individual thresholds have not been accommodated in the air quality plans and are therefore not consistent with air quality plans. Emissions will have a significant cumulative impact on regional air quality unless ozone precursor emissions above the thresholds are offset.

As for PM₁₀, the District implements Senate Bill 656, codified as H&SC §39614, and has developed a subset of control measures to further reduce PM₁₀ emissions from new and existing stationary, mobile and area sources. The objective is to make progress toward attainment of the State PM₁₀ standard. Project PM₁₀ emissions above BACT thresholds have not been accommodated in the plan and therefore the emissions will have a significant cumulative impact on District air quality unless the emissions above the thresholds are offset.

APPENDIX C – VOC Emission Factors from Architectural Coatings for Non-Residential and Residential Projects Using South Coast AQMD Methodology

C.1 Coating Emission Factor for Non-Residential Projects

Table C.1 Commercial/Industrial Projects at 150 grams per liter.

VOC Content (grams per liter)	conversion from grams per liter	conversion to pounds VOC per gallon	Coating coverage ¹ (square feet per gallon)	Emission Factor (pounds per square feet)
150	454	3.785	180	0.0069

¹ Based on architectural coating data sheets and known industry, for two coats of paint typically applied at 4 mil thickness per coat.

C.2 Coating Emission Factor for Residential Projects

Table C.2 Exterior Coatings for Residential Projects at 150 grams per liter.

VOC Content (grams per liter)	conversion from grams per liter	conversion to pounds VOC per gallon	Coating coverage ¹ (square feet per gallon)	Percent of Exterior Coating on Total Residential Project	Weighted Emission Factor (pounds per square feet)
150	454	3.785	180	0.25	0.00174

¹ Based on architectural coating data sheets and known industry for two coats of paint typically applied at 4 mil thickness per coat.

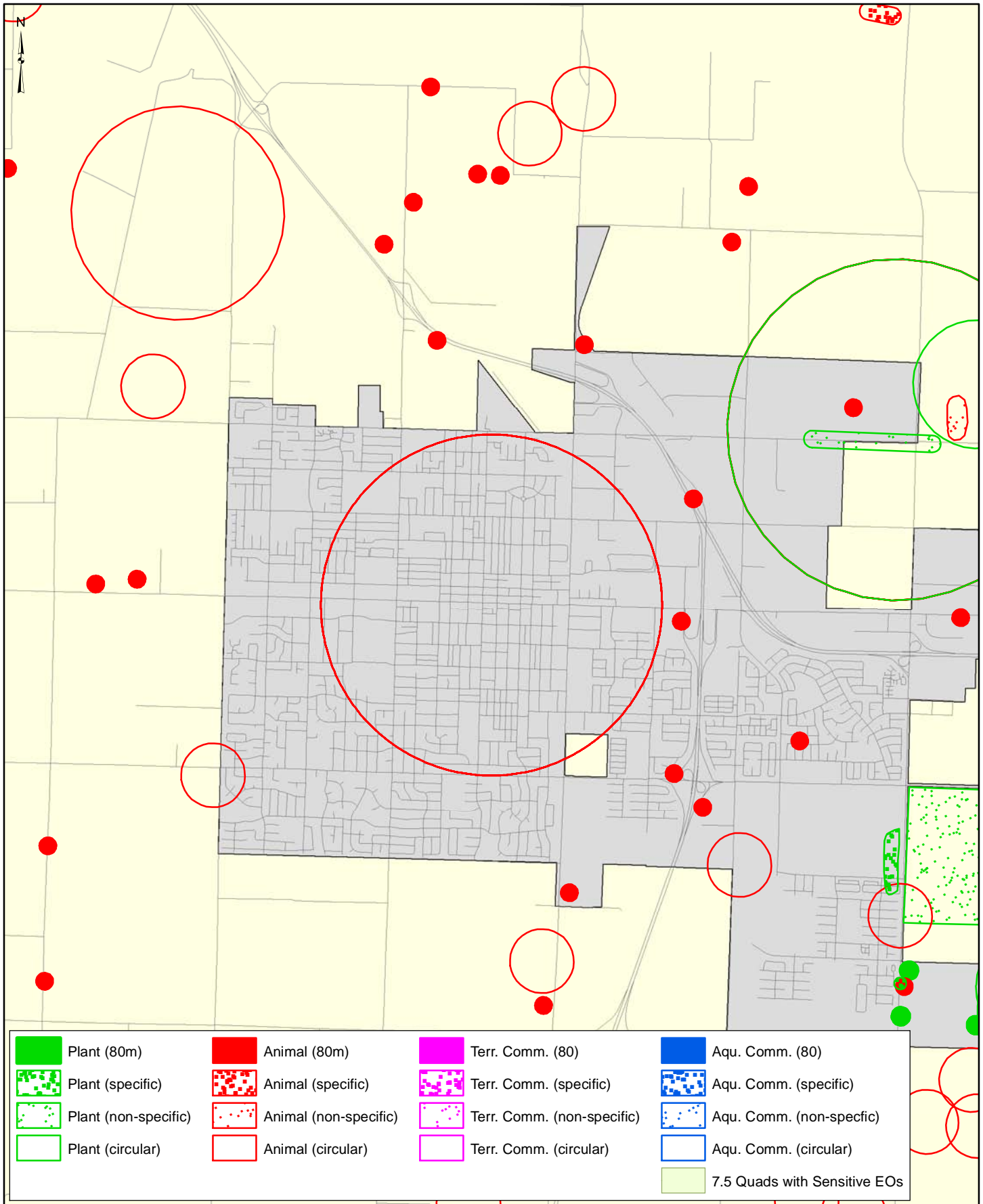
Table C.3 Interior Coatings for Residential Projects at 100 grams per liter.

VOC Content (grams per liter)	conversion from grams per liter	conversion to pounds VOC per gallon	Coating coverage ² (square feet per gallon)	Percent of Exterior Coating on Total Residential Project	Weighted Emission Factor (pounds per square feet)
100	454	3.785	200	0.75	0.00313

² Based on architectural coating data sheets and known industry for two coats of paint typically applied at 1.2 – 1.5 mil thickness per coat.

Sum of Total Weighted Emission Factor (pounds per square feet): 0.00486

Appendix D
Biological Resources Search



2,000 1,000 0 1,000 2,000
 Feet

Figure _
Special-Status Species and Sensitive Natural Communities
 Project
 Woodland, California

SOURCE: California Department of Fish & Game;
 California Natural Diversity Data Base (CNDDB).

Antrozous pallidus

pallid bat

Element Code: AMACC10010

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5

CDFG Status: SC

State: None

State: S3

Habitat Associations

General: DESERTS, GRASSLANDS, SHRUBLANDS, WOODLANDS & FORESTS. MOST COMMON IN OPEN, DRY HABITATS WITH ROCKY AREAS FOR ROOSTING.

Micro: ROOSTS MUST PROTECT BATS FROM HIGH TEMPERATURES. VERY SENSITIVE TO DISTURBANCE OF ROOSTING SITES.

Occurrence No. 313

Map Index: 57705

EO Index: 66789

Dates Last Seen

Occ Rank: Unknown

Element: 1957-10-28

Origin: Natural/Native occurrence

Site: 1957-10-28

Presence: Presumed Extant

Record Last Updated: 2006-10-05

Trend: Unknown

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.67728° / -121.77377°

Township: 10N

UTM: Zone-10 N4281679 E606663

Range: 02E

Radius: 1 mile

Mapping Precision: NON-SPECIFIC

Section: 29

Qtr: XX

Elevation: 65 ft

Symbol Type: POINT

Meridian: M

Location: WOODLAND.

Location Detail: MAPPED ACCORDING TO LAT/LONG COORDINATES GIVEN IN MANIS, WITH UNCERTAINTY OF 1609.344M.

General: 1 MALE SPECIMEN COLLECTED BY CHARLES S. THAELER JR. AND ROBERT L. RUDD, MVZ #122295.

Owner/Manager: UNKNOWN

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status _____ **NDDB Element Ranks** _____ **Other Lists** _____
 Federal: None **Global:** G5 **CDFG Status:**
 State: Threatened **State:** S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 27 **Map Index:** 10745 **EO Index:** 27276 **Dates Last Seen** _____
Occ Rank: None **Element:** 1984-04-11
Origin: Natural/Native occurrence **Site:** 1979-06-27
Presence: Extirpated
Trend: Unknown **Record Last Updated:** 2002-07-30

Quad Summary: Grays Bend (3812166/513B), Woodland (3812167/514A), Eldorado Bend (3812177/530D)
County Summary: Yolo

Lat/Long: 38.74425° / -121.76062° **Township:** 10N
UTM: Zone-10 N4289125 E607707 **Range:** 02E
Radius: 3/5 mile **Mapping Precision:** NON-SPECIFIC **Section:** 04 **Qtr:** XX
Elevation: 47 ft **Symbol Type:** POINT **Meridian:** M

Location: 3.3 MILES NORTH OF THE JUNCTION OF HIGHWAY 113 AND I-5
Ecological: NEST TREE WAS AN OAK, WHICH WAS REMOVED, AND THE FIELD WAS CONVERTED TO AGRICULTURE.
General: DFG SWHA #YO001. NEST FOUND IN 1979; YOUNG FLEDGED, BUT NEST TREE WAS CUT DOWN BY MAY 1980. ADULTS OBSERVED SOARING IN 1980, BUT NOT AGAIN UNTIL 1984; NO NEST FOUND IN 1984, AND SIGHTING WAS NW OF OLD LOCATION.
Owner/Manager: PVT

Occurrence No. 211 **Map Index:** 10704 **EO Index:** 27090 **Dates Last Seen** _____
Occ Rank: Unknown **Element:** 1984-06-04
Origin: Natural/Native occurrence **Site:** 1984-06-04
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2003-08-06

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.63739° / -121.77136° **Township:** 09N
UTM: Zone-10 N4277254 E606932 **Range:** 02E
Radius: 1/5 mile **Mapping Precision:** NON-SPECIFIC **Section:** 08 **Qtr:** SE
Elevation: 55 ft **Symbol Type:** POINT **Meridian:** M

Location: 0.25 MILE SW OF THE JUNCTION OF HIGHWAY 113 AND ROAD 25A
Ecological: NEST TREE IS A LARGE COTTONWOOD; SURROUNDED BY AGRICULTURAL FIELDS.
General: DFG SWHA #YO048 (ALSO, SEE EO#401). 2 ADULTS OBSERVED NESTING ON 4 JUN 1984. ADULTS WITH 1+ YOUNG OBSERVED IN THE NEST ON 12 JUN 1985. 2 ADULTS FLEDGED 1 YOUNG IN 1986
Owner/Manager: PVT

Occurrence No. 384 **Map Index:** 21190 **EO Index:** 17105 **Dates Last Seen** _____
Occ Rank: Fair **Element:** 1992-05-05
Origin: Natural/Native occurrence **Site:** 1992-05-05
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 1992-10-13

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.66247° / -121.80346° **Township:** 09N
UTM: Zone-10 N4280001 E604102 **Range:** 01E
Radius: 1/5 mile **Mapping Precision:** NON-SPECIFIC **Section:** 01 **Qtr:** NE
Elevation: 75 ft **Symbol Type:** POINT **Meridian:** M

Location: JUST SOUTHWEST OF THE JUNCTION OF COUNTY ROAD 98 AND COUNTY ROAD 24, ON THE SOUTHWEST EDGE OF WOODLAND.
Ecological: NEST TREE IS A EUCALYPTUS WITH TWO NESTS, ONE ABOVE THE OTHER. SURROUNDING HABITAT IS IRRIGATED AGRICULTURAL LAND TO THE WEST AND THE TOWN OF WOODLAND TO THE EAST.
Threat: POTENTIAL THREAT OF DEVELOPMENT FROM EXPANSION OF WOODLAND.
General: BIRDS WERE OBSERVED AT THE UPPER NEST IN 1991, PRODUCING 3 FLEDGLINGS; IN 1992, ONE PAIR MEMBER WAS OBSERVED AT THE LOWER (NEWER) NEST.
Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDDB Element Ranks _____ Other Lists _____
 Federal: None Global: G5
 State: Threatened State: S2 CDFG Status:

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 400 Map Index: 21466 EO Index: 17426 Dates Last Seen _____
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-31

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.63625° / -121.78771° Township: 09N
 UTM: Zone-10 N4277109 E605511 Range: 02E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 07 Qtr: SE
 Elevation: 65 ft Symbol Type: POINT Meridian: M

Location: 0.25 MILE SOUTH OF COUNTY ROAD 25A AND 0.25 MILE WEST OF COUNTY ROAD 99, JUST SOUTH OF WOODLAND.
 Ecological: NEST TREE IS A LONE COTTONWOOD, SURROUNDED BY AGRICULTURAL FIELDS. BIRDS FORAGE IN GRAIN AND ROW CROPS.
 Threat: NEST TREE WAS TRIMMED IN EARLY JULY OF 1991, POSSIBLY DESTROYING AN ACTIVE NEST SITE.
 General: DFG SWHA #YO060. NESTING IN 1986 PRODUCED 2 FLEDGLINGS; IN 1987, 1 FLEDGLING; IN 1988, 1 FLEDGLING; IN 1991, NESTING FAILED.
 Owner/Manager: PVT

Occurrence No. 401 Map Index: 21465 EO Index: 8483 Dates Last Seen _____
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-31

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.64731° / -121.76761° Township: 09N
 UTM: Zone-10 N4278359 E607244 Range: 02E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 08 Qtr: NE
 Elevation: 60 ft Symbol Type: POINT Meridian: M

Location: ALONG HIGHWAY 113, NORTH OF COUNTY ROAD 25A, SOUTH OF WOODLAND
 Ecological: NEST TREE IS A WALNUT (ONE OF A GROUP OF ROADSIDE TREES); BIRDS FORAGE IN NEARBY GRAIN FIELDS AND ROW CROPS.
 General: DFG SWHA #YO048 (ALSO, SEE EO#211). 2 ADULTS NESTED IN 1986, PRODUCING 1 FLEDGLING; IN 1987, NESTING SUCCESS UNKNOWN; IN 1988, NESTING SUCCESS UNKNOWN; IN 1991, NESTING SUCCESS UNKNOWN.
 Owner/Manager: PVT

Occurrence No. 402 Map Index: 21467 EO Index: 17425 Dates Last Seen _____
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-31

Quad Summary: Merritt (3812157/514D), Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.62672° / -121.77505° Township: 09N
 UTM: Zone-10 N4276066 E606627 Range: 02E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 17 Qtr: SE
 Elevation: 65 ft Symbol Type: POINT Meridian: M

Location: 0.5 MILES WEST OF HWY 113 AND 0.5 MILES NORTH OF COUNTY ROAD 27, 2 MILES SOUTH OF WOODLAND.
 Ecological: NEST TREE IS A LONE VALLEY OAK; BIRDS FORAGE NEARBY ON HAY, GRAIN, AND ROW CROPS.
 General: DFG SWHA #YO089. TWO ADULTS NESTED AT THIS SITE IN 1991; MALE WAS FOUND DEAD ALONG COUNTY ROAD 27, JUST SOUTH OF NEST.
 Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5

CDFG Status:

State: Threatened

State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH

Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 416 Map Index: 21851 EO Index: 14800 Dates Last Seen
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1995-11-02

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.71713° / -121.77056° Township: 10N
 UTM: Zone-10 N4286104 E606883 Range: 02E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 08 Qtr: SE
 Elevation: 55 ft Symbol Type: POINT Meridian: M

Location: NELSON'S GROVE COUNTY PARK, 0.25 MILE SOUTH OF COUNTY ROAD 18 AND 0.25 MILE WEST OF HWY 113, NORTH OF WOODLAND.

Ecological: NEST TREE IS A VALLEY OAK.

General: DFG SWHA #YO095. 2 ADULTS OBSERVED NESTING.

Owner/Manager: YOL COUNTY

Occurrence No. 417 Map Index: 21847 EO Index: 13702 Dates Last Seen
 Occ Rank: Good Element: 2004-07-12
 Origin: Natural/Native occurrence Site: 2004-07-12
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-04-28

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.74403° / -121.79360° Township: 10N
 UTM: Zone-10 N4289063 E604840 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 06 Qtr: NW
 Elevation: 65 ft Symbol Type: POINT Meridian: M

Location: 0.5 MILE EAST OF COUNTY ROAD 98 AND 300 FEET NORTH OF COUNTY ROAD 16A, 3 MILES NORTH OF WOODLAND.

Location Detail: 2002 & 2004 NEST TREE LOCATED AT THE NE CORNER OF FARMSTEAD #38540. 2002 NEST LOCATED AT THE 95% HEIGHT OF THE NEST TREE.

Ecological: NEST TREE IS A LOGUST; FARMSTEAD SURROUNDED BY CULTIVATED LAND IN ALL DIRECTIONS.

General: DFG SWHA #YO132. NESTING IN 1991; RESULTS UNKNOWN. NEST MONITORED 22 APR-12 JUL 2002; 1 FLEDGED. NEST MONITORED 2 MAY-12 JUL 2004; 1 FLEDGED.

Owner/Manager: PVT

Occurrence No. 418 Map Index: 21848 EO Index: 13701 Dates Last Seen
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-22

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.74577° / -121.77777° Township: 10N
 UTM: Zone-10 N4289274 E606214 Range: 02E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 05 Qtr: NW
 Elevation: 55 ft Symbol Type: POINT Meridian: M

Location: ON THE WEST SIDE OF HWY 113, 0.25 MILE NORTH OF COUNTY ROAD 16A AND 200 FEET SOUTH OF WINTERS LANE, 2 MILES NE OF YOLO.

Ecological: NEST TREE IS A ROADSIDE VALLEY OAK.

General: DFG SWHA #YO098. 2 ADULTS OBSERVED NESTING IN 1991.

Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDDB Element Ranks _____ Other Lists _____
 Federal: None Global: G5 CDFG Status:
 State: Threatened State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 419 Map Index: 21849 EO Index: 13700 Dates Last Seen _____
 Occ Rank: Good Element: 2001-04-01
 Origin: Natural/Native occurrence Site: 2004-08-04
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-04-28

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.74143° / -121.76292° Township: 10N
 UTM: Zone-10 N4288810 E607510 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 04 Qtr: SW
 Elevation: 50 ft Symbol Type: POINT Meridian: M

Location: ALONG COUNTY ROAD 100, 0.5 MILE NORTH OF COUNTY ROAD 17, 2.3 MILES ENE OF YOLO
 Location Detail: NEST TREE IS LOCATED 0.2 MILE EAST OF ROAD 100.
 Ecological: NEST TREE IS A SOLITARY VALLEY OAK IN THE MIDDLE OF A WHEAT FIELD.
 General: DFG SWHA #YO099 (PART). NESTING IN 1991; 2 FLEDGLED. PAIR NESTING ON 20 MAR AND 1 APR 2001; NO OBSERVATIONS 2 APR-11 AUG 2001 (10 VISITS). UNOCCUPIED, 2002. NEST SITE MONITORED 6 MAY-4 AUG 2004; ADULT SEEN (INADEQUATE OBSERVATION).
 Owner/Manager: PVT

Occurrence No. 420 Map Index: 21850 EO Index: 14801 Dates Last Seen _____
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-22

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.73658° / -121.76335° Township: 10N
 UTM: Zone-10 N4288271 E607481 Range: 02E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 04 Qtr: SW
 Elevation: 50 ft Symbol Type: POINT Meridian: M

Location: NE OF THE INTERSECTION OF HWY 113 & COUNTY ROAD 17, 2 MILES EAST OF YOLO.
 Ecological: NEST TREE IS A VALLEY OAK LOCATED IN A SMALL OAK GROVE/FARM YARD; BIRDS FORAGE IN AN AREA OF TOMATO/WHEAT ROTATION.
 General: DFG SWHA #YO099 (PART). 2 ADULTS OBSERVED NESTING IN 1991, PRODUCING 2 FLEDGLINGS.
 Owner/Manager: PVT

Occurrence No. 421 Map Index: 21852 EO Index: 21465 Dates Last Seen _____
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-22

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.69850° / -121.83563° Township: 10N
 UTM: Zone-10 N4283963 E601252 Range: 01E
 Radius: 2/5 mile Mapping Precision: NON-SPECIFIC Section: 23 Qtr: SW
 Elevation: 90 ft Symbol Type: POINT Meridian: M

Location: 0.2 MILE EAST OF COUNTY ROAD 96 AND 0.5 MILE NORTH OF COUNTY ROAD 20, JUST SOUTH OF CACHE CREEK. 2.5 MILES SW OF YOLO.
 Ecological: BIRDS NEST IN A RIPARIAN AREA; TYPE OF TREE UNKNOWN.
 General: DFG SWHA #YO139. 2 ADULTS OBSERVED NESTING IN 1991; NESTING SUCCESS UNKNOWN.
 Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5

CDFG Status:

State: Threatened

State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH

Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 422 Map Index: 21853 EO Index: 15557 Dates Last Seen
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-22

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.66488° / -121.83311° Township: 10N
 UTM: Zone-10 N4280235 E601519 Range: 01E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 35 Qtr: SW
 Elevation: 85 ft Symbol Type: POINT Meridian: M

Location: ON THE NORTH SIDE OF COUNTY ROAD 24 AND 0.4 MILE EAST OF COUNTY ROAD 96, 2 MILES WEST OF WOODLAND.

Ecological: NEST TREE IS A FARMHOUSE VALLEY OAK.

General: DFG SWHA #YO141. 2 ADULTS OBSERVED NESTING IN 1991, NESTING SUCCESS UNKNOWN.

Owner/Manager: PVT

Occurrence No. 423 Map Index: 21855 EO Index: 11173 Dates Last Seen
 Occ Rank: Good Element: 2004-07-12
 Origin: Natural/Native occurrence Site: 2004-07-12
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-09-14

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.74170° / -121.82399° Township: 10N
 UTM: Zone-10 N4288770 E602202 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 02 Qtr: SE
 Elevation: 70 ft Symbol Type: POINT Meridian: M

Location: JUST WEST OF I-5, 0.4 MILE NORTH OF COUNTY ROAD 17, 1 MILE NW OF YOLO.

Location Detail: RESSEGUIE'S WOODLAND 60. KNOWN AS THE "PINK HOUSE" SITE; NEST TREE IS A VALLEY OAK LOCATED SOUTH OF A PINK HOUSE.

Ecological: NEST TREE IS A VALLEY OAK; SURROUNDED BY CULTIVATED FIELDS WITH SCATTERED TREES.

General: 2 ADULTS OBSERVED NESTING IN 1991; 1 YOUNG FLEDGED. NEST MONITORED 1 APR-4 AUG 2004; 2 YOUNG FLEDGED.

Owner/Manager: PVT

Occurrence No. 424 Map Index: 21854 EO Index: 15623 Dates Last Seen
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-22

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.70985° / -121.80844° Township: 10N
 UTM: Zone-10 N4285253 E603600 Range: 01E
 Radius: 3/5 mile Mapping Precision: NON-SPECIFIC Section: 13 Qtr: NE
 Elevation: 80 ft Symbol Type: POINT Meridian: M

Location: 0.25 MILE WEST OF COUNTY ROAD 98 & 0.25 MILE SOUTH OF COUNTY ROAD 18, SOUTH OF YOLO.

Ecological: NEST TREE IS A LONE VALLEY OAK; BIRDS FORAGE IN AN AREA OF WHEAT/TOMATO ROTATION.

General: DFG SWHA #YO140. 2 ADULTS OBSERVED NESTING IN 1991; NESTING SUCCESS UNKNOWN.

Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5

CDFG Status:

State: Threatened

State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH

Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 425 Map Index: 21856 EO Index: 15556 Dates Last Seen
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-22

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.63467° / -121.82060° Township: 09N
 UTM: Zone-10 N4276896 E602650 Range: 01E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 12 Qtr: SW
 Elevation: 80 ft Symbol Type: POINT Meridian: M

Location: EAST SIDE OF COUNTY ROAD 97, AT COUNTY ROAD 26, 0.5 MILE SOUTH OF PLAINFIELD SCHOOL, SW OF WOODLAND.

Ecological: NEST TREE IS A ROADSIDE WALNUT; BIRDS FORAGE IN AN AREA OF WHEAT/TOMATOES.

General: DFG SWHA #YO142. 2 ADULTS PRODUCED 2 FLEDGLINGS AT THIS SITE IN 1991.

Owner/Manager: PVT

Occurrence No. 426 Map Index: 21857 EO Index: 11174 Dates Last Seen
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-22

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.72845° / -121.82669° Township: 10N
 UTM: Zone-10 N4287296 E601987 Range: 01E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 11 Qtr: NE
 Elevation: 80 ft Symbol Type: POINT Meridian: M

Location: AT THE INTERSECTION OF COUNTY ROAD 96B & COUNTY ROAD 17A, SW OF YOLO.

Ecological: NEST TREE IS A FARMYARD WALNUT; BIRDS FORAGE IN AN AREA PLANTED IN TOMATOES.

General: DFG SWHA #YO136. 2 ADULTS OBSERVED NESTING IN 1991, ALTHOUGH THE BREEDING ATTEMPT FAILED.

Owner/Manager: PVT

Occurrence No. 427 Map Index: 21859 EO Index: 15624 Dates Last Seen
 Occ Rank: Fair Element: 2004-08-16
 Origin: Natural/Native occurrence Site: 2004-08-16
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-10-26

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.71519° / -121.83958° Township: 10N
 UTM: Zone-10 N4285810 E600885 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 15 Qtr: NW
 Elevation: 85 ft Symbol Type: POINT Meridian: M

Location: NORTH SIDE OF ROAD 18A, 0.2 MILE EAST OF ROAD 95B, 2 MILES SW OF YOLO

Location Detail: 2004 NEST TREE WAS A TALL, RAGGED VALLEY OAK LOCATED NORTH OF ROAD 18A. RESIDENT OF THE ADJACENT HOUSE SAYS THAT SWHA HAVE NESTED IN THAT TREE EVERY YEAR FOR MANY YEARS.

Ecological: 1991 AND 2004 NEST TREE WAS A VALLEY OAK.

General: DFG SWHA #YO135. 2 ADULTS OBSERVED NESTING IN 1991; 1 YOUNG FLEDGED. NEST MONITORED 9 JUL-16 AUG 2004; ADULTS DEFENDING NEST ON 9 JUL 2004, AND PRESENT ON 26 JUL, 9 AUG, AND 16 AUG 2004.

Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5

CDFG Status:

State: Threatened

State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH

Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 428 Map Index: 21858 EO Index: 21466 Dates Last Seen
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1992-12-22

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.70754° / -121.83221° Township: 10N
 UTM: Zone-10 N4284970 E601537 Range: 01E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 14 Qtr: SW
 Elevation: 85 ft Symbol Type: POINT Meridian: M

Location: ALONG CACHE CREEK, 0.5 MILE UPSTREAM FROM THE INTERSECTION OF COUNTY ROAD 96B AND 18A, 2.5 MILES SW OF YOLO.

Ecological: NEST TREE IS A VALLEY OAK WITHIN RIPARIAN HABITAT.

General: DFG SWHA #YO137. 2 ADULTS OBSERVED NESTING IN 1991; RESULTS OF NESTING UNKNOWN.

Owner/Manager: PVT

Occurrence No. 518 Map Index: 23224 EO Index: 7602 Dates Last Seen
 Occ Rank: Good Element: 2004-08-04
 Origin: Natural/Native occurrence Site: 2004-08-04
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-09-13

Quad Summary: Grays Bend (3812166/513B), Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.73485° / -121.75065° Township: 10N
 UTM: Zone-10 N4288094 E608587 Range: 02E
 Area: 11.9 acres Mapping Precision: SPECIFIC Section: 04 Qtr: NW
 Elevation: 45 ft Symbol Type: POLYGON Meridian: M

Location: ALONG COUNTY ROAD 17, 1 MILE WEST OF COUNTY ROAD 102, NE OF WOODLAND

Location Detail: 1991 NEST TREE WAS A LONE VALLEY OAK ON THE SOUTH SIDE OF ROAD 17. 2001 NEST TREE WAS THE FOURTH LARGE TREE (A VALLEY OAK) ON THE NORTH SHOULDER OF ROAD 17. 2002/2004 NEST TREE WAS THE ONLY SOUTH SHOULDER TREE EAST OF ROAD 101.

Ecological: NEST TREE IS A VALLEY OAK; SURROUNDED BY CULTIVATED LAND.

General: DFG SWHA #YO102. 2 YOUNG FLEDGED IN 1991. NEST MONITORED 19 MAR-27 JUL 2001; 2 FLEDGED. NEST MONITORED 22 APR-6 JUL 2002; 2 FLEDGED. NEST MONITORED 17 MAR-4 AUG 2004; 1 FLEDGED.

Owner/Manager: UNKNOWN

Occurrence No. 521 Map Index: 23132 EO Index: 13224 Dates Last Seen
 Occ Rank: Unknown Element: 2000-XX-XX
 Origin: Natural/Native occurrence Site: 2000-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2001-12-12

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.74259° / -121.78506° Township: 10N
 UTM: Zone-10 N4288913 E605585 Range: 02E
 Radius: 1/10 mile Mapping Precision: NON-SPECIFIC Section: 06 Qtr: NE
 Elevation: 65 ft Symbol Type: POINT Meridian: M

Location: JUST NORTH OF COUNTY ROAD 16A, 0.5 MILE WEST OF HWY 113, 3 MILES NORTH OF WOODLAND

Ecological: NEST TREE IS A LONE VALLEY OAK, SURROUNDED BY AGRICULTURAL FIELDS.

Threat: THREATENED BY PROPOSED PIPELINE CONSTRUCTION.

General: DFG SWHA #YO131. 2 ADULTS OBSERVED NESTING IN 1991. OWNER REPORTS THAT A PAIR OF SWHA HAVE NESTED IN THIS TREE FROM 1988-2000.

Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDDB Element Ranks _____ Other Lists _____
 Federal: None Global: G5
 State: Threatened State: S2 CDFG Status:

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 522 Map Index: 23133 EO Index: 13225 Dates Last Seen _____
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1993-04-29

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.72014° / -121.76484° Township: 10N
 UTM: Zone-10 N4286445 E607376 Range: 02E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 08 Qtr: XX
 Elevation: 60 ft Symbol Type: POINT Meridian: M

Location: NORTH OF THE INTERSECTION OF COUNTY ROAD 18 AND COUNTY ROAD 99, ALONG CACHE CREEK, 2 MILES NORTH OF WOODLAND.

General: DFG SWHA #YO096. 2 ADULTS OBSERVED NESTING.

Owner/Manager: UNKNOWN

Occurrence No. 524 Map Index: 23135 EO Index: 27168 Dates Last Seen _____
 Occ Rank: Unknown Element: 1991-XX-XX
 Origin: Natural/Native occurrence Site: 1991-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1993-07-02

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.69519° / -121.81072° Township: 10N
 UTM: Zone-10 N4283623 E603423 Range: 01E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 24 Qtr: SE
 Elevation: 75 ft Symbol Type: POINT Meridian: M

Location: WEST SIDE OF COUNTY ROAD 98, 0.25 MILE NORTH OF COUNTY ROAD 20, 1 MILE NW OF WOODLAND.

Ecological: NEST TREE IS A VALLEY OAK IN A TREE ROW (4TH TREE FROM ROAD).

General: DFG SWHA #YO122. 2 ADULTS OBSERVED NESTING.

Owner/Manager: PVT

Occurrence No. 574 Map Index: 23136 EO Index: 7608 Dates Last Seen _____
 Occ Rank: Unknown Element: 1992-XX-XX
 Origin: Natural/Native occurrence Site: 1992-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2002-07-30

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.74482° / -121.82776° Township: 10N
 UTM: Zone-10 N4289112 E601871 Range: 01E
 Radius: 1/10 mile Mapping Precision: NON-SPECIFIC Section: 02 Qtr: NE
 Elevation: 65 ft Symbol Type: POINT Meridian: M

Location: WEST SIDE OF I-5, 1 MILE NW OF YOLO.

Location Detail: NEST TREE LOCATED ~300 FEET NORTH OF "PINK HOUSE."

Ecological: NEST TREE IS A LONE VALLEY OAK.

General: DFG SWHA #YO. NEST WITH ONE FLEDGLING OBSERVED.

Owner/Manager: UNKNOWN

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDBB Element Ranks _____ Other Lists _____
 Federal: None Global: G5
 State: Threatened State: S2 CDFG Status:

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 578 Map Index: 23218 EO Index: 17827 Dates Last Seen _____
 Occ Rank: Good Element: 2001-07-31
 Origin: Natural/Native occurrence Site: 2004-08-13
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-07-05

Quad Summary: Woodland (3812167/514A), Eldorado Bend (3812177/530D)
 County Summary: Yolo

Lat/Long: 38.75015° / -121.84090° Township: 10N
 UTM: Zone-10 N4289688 E600722 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 03 Qtr: SE
 Elevation: 70 ft Symbol Type: POINT Meridian: M

Location: SOUTH SIDE OF ROAD 16, JUST WEST OF ROAD 96, 2 MILES NW OF YOLO
 Location Detail: 1992 NEST TREE WAS LOCATED 300 FEET WEST OF COUNTY ROAD 96 AND 100 FEET NORTH OF COUNTY ROAD 16. 2001 NEST TREE WAS LOCATED ON THE SOUTH SHOULDER OF ROAD 96; NEST LOCATED AT THE 80% HEIGHT OF THE EASTERNMOST LARGE TREE ON THE SOUTH SHOULDER
 Ecological: NEST TREE IS A VALLEY OAK; SURROUNDED BY CULTIVATED LAND IN ALL DIRECTIONS.
 General: DFG SWHA #YO. 1 FLEDGED IN 1992. NEST MONITORED 27 JUN-31 JUL 2001; 2 FLEDGED. NEST SITE MONITORED 11 JUN-20 AUG 2002; ADULTS PRESENT, BUT NO NEST FOUND. NEST SITE MONITORED 16 APR-13 AUG 2004; NO SIGHTINGS (POORLY OBSERVED).
 Owner/Manager: UNKNOWN

Occurrence No. 876 Map Index: 43668 EO Index: 43668 Dates Last Seen _____
 Occ Rank: Good Element: 2004-07-24
 Origin: Natural/Native occurrence Site: 2004-07-24
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-04-28

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.63940° / -121.86137° Township: 09N
 UTM: Zone-10 N4277376 E599096 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 09 Qtr: SE
 Elevation: 85 ft Symbol Type: POINT Meridian: M

Location: 0.2 MILE WEST OF ROAD 95, 1.3 MILES NORTH OF ROAD 27, SW OF WOODLAND
 Location Detail: RTHA OCCUPIED THIS TERRITORY AT THE BEGINNING OF THE 2000 SEASON. NEST IS LOCATED AT THE 85% HEIGHTH OF THE TALLEST WILLOW.
 Ecological: NEST TREE IS A WILLOW; SURROUNDED BY SUDAN GRASS TO THE EAST AND CULTIVATED LAND TO THE WEST.
 General: NEST MONITORED 14 APR-9 JUL 2000; 2 FLEDGED. NEST MONITORED 14 MAR-19 AUG 2001; 1 FLEDGED. NEST SITE MONITORED 10 APR-26 JUL 2002; ADULTS PRESENT, BUT NO CHICKS SEEN. NEST MONITORED 30 MAR-24 JUL 2004; 2 FLEDGED.
 Owner/Manager: PVT

Occurrence No. 918 Map Index: 43794 EO Index: 43794 Dates Last Seen _____
 Occ Rank: Good Element: 2001-08-11
 Origin: Natural/Native occurrence Site: 2004-08-14
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-09-29

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.62566° / -121.76708° Township: 09N
 UTM: Zone-10 N4275958 E607322 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 17 Qtr: SE
 Elevation: 55 ft Symbol Type: POINT Meridian: M

Location: ALONG ROSE LANE (WEST FRONTAGE ROAD OF HIGHWAY 113), 0.4 MILE NORTH OF ROAD 27, 3.5 MILES SOUTH OF WOODLAND
 Location Detail: IN 2000, TWO PINES CLOSE TOGETHER STAND OUT AS TALLER THAN ALL OTHER TREES, COPULATION OBSERVED AT THE TOP OF THESE PINES. NEST FOUND (BARELY VISIBLE) IN 2001 NEAR THE TOP OF THE TALLER, SOUTHERN PINE.
 Ecological: NEST TREE IS A PINE; SURROUNDED BY WALNUT ORCHARDS AND CULTIVATED LAND TO THE SOUTH AND CULTIVATED LAND TO THE EAST, ACROSS HIGHWAY 113.
 General: 2 ADULTS NESTED IN 1991. ACTIVE IN 2000; COPULATION OBSERVED, 8 APR 2000. ACTIVE IN 2001; 1 CHICK OBSERVED, (0 FLEDGED). ACTIVE IN 2002; 0 FLEDGED. ADULT SIGHTINGS ONLY IN 2004, ON 3 OF 10 VISITS; NO NEST FOUND.
 Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDDB Element Ranks _____ Other Lists _____
 Federal: None Global: G5 CDFG Status:
 State: Threatened State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 954 Map Index: 46154 EO Index: 46154 Dates Last Seen _____
 Occ Rank: Good Element: 2004-07-25
 Origin: Natural/Native occurrence Site: 2004-07-25
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-04-28

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.72091° / -121.78138° Township: 10N
 UTM: Zone-10 N4286511 E605937 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 08 Qtr: XX
 Elevation: 60 ft Symbol Type: POINT Meridian: M

Location: SOUTH SIDE OF ROAD 18, 0.2 MILE EAST OF ROAD 99, 1.6 MILES SE OF YOLO
 Location Detail: NEST IS LOCATED AT THE 95% HEIGHT, NORTH OF CENTER, OF THE TALLEST OAK ON THE SOUTH SHOULDER.
 Ecological: NEST TREE IS A VALLEY OAK; SURROUNDED BY CULTIVATED LAND IN ALL DIRECTIONS.
 General: NEST MONITORED 3 APR-11 AUG 2001; 1 FLEDGED. NEST SITE MONITORED 18 MAY-12 JUL 2002; NO SWHA SIGHTINGS IN 2002. NEST MONITORED 3 APR-25 JUL 2004; 1 FLEDGED.
 Owner/Manager: YOL COUNTY, PVT

Occurrence No. 1074 Map Index: 50894 EO Index: 50894 Dates Last Seen _____
 Occ Rank: Excellent Element: 2004-07-26
 Origin: Natural/Native occurrence Site: 2004-07-26
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-08-25

Quad Summary: Woodland (3812167/514A), Eldorado Bend (3812177/530D)
 County Summary: Yolo

Lat/Long: 38.75005° / -121.86079° Township: 10N
 UTM: Zone-10 N4289656 E598992 Range: 01E
 Area: 9.4 acres Mapping Precision: SPECIFIC Section: 04 Qtr: NE
 Elevation: 70 ft Symbol Type: POLYGON Meridian: M

Location: SOUTH SIDE OF ROAD 16 WESTWARD EXTENSION, 0.1 MILE WEST OF ROAD 95, 3 MILES SSE OF ZAMORA
 Location Detail: 2001 NEST WAS LOCATED AT THE 80% HEIGHT OF A LOCUST TREE IN THE NW CORNER OF THE FARMSTEAD. 2002 NEST WAS IN A BLACK WALNUT. 2004 NEST WAS IN A LOCUST.
 Ecological: NEST TREE IS A LOCUST; SURROUNDING FORAGING HABITAT CONSISTS OF ALFALFA NORTH OF THE FARMSTEAD, PASTURE TO THE SW, AND THE REMAINDER CULTIVATED LAND.
 General: NEST MONITORED 16 APR-27 JUL 2001; NEST-BUILDING OBSERVED ON 16 APR 2001. NEST MONITORED 1 APR-20 AUG 2002; NEST-BUILDING OBSERVED. NEST MONITORED 1 APR-26 JUL 2004; 2 FLEDGED.
 Owner/Manager: PVT

Occurrence No. 1174 Map Index: 51144 EO Index: 51144 Dates Last Seen _____
 Occ Rank: Excellent Element: 2002-07-26
 Origin: Natural/Native occurrence Site: 2004-06-07
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-12-15

Quad Summary: Woodland (3812167/514A), Eldorado Bend (3812177/530D)
 County Summary: Yolo

Lat/Long: 38.75010° / -121.76640° Township: 11N
 UTM: Zone-10 N4289768 E607195 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 32 Qtr: SE
 Elevation: 45 ft Symbol Type: POINT Meridian: M

Location: WEST SIDE OF ROAD 100, 1 MILE NORTH OF ROAD 17 AND 0.5 MILE EAST OF HIGHWAY 113, 6 MILES SOUTH OF KNIGHTS LANDING
 Location Detail: 2001 NEST WAS LOCATED AT THE 75% HEIGHT, ON THE NORTH LOBE, OF A SOLITARY VALLEY OAK, 56 METERS WEST OF THE ROAD, IN AN ALFALFA FIELD.
 Ecological: NEST TREE IS A VALLEY OAK; SURROUNDING FORAGING HABITAT CONSISTS OF ALFALFA. BLACK WALNUTS ARE WIDELY-SPACED ALONG THE ROAD SHOULDER.
 General: NEST MONITORED 1 APR-27 JUL 2001; 1 FLEDGED. NEST SITE MONITORED 20 APR-26 JUL 2002; NEST FROM 2001 RAGGED, AND ADULTS CONSISTENTLY PRESENT, BUT NO YOUNG OBSERVED. NEST SITE MONITORED 17 MAR-7 JUN 2004; RTHA FLEDGED 2 FROM 2001 SWHA SITE.
 Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDBB Element Ranks _____ Other Lists _____
 Federal: None Global: G5
 State: Threatened State: S2 CDFG Status:

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1175 Map Index: 51145 EO Index: 51145 Dates Last Seen _____
 Occ Rank: Good Element: 2004-08-09
 Origin: Natural/Native occurrence Site: 2004-08-09
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-05-02

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.74650° / -121.83036° Township: 10N
 UTM: Zone-10 N4289295 E601643 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 02 Qtr: NE
 Elevation: 65 ft Symbol Type: POINT Meridian: M

Location: JUST WEST OF I-5, 1 MILE NW OF YOLO
 Location Detail: NEST IS LOCATED AT THE 85% HEIGHT, ON THE NORTH SIDE OF THE NORTHMOST VALLEY OAK, IN THE ROW OF TREES ALONG A PROPERTY LINE.
 Ecological: NEST TREE IS A VALLEY OAK.
 General: NEST MONITORED 20 MAR-22 AUG 2001; INCUBATION OBSERVED ON 2 APR 2001. NEST SITE MONITORED 24 MAY-20 AUG 2002; NUMEROUS SIGHTING OF SINGLE ADULT PERCHED, BUT NOT IN 2001 NEST TREE. NEST MONITORED 8 MAY-9 AUG 2004; 1 FLEDGED.
 Owner/Manager: PVT

Occurrence No. 1176 Map Index: 51146 EO Index: 51146 Dates Last Seen _____
 Occ Rank: Fair Element: 2002-08-02
 Origin: Natural/Native occurrence Site: 2004-08-08
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-05-02

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.69953° / -121.78019° Township: 10N
 UTM: Zone-10 N4284140 E606072 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 20 Qtr: SW
 Elevation: 60 ft Symbol Type: POINT Meridian: M

Location: SW SIDE OF I-5, ON THE NORTH EDGE OF WOODLAND
 Location Detail: A SMALL NEST LOCATED AT THE 85% HEIGHT OF THE NEST TREE, ON THE WEST SIDE. NEST IS VISIBLE FROM ROAD 19A OR THE BACK OF DENNYS.
 Ecological: NEST TREE IS A COTTONWOOD; SURROUNDING FORAGING HABITAT CONSISTS OF RUDERAL NEARBY AND NORTH ACROSS THE FREEWAY.
 General: NEST MONITORED 26 MAR-12 JUL 2001; 1 FLEDGED. NEST MONITORED 8 MAY-2 AUG 2002; 1 FLEDGED. NEST SITE MONITORED 30 MAR-8 AUG 2004; NO NEST DETECTED.
 Owner/Manager: PVT

Occurrence No. 1177 Map Index: 51147 EO Index: 51147 Dates Last Seen _____
 Occ Rank: Good Element: 2004-08-08
 Origin: Natural/Native occurrence Site: 2004-08-08
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-05-02

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.65312° / -121.76479° Township: 09N
 UTM: Zone-10 N4279007 E607480 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 04 Qtr: SW
 Elevation: 65 ft Symbol Type: POINT Meridian: M

Location: JUST NE OF THE INTERSECTION OF EAST STREET (HWY 113) AND ROAD 24C, ON THE SOUTH EDGE OF WOODLAND
 Location Detail: NEST IS LOCATED AT THE 80% HEIGHT OF THE NEST TREE, IN THE CENTRAL CROTCH; A MORE CONSPICUOUS NEST, ON THE WEST SIDE, WAS VACANT.
 Ecological: NEST TREE IS A SOLITARY BLACK WALNUT IN A WHEAT FIELD; MUCH OF THE SURROUNDING AREA IS URBANIZED, AND THIS NEST TREE IS CLEARLY IN THE PATH OF WOODLAND'S EXPANSION.
 Threat: THREATENED BY URBAN EXPANSION.
 General: NEST MONITORED 11 APR-28 JUL 2001; 1 FLEDGED. NEST SITE MONITORED 12 APR-20 JUL 2002; UNOCCUPIED IN 2002. NEST SITE MONITORED 31 MAR-8 AUG 2004; 1 FLEDGED
 Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status _____ **NDDB Element Ranks** _____ **Other Lists** _____
 Federal: None **Global:** G5 **CDFG Status:**
 State: Threatened **State:** S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1178 **Map Index:** 51148 **EO Index:** 51148 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2001-07-31
Origin: Natural/Native occurrence **Site:** 2004-08-02
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2004-12-15

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.71355° / -121.77370° **Township:** 10N
UTM: Zone-10 N4285703 E606616 **Range:** 02E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 17 **Qtr:** XX
Elevation: 55 ft **Symbol Type:** POINT **Meridian:** M

Location: SOUTH SIDE OF ROAD 99E, 0.1 MILE WEST OF COIL LANE, SOUTH OF NELSON'S GROVE, NORTH OF WOODLAND
Location Detail: NEST LOCATED AT THE 90% HEIGHT OF THE NEST TREE; VISIBLE FROM THE WEST OR DIRECTLY UNDERNEATH.
Ecological: NEST TREE WAS A BLACK WALNUT ALONG A DITCH SEPARATING A WHEAT FIELD TO THE SOUTH FROM A CORN FIELD TO THE NORTH.
General: NEST MONITORED 13 APR-31 JUL 2001; 1 FLEDGED. NEST REMAINED IN 2002; NO SIGHTINGS. NEST SITE MONITORED 2 APR-2 AUG 2004; ALTHOUGH NEST WAS NOT FOUND, 2 YOUNG FLEDGED.
Owner/Manager: PVT

Occurrence No. 1179 **Map Index:** 51149 **EO Index:** 51149 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2004-06-05
Origin: Natural/Native occurrence **Site:** 2004-07-25
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-05-02

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.64482° / -121.82121° **Township:** 09N
UTM: Zone-10 N4278022 E602583 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 12 **Qtr:** NE
Elevation: 75 ft **Symbol Type:** POINT **Meridian:** M

Location: WEST SIDE OF ROAD 97, 0.3 MILE SOUTH OF ROAD 25, SW OF WOODLAND
Location Detail: NEST LOCATED HIGH, ON THE NW SIDE OF THE SECOND TREE FROM THE SOUTH IN THE ROW.
Ecological: NEST TREE IS A BLACK WALNUT; SURROUNDING FORAGING HABITAT CONSISTS OF WHEAT TO THE NE AND TOMATOES TO THE EAST AND WEST.
General: NEST MONITORED 15 APR-12 AUG 2001; 1 FLEDGED. NEST MONITORED 12 APR-20 JUL 2002; INCUBATING ADULT OBSERVED ON 10 JUN 2002, BUT NO CHICK EVER SEEN. NEST SITE MONITORED 31 MAR-25 JUL 2004; NO NEST FOUND, BUT ADULTS SEEN ON 28 APR & 5 JUN 2004
Owner/Manager: UNKNOWN

Occurrence No. 1180 **Map Index:** 51150 **EO Index:** 51150 **Dates Last Seen** _____
Occ Rank: Fair **Element:** 2002-08-21
Origin: Natural/Native occurrence **Site:** 2004-06-14
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-05-05

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.69234° / -121.84075° **Township:** 10N
UTM: Zone-10 N4283274 E600816 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 22 **Qtr:** SE
Elevation: 95 ft **Symbol Type:** POINT **Meridian:** M

Location: SOUTH SIDE OF ROAD 20, 0.1 MILE WEST OF ROAD 96, NW OF WOODLAND
Location Detail: NEST IS LOCATED AT THE 2/3 HEIGHT OF THE EASTERN OF TWO RAGGED EUCALYPTUS, ON A HEAVY, NEARLY LEAFLESS, SUBTRUNK WHICH ANGLES SOUTH OVER THE FIELD.
Ecological: NEST TREE IS A RAGGED BLUE GUM EUCALYPTUS; SURROUNDING FORAGING HABITAT CONSISTS OF TOMATOES TO THE SOUTH AND NE, CORN TO THE NORTH, AND AN OLD ALMOND ORCHARD TO THE EAST.
General: NEST MONITORED 15 APR-28 JUL 2001; 1 FLEDGED. NEST SITE MONITORED 5 MAY-21 AUG 2002; ADULTS OBSERVED IN JUL-AUG, BUT NO NEST DETECTED. NEST SITE MONITORED 31 MAR-14 JUN 2004; INADEQUATE OBSERVATION.
Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDBB Element Ranks _____ Other Lists _____
 Federal: None Global: G5 CDFG Status:
 State: Threatened State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1181 Map Index: 51153 EO Index: 51153 Dates Last Seen _____
 Occ Rank: None Element: 2001-07-27
 Origin: Natural/Native occurrence Site: 2002-XX-XX
 Presence: Extirpated
 Trend: Decreasing Record Last Updated: 2004-06-16

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.70755° / -121.78610° Township: 10N
 UTM: Zone-10 N4285023 E605546 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 18 Qtr: NE
 Elevation: 65 ft Symbol Type: POINT Meridian: M

Location: NE OF I-5 AND WEST OF ROAD 99, NORTH OF WOODLAND
 Location Detail: NEST WAS LOCATED AT THE 85% HEIGHT OF THE NEST TREE, ALMOST DIRECTLY BELOW THE HIGHEST LEAVES AS SEEN FROM JUST SOUTH OF THE TRACK.
 Ecological: NEST TREE WAS A VALLEY OAK; SURROUNDING FORAGING HABITAT CONSISTED OF TOMATOES WEST OF THE ROAD AND SPARSE WEEDS AND RUBBLE TO THE EAST.
 General: NEST MONITORED 16 APR-27 JUL 2001; 1 FLEDGED. SUBSEQUENT TO THE 2001 NESTING SEASON, THE NEST TREE WAS COMPLETELY REMOVED AND THE SURROUNDING AREA CONVERTED TO CULTIVATION.
 Owner/Manager: PVT

Occurrence No. 1182 Map Index: 51154 EO Index: 51154 Dates Last Seen _____
 Occ Rank: Good Element: 2004-07-09
 Origin: Natural/Native occurrence Site: 2004-07-09
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-12-15

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.72859° / -121.83341° Township: 10N
 UTM: Zone-10 N4287304 E601403 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 11 Qtr: NW
 Elevation: 80 ft Symbol Type: POINT Meridian: M

Location: 0.5 MILE WEST OF ROAD 96B AND 0.5 MILE NORTH OF ROAD 18, NW OF WOODLAND
 Location Detail: 2001-2004 NEST TREE WAS LOCATED ON AN OLD FARMSTEAD SITE; NEST LOCATED AT THE 90% HEIGHT, ON THE SOUTH SIDE, OF THE THIRD BLACK WALNUT NORTH OF THE PRIVATE ROAD.
 Ecological: NEST TREE WAS A BLACK WALNUT.
 General: NEST MONITORED 16 APR-27 JUL 2001; 2 FLEDGED. NEST MONITORED 1 APR-12 JUL 2002; 2 FLEDGED. NEST MONITORED 31 MAR-26 JUL 2004; 2 FLEDGED.
 Owner/Manager: PVT

Occurrence No. 1183 Map Index: 51155 EO Index: 51155 Dates Last Seen _____
 Occ Rank: Good Element: 2004-07-26
 Origin: Natural/Native occurrence Site: 2004-07-26
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-05-05

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.74252° / -121.83881° Township: 10N
 UTM: Zone-10 N4288844 E600913 Range: 01E
 Area: 11.4 acres Mapping Precision: SPECIFIC Section: 02 Qtr: SE
 Elevation: 70 ft Symbol Type: POLYGON Meridian: M

Location: EAST AND WEST SIDES OF ROAD 96, 0.5 MILE NORTH OF ROAD 17, NW OF WOODLAND
 Location Detail: 2001 NEST LOCATED AT THE 95% HEIGHT OF THE NEST TREE, ON WEST ROAD SHOULDER. 2002 NEST TREE LOCATED WELL EAST OF ROAD, IN THE TALLEST OAK ALONG DITCH. 2004 NEST TREE WAS THRID OAK EAST ON THE DITCH.
 Ecological: NEST TREE IS A VALLEY OAK; SURROUNDED BY CULTIVATED LAND IN ALL DIRECTIONS.
 General: NEST MONITORED 16 APR-31 JUL 2001; SWHA SITTING TIGHT ON NEST ON 5 AND 27 JUN 2001, BUT NO LATER SIGHTINGS. NEST MONITORED 1 APR-21 AUG 2002; 1 FLEDGED. NEST MONITORED 12 MAR-26 JUL 2004; 1 FLEDGED.
 Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDDB Element Ranks _____ Other Lists _____
 Federal: None Global: G5 CDFG Status:
 State: Threatened State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1184 Map Index: 51159 EO Index: 51159 Dates Last Seen _____
 Occ Rank: Fair Element: 2004-08-09
 Origin: Natural/Native occurrence Site: 2004-08-09
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-05-05

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.68655° / -121.75220° Township: 10N
 UTM: Zone-10 N4282732 E608526 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 28 Qtr: NE
 Elevation: 50 ft Symbol Type: POINT Meridian: M

Location: EAST SIDE OF I-5, BETWEEN KENTUCKY AVENUE AND BEAMER AVENUE, NORTH END OF WOODLAND
 Location Detail: NEST TREE IS 2001 AND 2002 WAS A DEODAR CEDAR; NEST LOCATED NEAR THE TOP OF THE NEST TREE. 2004 NEST TREE WAS AN OAK.
 Ecological: NEST TREE WAS AN OAK; LOCATED ON AN ISLAND OF VEGETATION SURROUNDED BY FREEWAY, WITH THE LARGER SURROUNDING AREA CONSISTING OF AN EXTENSIVE WAREHOUSE DISTRICT WITH RUDERAL PATCHES.
 General: NEST MONITORED 19 APR-30 JUL 2001; 2 FLEDGED. NEST MONITORED 1 APR-6 JUL 2002; 1 FLEDGED. NEST MONITORED 1 APR-9 AUG 2004; 1 FLEDGED.
 Owner/Manager: CALTRANS

Occurrence No. 1185 Map Index: 51160 EO Index: 51160 Dates Last Seen _____
 Occ Rank: Good Element: 2004-06-07
 Origin: Natural/Native occurrence Site: 2004-06-07
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-12-15

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.71363° / -121.77615° Township: 10N
 UTM: Zone-10 N4285709 E606402 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 17 Qtr: NW
 Elevation: 55 ft Symbol Type: POINT Meridian: M

Location: SOUTH SIDE OF ROAD 99E, 0.2 MILE WEST OF COIL LANE, SW OF NELSONS GROVE, NORTH OF WOODLAND.
 Location Detail: 2001 NEST TREE WAS THE SECOND TREE WEST OF COIL LANE; NEST LOCATED AT THE 95% HEIGHT OF THE NEST TREE. 2004 NEST TREE ~40METERS WEST OF THE 2001 NEST TREE.
 Ecological: NEST TREE IS A BLACK WALNUT; SURROUNDING FORAGING HABITAT CONSISTS OF WHEAT TO THE SOUTH AND CORN TO THE NORTH.
 General: NEST SITE MONITORED 8 MAY-31 JUL 2001; ADULTS DEFENDED SITE ON 27 JUN 2001 AND GAVE QUIET ALARM CRIES ON 31 JUL 2001, NO VISIBLE NEST. NEST MONITORED 29 APR-20 JUL 2002; 1 FLEDGED. NEST MONITORED 3 APR-14 JUL 2004; LIKELY MISSED FLEDGLING.
 Owner/Manager: PVT

Occurrence No. 1186 Map Index: 51161 EO Index: 51161 Dates Last Seen _____
 Occ Rank: Good Element: 2002-07-10
 Origin: Natural/Native occurrence Site: 2004-07-12
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-12-15

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.63906° / -121.78472° Township: 09N
 UTM: Zone-10 N4277424 E605767 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 07 Qtr: SE
 Elevation: 65 ft Symbol Type: POINT Meridian: M

Location: WEST SIDE OF ROAD 99, 0.15 MILE SOUTH OF ROAD 25A, SOUTH OF WOODLAND
 Location Detail: 2001-2002 NEST TREE FOUND AT FARMSTEAD #20264; NEST WAS LOCATED AT THE 95% HEIGHT, ON THE WEST SIDE.
 Ecological: 2001-2002 NEST TREE WAS A DEODAR CEDAR; SURROUNDING FORAGING HABITAT CONSISTS OF A FARMSTEAD TO THE WEST AND THE REMAINDER CULTIVATED LAND.
 General: RESIDENT REPORTS THIS SITE HAS BEEN ACTIVE FOR AT LEAST 8 YEARS. NEST MONITORED 17 JUL-14 AUG 2001; 2 FLEDGED. NEST MONITORED 12 APR-10 JUL 2002; 1 FLEDGED. NEST SITE MONITORED 21 MAY-12 JUL 2004; POORLY OBSERVED, NO SIGHTINGS.
 Owner/Manager: UNKNOWN

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status _____ **NDDB Element Ranks** _____ **Other Lists** _____
 Federal: None **Global:** G5 **CDFG Status:**
 State: Threatened **State:** S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1187 **Map Index:** 51162 **EO Index:** 51162 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2002-07-27
Origin: Natural/Native occurrence **Site:** 2004-07-09
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-05-05

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.70478° / -121.86392° **Township:** 10N
UTM: Zone-10 N4284629 E598783 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 21 **Qtr:** NE
Elevation: 100 ft **Symbol Type:** POINT **Meridian:** M

Location: JUST SW OF THE INTERSECTION OF ROAD 19 AND ROAD 94B, NW OF WOODLAND
Ecological: NEST TREE IS A LARGE, SOLITARY VALLEY OAK AT THE EDGE OF A FIELD. NEST SITE IS SURROUNDED BY EXTENSIVE SUDAN GRASS AND SUNFLOWERS TO THE SOUTH.
General: NEST MONITORED 16 AUG-19 AUG 2001; 1 FLEDGED. NEST SITE MONITORED 14 APR-27 JUL 2002; SITE OCCUPIED, BUT NO NEST FOUND. NEST SITE MONITORED 31 MAR-9 JUL 2004; INADEQUATE OBSERVATION.
Owner/Manager: PVT

Occurrence No. 1289 **Map Index:** 53334 **EO Index:** 53334 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2002-08-20
Origin: Natural/Native occurrence **Site:** 2004-08-04
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-05-05

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.74293° / -121.82136° **Township:** 10N
UTM: Zone-10 N4288910 E602429 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 02 **Qtr:** NE
Elevation: 70 ft **Symbol Type:** POINT **Meridian:** M

Location: WEST SIDE OF ROAD 97, 0.1 MILE NORTH OF THE INTERSECTION WITH ROAD 99W, 0.8 MILE NW OF YOLO
Location Detail: NEST TREE IS A DOUBLE BLACK WALNUT IN THE SOUTHMOST TREES ON THE WEST SHOULDER OF ROAD 97.
Ecological: NEST TREE IS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE EAST OF ROAD 97, RUDERAL AROUND THE RAILROAD TRACKS, AND CULTIVATED IN ALL OTHER DIRECTIONS.
General: NEST MONITORED 1 APR-20 AUG 2002; 2 FLEDGED. NEST SITE MONITORED 1 APR-4 AUG 2004; UNOCCUPIED.
Owner/Manager: UNKNOWN

Occurrence No. 1290 **Map Index:** 53336 **EO Index:** 53336 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2002-07-09
Origin: Natural/Native occurrence **Site:** 2002-07-12
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2004-12-15

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.64357° / -121.76735° **Township:** 09N
UTM: Zone-10 N4277946 E607272 **Range:** 02E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 08 **Qtr:** NE
Elevation: 60 ft **Symbol Type:** POINT **Meridian:** M

Location: WEST SIDE OF EAST STREET, 0.2 MILE NORTH OF ROAD 25A, 1 MILE SOUTH OF WOODLAND
Location Detail: LOCALS CLAIM THIS TO BE A LONG-ESTABLISHED SWHA NEST SITE. 2002 NEST LOCATED AT THE 90% HEIGHT OF THE FIRST TREE EAST OF THE TALLEST TREE IN THE ROW.
Ecological: NEST TREE IS SURROUNDED BY A DENSE FARMSTEAD TO THE WEST, AN EQUIPMENT YARD TO THE EAST, ACROSS THE ROAD, AND CULTIVATED IN ALL OTHER DIRECTIONS.
General: NEST MONITORED 12 APR-20 JUL 2002; NEST, BUT NO CHICKS DETECTED. NEST MONITORED 23 FEB-12 JUL 2004; 1 FLEDGLING OBSERVED ON 9 JUL 2004, BUT NO OTHER SIGHTING.
Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status _____ **NDDB Element Ranks** _____ **Other Lists** _____
 Federal: None **Global:** G5 **CDFG Status:**
 State: Threatened **State:** S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1291 **Map Index:** 53338 **EO Index:** 53338 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2004-07-09
Origin: Natural/Native occurrence **Site:** 2004-07-09
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-05-05

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.69940° / -121.76427° **Township:** 10N
UTM: Zone-10 N4284144 E607456 **Range:** 02E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 21 **Qtr:** NW
Elevation: 50 ft **Symbol Type:** POINT **Meridian:** M

Location: JUST NORTH OF CHURCHILL DOWNS AVENUE & JUST EAST OF HIGHWAY 113, NE OF WOODLAND
Location Detail: NEST TREE LOCATED AT 1201 CHURCHILL DOWNS AVENUE, IN THE FENCED YARD OF TRUCK MIXER SUPPLY & MANUFACTURING.
Ecological: NEST TREE IS A VALLEY OAK; CULTIVATED LAND TO THE EAST, NE, AND NW; INDUSTRIAL/COMMERCIAL/RUDERAL TO THE SOUTH; BALL PARK TO THE SW.
General: NEST MONITORED 20 APR-20 JUL 2002; AFTER POWERFUL WINDS, 1 SMALL, DOWNY CHICK OBSERVED DEAD ON GROUND, 11 JUN 2002, AND NEST GONE. NEST MONITORED 26 MAR-9 JUL 2004; 1 FLEDGED.
Owner/Manager: UNKNOWN

Occurrence No. 1292 **Map Index:** 53343 **EO Index:** 53343 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2002-07-26
Origin: Natural/Native occurrence **Site:** 2004-06-05
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2004-12-15

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.74787° / -121.79761° **Township:** 10N
UTM: Zone-10 N4289484 E604486 **Range:** 02E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 06 **Qtr:** XX
Elevation: 70 ft **Symbol Type:** POINT **Meridian:** M

Location: SOUTH SIDE OF ROAD 16, 0.2 MILE WEST OF GORMAN LANE, 4 MILES NORTH OF WOODLAND
Location Detail: NEST TREE LOCATED 100 METERS SOUTH OF ROAD 16; 2002 NEST LOCATED NEAR THE TOP, ON THE EAST SIDE.
Ecological: NEST TREE IS A SOLITARY VALLEY OAK.
General: NEST MONITORED 22 APR-26 JUL 2002; NEST, BUT NO CHICKS DETECTED. RTHA OCCUPIED THIS NEST SITE IN 2004.
Owner/Manager: PVT

Occurrence No. 1293 **Map Index:** 53345 **EO Index:** 53345 **Dates Last Seen** _____
Occ Rank: Poor **Element:** 2004-06-07
Origin: Natural/Native occurrence **Site:** 2004-07-25
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-05-05

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.67622° / -121.75325° **Township:** 10N
UTM: Zone-10 N4281584 E608450 **Range:** 02E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 33 **Qtr:** NE
Elevation: 50 ft **Symbol Type:** POINT **Meridian:** M

Location: SOUTH SIDE OF MAIN STREET, JUST EAST OF THE ENTRANCE TO SOUTHBOUND HIGHWAY 113, ON THE EASTERN EDGE OF WOODLAND
Location Detail: NEST TREE IS LOCATED IN A RUDERAL FIELD AWAITING DEVELOPMENT IN A COMMERCIAL/INDUSTRIAL ZONE.
Ecological: NEST TREE IS A LARGE, SPRAWLING VALLEY OAK.
Threat: THREATENED BY FUTURE DEVELOPMENT.
General: NEST MONITORED 19 JUN-3 JUL 2002; ADULTS DEFENDED TREE, BUT NO CHICKS DETECTED. NEST MONITORED 5 MAY-25 JUL 2004; ADULT ON NEST, 7 JUN 2004, BUT NO CHICKS SEEN (POORLY OBSERVED).
Owner/Manager: UNKNOWN

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ **Status** _____ **NDDB Element Ranks** _____ **Other Lists** _____
 Federal: None **Global:** G5 **CDFG Status:**
 State: Threatened **State:** S2

_____ **Habitat Associations** _____

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1297 **Map Index:** 53573 **EO Index:** 53573 **Dates Last Seen**
Occ Rank: Good **Element:** 2002-08-21
Origin: Natural/Native occurrence **Site:** 2004-08-04
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-05-04

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.74610° / -121.82318° **Township:** 10N
UTM: Zone-10 N4289259 E602267 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 02 **Qtr:** NE
Elevation: 70 ft **Symbol Type:** POINT **Meridian:** M

Location: WEST OF ROAD 97, 0.35 MILE NORTH OF THE HIGHWAY 99W JUNCTION, 4.4 MILES NNW OF WOODLAND
Location Detail: NEST TREE LOCATED IN THE CENTER OF A CULTIVATED FIELD BETWEEN ROAD 97 AND HIGHWAY 99W.
Ecological: NEST TREE IS A LONE VALLEY OAK IN THE CENTER OF A CULTIVATED FIELD.
General: NEST SITE SUSPECTED IN 2001, BUT NOT DETECTED. NEST MONITORED 24 MAY-21 AUG 2002; 2 FLEDGED. NEST SITE MONITORED ON 4 AUG 2004; NO NEST DETECTED.
Owner/Manager: UNKNOWN

Occurrence No. 1298 **Map Index:** 53574 **EO Index:** 53574 **Dates Last Seen**
Occ Rank: Good **Element:** 2002-08-21
Origin: Natural/Native occurrence **Site:** 2004-07-09
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-04-28

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.71114° / -121.78301° **Township:** 10N
UTM: Zone-10 N4285426 E605809 **Range:** 02E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 17 **Qtr:** XX
Elevation: 60 ft **Symbol Type:** POINT **Meridian:** M

Location: 0.1 MILE EAST OF ROAD 99, 0.4 MILE NORTH OF I-5, 1.5 MILES NORTH OF WOODLAND
Location Detail: 2002 NEST LOCATED IN A HIGH, EASTERN LOBE OF A RAGGED VALLEY OAK.
Ecological: NEST TREE IS A LONE VALLEY OAK IN A WHEAT FIELD; SURROUNDED BY CULTIVATED LAND IN ALL DIRECTIONS.
General: NEST SITE SUSPECTED IN 2001, BUT NOT DETECTED. NEST MONITORED 24 MAY-21 AUG 2002; 1 FLEDGED. NEST MONITORED 16 MAR-9 JUL 2004; BUTEO (PERHAPS RTHA) SITTING TIGHT, 16 MAR, AND PERCHED, 3 APR 2004.
Owner/Manager: PVT

Occurrence No. 1299 **Map Index:** 53575 **EO Index:** 53575 **Dates Last Seen**
Occ Rank: Fair **Element:** 2004-07-14
Origin: Natural/Native occurrence **Site:** 2004-07-14
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-04-28

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.67843° / -121.81651° **Township:** 10N
UTM: Zone-10 N4281757 E602944 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 25 **Qtr:** SW
Elevation: 80 ft **Symbol Type:** POINT **Meridian:** M

Location: NORTH SIDE OF HIGHWAY 16, 0.2 MILE EAST OF ROAD 97, 1.5 MILES WEST OF WOODLAND
Location Detail: 2002 NEST LOCATED AT THE 90% HEIGHT OF THE TALLEST BLACK WALNUT, 2/3 WAY NORTH ALONG ROW ON THE EAST SIDE OF THE FARMSTEAD.
Ecological: NEST TREE IS A BLACK WALNUT; SURROUNDED BY CULTIVATED LAND TO THE EAST, RUDERAL AND TREES TO THE NORTH, CULTIVATED LAND AND RUDERAL TO THE SOUTH, AND RUDERAL TO THE WEST.
General: NEST SITE SUSPECTED IN 2001, BUT NOT CONFIRMED. NEST MONITORED 14 APR-12 JUL 2002; 1 FLEDGED. NEST MONITORED 21 MAY-14 JUL 2004; 2 FLEDGED.
Owner/Manager: UNKNOWN

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDBB Element Ranks _____ Other Lists _____
 Federal: None Global: G5 CDFG Status:
 State: Threatened State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1355 Map Index: 56687 EO Index: 56703 Dates Last Seen _____
 Occ Rank: Excellent Element: 2004-08-14
 Origin: Natural/Native occurrence Site: 2004-08-14
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-09-09

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.65625° / -121.82114° Township: 09N
 UTM: Zone-10 N4279290 E602572 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 01 Qtr: NW
 Elevation: 75 ft Symbol Type: POINT Meridian: M

Location: EAST SIDE OF ROAD 97, 0.5 MILE SOUTH OF ROAD 24, WSW OF WOODLAND.
 Location Detail: RESSEGUIE'S WOODLAND 48. 2004 NEST WAS LOCATED AT THE 85% HEIGHT OF A MULTI-TRUNKED BLACK WALNUT, ROOTED BETWEEN A FENCE AND BLACKTOP; NEST OVER THE FRONT YARD OF THE FARMSTEAD AT 19435 ROAD 97.
 Ecological: NEST TREE IS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE WEST, CULTIVATED LAND TO THE SOUTH AND SW, AND PASTURE TO THE NORTH.
 General: NEST MONITORED 31 MAR-14 AUG 2004; 2 YOUNG FLEDGED.
 Owner/Manager: UNKNOWN

Occurrence No. 1357 Map Index: 56739 EO Index: 56755 Dates Last Seen _____
 Occ Rank: Good Element: 2004-08-13
 Origin: Natural/Native occurrence Site: 2004-08-13
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-09-13

Quad Summary: Woodland (3812167/514A), Eldorado Bend (3812177/530D)
 County Summary: Yolo

Lat/Long: 38.75003° / -121.84619° Township: 10N
 UTM: Zone-10 N4289670 E600261 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 03 Qtr: NE
 Elevation: 70 ft Symbol Type: POINT Meridian: M

Location: SOUTH SIDE OF ROAD 16, 0.3 MILE WEST OF ROAD 96, 7 MILES WSW OF KNIGHTS LANDING.
 Location Detail: RESSEGUIE'S ELDORADO BEND 59. 2004 NEST WAS LOCATED AT THE 90% HEIGHT OF THE SOUTH LOBE OF THE WEST-MOST TREE.
 Ecological: NEST TREE WAS A BLACK WALNUT; SURROUNDED BY CULTIVATED LAND TO THE NORTH AND SOUTH.
 General: NEST MONITORED 12 MAR-13 AUG 2004; RESULTS UNKNOWN (MAY HAVE MISSED A FLEDGLING).
 Owner/Manager: PVT

Occurrence No. 1359 Map Index: 56750 EO Index: 56766 Dates Last Seen _____
 Occ Rank: Good Element: 2004-08-14
 Origin: Natural/Native occurrence Site: 2004-08-14
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-09-13

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.63030° / -121.82236° Township: 09N
 UTM: Zone-10 N4276409 E602503 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 14 Qtr: NE
 Elevation: 70 ft Symbol Type: POINT Meridian: M

Location: WEST SIDE OF ROAD 97, 0.75 MILE SOUTH OF ROAD 25A, 3.5 MILES SW OF WOODLAND.
 Location Detail: RESSEGUIE'S WOODLAND 53. NEST TREE IS FOUND ON THE ENGLUND FARMSTEAD; NEST IS LOCATED NEAR THE TOP OF THE EAST-MOST OF SEVERAL LARGE, TOPPED (ALEPPO?) PINES, IN A CORRAL JUST NORTH OF THE DRIVEWAY.
 Ecological: NEST TREE IS A PINE (ALEPPO?); SURROUNDED BY CULTIVATED LAND IN ALL DIRECTIONS.
 General: NEST MONITORED 28 APR-14 AUG 2004; 1 YOUNG FLEDGED.
 Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status _____ **NDDB Element Ranks** _____ **Other Lists** _____
 Federal: None **Global:** G5 **CDFG Status:**
 State: Threatened **State:** S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1364 **Map Index:** 56791 **EO Index:** 56807 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2004-08-14
Origin: Natural/Native occurrence **Site:** 2004-08-14
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2004-09-15

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.67890° / -121.81207° **Township:** 10N
UTM: Zone-10 N4281814 E603329 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 25 **Qtr:** SW
Elevation: 75 ft **Symbol Type:** POINT **Meridian:** M

Location: NORTH SIDE OF HIGHWAY 16, 0.5 MILE WEST OF ROAD 98, 1.25 MILES WEST OF WOODLAND.
Location Detail: RESSEGUIE'S WOODLAND 21. 2004 NEST LOCATED IN THE TALLEST TREE ON THE NORTH EDGE OF THE FARMSTEAD.
Ecological: AREA SURROUNDING NEST TREE IS PATCHY CULTIVATED, ORCHARD, RUDERAL, AND RESIDENTIAL.
General: NEST MONITORED 21 MAY-14 AUG 2004; ADULTS SEEN ON 21 MAY, 2 JUN, AND 9 JUL 2004. NO CHICKS OBSERVED, BUT SITE WAS POORLY OBSERVED.
Owner/Manager: PVT

Occurrence No. 1365 **Map Index:** 56840 **EO Index:** 56856 **Dates Last Seen** _____
Occ Rank: Excellent **Element:** 2004-07-12
Origin: Natural/Native occurrence **Site:** 2004-07-12
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2004-09-20

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.73525° / -121.77525° **Township:** 10N
UTM: Zone-10 N4288109 E606448 **Range:** 02E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 05 **Qtr:** XX
Elevation: 65 ft **Symbol Type:** POINT **Meridian:** M

Location: SOUTH SIDE OF ROAD 113, JUST EAST OF THE ROAD 17 JUNCTION, 3 MILES NORTH OF WOODLAND.
Location Detail: RESSEGUIE'S WOODLAND 43.
Ecological: PRESUMED NEST TREE(S) CONSISTS OF TWO LARGE BLACK WALNUTS ON THE SOUTH SHOULDER OF ROAD 113; SURROUNDED BY ALFALFA TO THE SW AND THE REMAINDER CULTIVATED FIELDS.
General: ADULTS OBSERVED DEFENDING TREES ON 23 MAY, 28 JUN, AND 12 JUL 2002; NO NEST COULD BE SEEN. NEST SITE MONITORED 2 MAY-12 JUL 2004; SWHA DEFENDING NEST TREES ON 9 JUL 2004, BUT NO NEST WAS VISIBLE (NESTING PRESUMED).
Owner/Manager: UNKNOWN

Occurrence No. 1366 **Map Index:** 56849 **EO Index:** 56865 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2004-08-14
Origin: Natural/Native occurrence **Site:** 2004-08-14
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2004-09-20

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.73191° / -121.82478° **Township:** 10N
UTM: Zone-10 N4287683 E602148 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 11 **Qtr:** XX
Elevation: 75 ft **Symbol Type:** POINT **Meridian:** M

Location: WEST SIDE OF ROAD 96B, 0.25 MILE SOUTH OF ROAD 17, 4 MILES NW OF WOODLAND
Location Detail: RESSEGUIE'S WOODLAND 51.
Ecological: PRESUMED NEST TREE(S) CONSISTS OF TWO VALLEY OAKS IN A FIELD WEST OF ROAD 96B.
General: NEST SITE MONITORED 31 MAR-14 AUG 2004; PAIR PERCHED ON 31 MAR 2004, AND ADULT PRESUMED TO BE NEST-BUILDING ON 16 APR 2004 (NESTING PRESUMED). A SINGLE ADULT OBSERVED PERCHING ON 1 MAY AND 5 JUN 2004; FOOT SEARCHES YIELDED NO NEST.
Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status _____ **NDDB Element Ranks** _____ **Other Lists** _____
 Federal: None **Global:** G5
 State: Threatened **State:** S2 **CDFG Status:** _____

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1367 **Map Index:** 56852 **EO Index:** 56868 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2004-08-14
Origin: Natural/Native occurrence **Site:** 2004-08-14
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2004-09-20

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.71336° / -121.82690° **Township:** 10N
UTM: Zone-10 N4285622 E601990 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 14 **Qtr:** XX
Elevation: 90 ft **Symbol Type:** POINT **Meridian:** M

Location: SOUTH END OF ROAD 96B, 0.1 MILE SOUTH OF ROAD 18A, 3 MILES NW OF WOODLAND.
Location Detail: RESSEGUIE'S WOODLAND 54. 2004 NEST APPEARED TO BE IN THE NW LOBE OF THE TALLEST OAK, JUST SOUTH OF THE SMALL GRAY BARN (OBSERVATION DIFFICULT BECAUSE ENTRY WAS PROHIBITED).
Ecological: NEST TREE IS A (VALLEY) OAK; SURROUNDED BY TWO RESIDENCES AND MIXED RUDERAL AND CULTIVATED LAND.
General: NEST SITE MONITORED 1 MAY-16 AUG 2004; ADULTS OBSERVED ON 1 MAY, 2 MAY, 5 JUN, AND 9 AUG 2004.
Owner/Manager: PVT

Occurrence No. 1402 **Map Index:** 57556 **EO Index:** 57572 **Dates Last Seen** _____
Occ Rank: Good **Element:** 2004-08-13
Origin: Natural/Native occurrence **Site:** 2004-08-13
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2004-10-21

Quad Summary: Grays Bend (3812166/513B), Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.66054° / -121.75056° **Township:** 09N
UTM: Zone-10 N4279848 E608707 **Range:** 02E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 04 **Qtr:** NE
Elevation: 50 ft **Symbol Type:** POINT **Meridian:** M

Location: 0.25 MILE SW OF THE INTERSECTION OF GIBSON ROAD AND ROAD 101,
Ecological: NEST TREE IS A VALLEY OAK; SURROUNDED BY CULTIVATED FIELDS IN ALL DIRECTIONS.
Threat: THREATENED BY DEVELOPMENT.
General: NEST MONITORED 26 MAR-15 AUG 2004; 1 YOUNG FLEDGED.
Owner/Manager: PVT

Occurrence No. 1409 **Map Index:** 57684 **EO Index:** 57700 **Dates Last Seen** _____
Occ Rank: Fair **Element:** 2004-07-14
Origin: Natural/Native occurrence **Site:** 2004-07-14
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2004-10-26

Quad Summary: Woodland (3812167/514A)
County Summary: Yolo

Lat/Long: 38.67083° / -121.86819° **Township:** 10N
UTM: Zone-10 N4280857 E598458 **Range:** 01E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 33 **Qtr:** SW
Elevation: 130 ft **Symbol Type:** POINT **Meridian:** M

Location: SOUTH SIDE OF ROAD 16, 0.15 MILE NE OF ROAD 94B, 4.5 MILES WEST OF WOODLAND
Location Detail: NEST TREE LOCATED AT RESIDENCE 34511 ROAD 16. 2004 NEST LOCATED AT THE 80% HEIGHT OF THE WESTMOST BLUE GUM, CLOSE TO THE ROAD.
Ecological: 2004 NEST TREE WAS A BLUE GUM EUCALYPTUS; SURROUNDED BY MIXED RUDERAL, RESIDENCES, AND CULTIVATED FIELDS.
General: NEST MONITORED 30 MAR-14 JUL 2004; 3 YOUNG FLEDGED.
Owner/Manager: PVT

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

_____ Status _____ NDDB Element Ranks _____ Other Lists _____
 Federal: None Global: G5 CDFG Status:
 State: Threatened State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
 Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1410 Map Index: 57685 EO Index: 57701 Dates Last Seen _____
 Occ Rank: Good Element: 2004-07-12
 Origin: Natural/Native occurrence Site: 2004-07-12
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-10-26

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.73540° / -121.85185° Township: 10N
 UTM: Zone-10 N4288040 E599790 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 10 Qtr: NW
 Elevation: 75 ft Symbol Type: POINT Meridian: M

Location: SOUTH SIDE OF ROAD 17, 0.2 MILE WEST OF ROAD 95A, 5 MILES NW OF WOODLAND
 Location Detail: NEST TREE LOCATED WHERE A SMALL CREEK CROSSES ROAD 16. 2004 NEST LOCATED AT THE 90% HEIGHT OF THE TALLEST BLACK WALNUT ALONG THE CREEK, ON THE SOUTH EDGE OF A SMALL PASTURE, NEAR THE EAST END.
 Ecological: 2004 NEST TREE WAS A BLACK WALNUT.
 General: NEST MONITORED 31 MAR-12 JUL 2004; 2 YOUNG FLEDGED.
 Owner/Manager: PVT

Occurrence No. 1411 Map Index: 57686 EO Index: 57702 Dates Last Seen _____
 Occ Rank: Fair Element: 2004-08-14
 Origin: Natural/Native occurrence Site: 2004-08-14
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-10-26

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.73564° / -121.82276° Township: 10N
 UTM: Zone-10 N4288099 E602318 Range: 01E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 02 Qtr: SE
 Elevation: 70 ft Symbol Type: POINT Meridian: M

Location: NORTH SIDE OF ROAD 17, JUST EAST OF ROAD 96B, 4 MILES NNW OF WOODLAND
 Location Detail: 2004 NEST HUNG DIRECTLY OVER THE MIDDLE OF ROAD 17.
 Ecological: 2004 NEST TREE WAS AN OAK; SURROUNDED BY CULTIVATED FIELDS.
 General: NEST MONITORED 31 MAR-14 AUG 2004; ADULT WAS SITTING TIGHT ON NEST ON 16 & 30 APR 2004, AND ADULTS DEFENDING ON 26 JUL 2004 (OUTCOME UNKNOWN).
 Owner/Manager: YOL COUNTY

Occurrence No. 1412 Map Index: 57687 EO Index: 57703 Dates Last Seen _____
 Occ Rank: Fair Element: 2004-04-03
 Origin: Natural/Native occurrence Site: 2004-07-25
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2004-10-26

Quad Summary: Woodland (3812167/514A)
 County Summary: Yolo

Lat/Long: 38.66334° / -121.75374° Township: 10N
 UTM: Zone-10 N4280155 E608427 Range: 02E
 Radius: 80 meters Mapping Precision: SPECIFIC Section: 33 Qtr: SE
 Elevation: 70 ft Symbol Type: POINT Meridian: M

Location: JUST NORTH OF THE GIBSON ROAD OFFRAMP AT HIGHWAY 113, ON THE SE EDGE OF WOODLAND
 Location Detail: 2004 NEST LOCATED HIGH IN THE LARGER, BUSHIER TREE WITHIN A GROUP OF TREES JUST NORTH OF THE OFF-RAMP TO WESTBOUND GIBSON ROAD.
 Ecological: 2004 NEST TREE WAS AN ELM (?); SURROUNDED BY A RUDERAL PATCH AROUND THE GROUP OF TREES, AND URBAN EXCEPT FOR A SMALL PATCH TO THE SE WHICH IS SCHEDULED FOR DEVELOPMENT.
 Threat: THREATENED BY URBAN DEVELOPMENT.
 General: NEST MONITORED 1 APR-25 JUL 2004; NEST-BUILDING OBSERVED ON 3 APR 2004, BUT NO LATER SIGHTINGS.
 Owner/Manager: CALTRANS

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5

CDFG Status:

State: Threatened

State: S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH

Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1413 Map Index: 57689 EO Index: 57705 Dates Last Seen

Occ Rank: Fair Element: 2004-08-16

Origin: Natural/Native occurrence Site: 2004-08-16

Presence: Presumed Extant

Trend: Unknown Record Last Updated: 2004-10-26

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.73130° / -121.81432° Township: 10N

UTM: Zone-10 N4287626 E603058 Range: 01E

Radius: 80 meters Mapping Precision: SPECIFIC Section: 12 Qtr: NW

Elevation: 75 ft Symbol Type: POINT Meridian: M

Location: WEST SIDE OF ROAD 97B, 0.5 MILE SE OF ROAD 17, JUST SW OF YOLO

Ecological: 2004 NEST TREE WAS A SMALL, WEST-SHOULDER OAK; SURROUNDED BY A CULTIVATED LAND TO THE WEST AND I-5 TO THE EAST.

General: NEST MONITORED 1 MAY-16 AUG 2004; NEST-BUILDING OBSERVED ON 1 MAY 2004, AND ADULTS PRESENT ON 2 MAY, 5 JUN, AND 13 AUG 2004. MALE IN SUB-ADULT PLUMAGE.

Owner/Manager: UNKNOWN

Occurrence No. 1711 Map Index: 70492 EO Index: 71387 Dates Last Seen

Occ Rank: Unknown Element: 2000-07-07

Origin: Natural/Native occurrence Site: 2000-07-07

Presence: Presumed Extant

Trend: Unknown Record Last Updated: 2007-11-20

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.69092° / -121.86866° Township: 10N

UTM: Zone-10 N4283086 E598390 Range: 01E

Radius: 80 meters Mapping Precision: SPECIFIC Section: 28 Qtr: NW

Elevation: 107 ft Symbol Type: POINT Meridian: M

Location: 0.15 MILE NORTH OF CACHE CREEK AND 0.15 MILE WEST OF ROAD 94B, CACHE CREEK NATURE CENTER, WEST OF WOODLAND.

Ecological: NEST TREE IS A VALLEY OAK; SURROUNDED BY COMMERCIAL/HIGHWAY TO THE NE AND NW, AND RIPARIAN TO THE SE AND SW.

Threat: POSSIBLE THREAT FROM NEARBY AIRPORT.

General: 1 FEATHERED CHICK OBSERVED IN THE NEST ON 7 JUL 2000; ADULTS WERE DEFENDING AGAINST A PERSON IN A SPRAY RIG IN THE NATURE CENTER AREA.

Owner/Manager: CACHE CREEK NATURE CENTER

Desmocerus californicus dimorphus

valley elderberry longhorn beetle

Element Code: IICOL48011

Status

NDDB Element Ranks

Other Lists

Federal: Threatened

Global: G3T2

CDFG Status:

State: None

State: S2

Habitat Associations

General: OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

Micro: PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Occurrence No. 81

Map Index: 30923

EO Index: 3697

Dates Last Seen

Occ Rank: Fair

Element: 1991-05-16

Origin: Natural/Native occurrence

Site: 1991-05-16

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 1998-08-11

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.68756° / -121.86828°

UTM: Zone-10 N4282713 E598428

Township: 10N

Range: 01E

Area:

Mapping Precision: NON-SPECIFIC

Section: 28

Qtr: XX

Elevation: 100 ft

Symbol Type: POLYGON

Meridian: M

Location: CACHE CREEK (SOUTH BANK), WEST SIDE OF ROAD 94B AND 1.4 MILES NORTH OF HIGHWAY 16, ~5 MILES WEST OF WOODLAND.

Location Detail: REPORT ON: TAXONOMY; DISTRIBUTION; LIFE HISTORY; HABITAT; FIELD TECHNIQUES & OBSERVATIONS; BEETLE RECOVERY.

Ecological: HABITAT CONSISTS OF RIPARIAN BORDERED BY OPEN, GRASSY FIELDS.

General: MANY RECENT EXIT HOLES WERE OBSERVED IN 2 ELDERBERRY CLUMPS.

Owner/Manager: PVT

Lasionycteris noctivagans

silver-haired bat

Element Code: AMACC02010

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5

CDFG Status:

State: None

State: S3S4

Habitat Associations

General: PRIMARILY A COASTAL & MONTANE FOREST DWELLER FEEDING OVER STREAMS, PONDS & OPEN BRUSHY AREAS.

Micro: ROOSTS IN HOLLOW TREES, BENEATH EXFOLIATING BARK, ABANDONED WOODPECKER HOLES & RARELY UNDER ROCKS. NEEDS DRINKING WATER.

Occurrence No. 89

Map Index: 57705

EO Index: 68972

Dates Last Seen

Occ Rank: Unknown

Element: 1990-10-02

Origin: Natural/Native occurrence

Site: 1990-10-02

Presence: Presumed Extant

Record Last Updated: 2007-03-20

Trend: Unknown

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.67728° / -121.77377°

Township: 10N

UTM: Zone-10 N4281679 E606663

Range: 02E

Radius: 1 mile

Mapping Precision: NON-SPECIFIC

Section: 29

Qtr: XX

Elevation: 65 ft

Symbol Type: POINT

Meridian: M

Location: WOODLAND.

Location Detail: MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY MANIS, WITH UNCERTAINTY OF 1609.344M.

General: 1 MALE SPECIMEN (MVZ #182384) COLLECTED BY WILLIAM E. RAINEY ON 2 OCT 1990.

Owner/Manager: UNKNOWN

Lasiurus cinereus

hoary bat

Element Code: AMACC05030

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5

CDFG Status:

State: None

State: S4?

Habitat Associations

General: PREFERS OPEN HABITATS OR HABITAT MOSAICS, WITH ACCESS TO TREES FOR COVER & OPEN AREAS OR HABITAT EDGES FOR FEEDING.

Micro: ROOSTS IN DENSE FOLIAGE OF MEDIUM TO LARGE TREES. FEEDS PRIMARILY ON MOTHS. REQUIRES WATER.

Occurrence No. 139

Map Index: 57705

EO Index: 68902

Dates Last Seen

Occ Rank: Unknown

Element: 1991-05-08

Origin: Natural/Native occurrence

Site: 1991-05-08

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 2007-03-19

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.67728° / -121.77377°

Township: 10N

UTM: Zone-10 N4281679 E606663

Range: 02E

Radius: 1 mile

Mapping Precision: NON-SPECIFIC

Section: 29

Qtr: XX

Elevation: 65 ft

Symbol Type: POINT

Meridian: M

Location: WOODLAND.

Location Detail: MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY MANIS, WITH UNCERTAINTY OF 1609.344M.

General: 1 MALE SPECIMEN (MVZ #182431) COLLECTED BY WILLIAM E. RAINEY ON 8 MAY 1991.

Owner/Manager: UNKNOWN

Taxidea taxus

American badger

Element Code: AMAJF04010

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5

CDFG Status: SC

State: None

State: S4

Habitat Associations

General: MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.

Micro: NEEDS SUFFICIENT FOOD, FRIABLE SOILS & OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.

Occurrence No. 330

Map Index: 57705

EO Index: 57721

Dates Last Seen

Occ Rank: Unknown

Element: XXXX-XX-XX

Origin: Natural/Native occurrence

Site: XXXX-XX-XX

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 2004-10-26

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.67728° / -121.77377°

UTM: Zone-10 N4281679 E606663

Radius: 1 mile

Elevation: 65 ft

Township: 10N

Range: 02E

Section: 29

Meridian: M

Mapping Precision: NON-SPECIFIC

Symbol Type: POINT

Qtr: XX

Location: WOODLAND.

General: 1 COLLECTED, UDAV (U.C. DAVIS, MUSEUM OF ZOOLOGY).

Owner/Manager: UNKNOWN

Valley Oak Woodland

Element Code: CTT71130CA

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G3

State: None

State: S2.1

Habitat Associations

General:

Micro:

Occurrence No. 1

Map Index: 10746

EO Index: 28797

Dates Last Seen

Occ Rank: Unknown

Element: 1986-12-20

Origin: Natural/Native occurrence

Site: 1986-12-20

Presence: Presumed Extant

Trend: Decreasing

Record Last Updated: 1998-07-31

Quad Summary: Woodland (3812167/514A)

County Summary: Yolo

Lat/Long: 38.73420° / -121.76068°

Township: 10N

UTM: Zone-10 N4288010 E607717

Range: 02E

Radius: 1/5 mile

Mapping Precision: NON-SPECIFIC

Section: 4

Qtr: XX

Elevation: 50 ft

Symbol Type: POINT

Meridian: M

Location: CACHE CREEK VALLEY OAKS, SOUTH OF YOLO COUNTY RD 17, JUST E OF ITS JCT W/HWY 113.

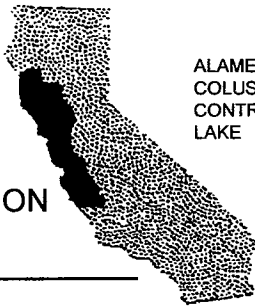
Ecological: 1980: 60% COVER Q. LOBATA W/MANY TREES >3 FT DBH. UNDERSTORY TOXIDENDRON, SAMBUCUS & ELYMUS TRITICOIDES. FEW OAK SEEDLINGS PRESENT. IN 1986, UNDERSTORY CLEARED, DOWNED TREES CLEARED, STANDING TREES BEING CUT. FEW TREES >1 FT DBH REMAIN.

General: THIS WAS OCC #001 OF CTT71130CA.

Owner/Manager: PVT

Appendix E
Cultural Resources Search

**CALIFORNIA
HISTORICAL
RESOURCES
INFORMATION
SYSTEM**



ALAMEDA
COLUSA
CONTRA COSTA
LAKE

MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO

SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center

Sonoma State University
1303 Maurice Avenue
Rohnert Park, California 94928-3609
Tel: 707.664.0880 • Fax: 707.664.0890
Email: leigh.jordan@sonoma.edu
<http://www.sonoma.edu/nwic>

January 21, 2010

NWIC File No.: 09-0823

Tarisai Garande
ERM
1277 Treat Boulevard, Suite 500
Walnut Creek, CA, 94597

Re: Record search results for the proposed Yolo County Courthouse in the City of Woodland.

Dear Miss Garande:

Per your request received by our office on January 8, 2010, a records search was conducted for the above referenced project by reviewing pertinent Northwest Information Center (NWIC) base maps that reference cultural resources records and reports, historic-period maps, and literature for Yolo County. Please note that use of the term cultural resources includes both archaeological resources and historical buildings and/or structures.

Review of this information indicates that there has been no specific cultural resource study that covers the Yolo County Courthouse in the City of Woodland project area. This project area contains no recorded cultural resources. The Office of Historic Preservation's (OHP) Historic Properties Directory lists the project area as located within the Downtown Woodland Historic District, OHP file #04291, which is listed as 1S, meaning that it is an individual property that is listed in the National Register of Historic Places by the Keeper, and it is listed in the California Register of Historical Resources. Additionally, within the requested 1/2-mile radius of the projects area there are four listed districts and hundreds of single property listings, cumulatively totaling 360 properties. See Attachment A for a detailed printout. In addition to these inventories, the NWIC base maps show no recorded buildings/structures.

At the time of Euroamerican contact the Native Americans that lived in the area were speakers of the Patwin language, part of the Penutian stock (Johnson 1978:350 #). Ethnographic literature describes the project area and the vicinity as the territory of the Kachituli tribelet (Kroeber 1925:Plate 34).

Based on an evaluation of the environmental setting and features associated with known sites, Native American resources in this part of Yolo County have been found in flatland areas that are adjacent to fresh water sources. The Yolo County Courthouse in the City of Woodland project area contains is within the vicinity of several vernal pools and springs (Flynn and Wheeler 1978:Map 2). Given the similarity of these

environmental factors, there is a moderate potential of identifying unrecorded Native American resources in the proposed Yolo County Courthouse in the City of Woodland project area.

Review of historical literature and maps indicated the possibility of encountering historic-period archaeological resources within the Yolo County Courthouse in the City of Woodland project area. The City of Woodland Cultural Resource Study (Flynn and Wheeler 1978:Map 3) shows the 1871 town limits, and the project area is included within this boundary. The 1907 USGS 15-minute topographic quadrangle depicts four buildings within the project area. Additionally, in the vicinity, an excavation was conducted that located thousands of artifact that contain information potential that may provide insight into the Chinese community that lived in Woodland during the historic era (DPR 1984). With this in mind, there is a high potential of identifying unrecorded historic-period archaeological resources in the proposed project area.

As mentioned previously, the 1907 USGS 15-minute topographic quadrangle depicts four buildings/structures within the Yolo County Courthouse in the City of Woodland project area. These unrecorded buildings/structures meet the Office of Historic Preservation's minimum age standard that buildings, structures, and objects 45 years or older may be of historical value.

RECOMMENDATIONS:

1) There is a moderate possibility of identifying Native American archaeological resources and a high possibility of identifying historic-period archaeological resources in the project area. We recommend a qualified archaeologist conduct further archival and field study to identify cultural resources. Field study may include, but is not limited to, pedestrian survey, hand auger sampling, shovel test units, or geoarchaeological analyses as well as other common methods used to identify the presence of archaeological resources. Please refer to the list of consultants who meet the Secretary of Interior's Standards at <http://www.chrisinfo.org>.

2) The proposed project area contains four unrecorded buildings/structures that may be eligible for listing in the National Register of Historic Places or the California Register of Historical Resources; therefore, prior to commencement of project activities, it is recommended that these resources should be assessed by a professional familiar with the architecture and history of Yolo County. Please refer to the list of consultants who meet the Secretary of Interior's Standards at <http://www.chrisinfo.org>.

3) Review for possible historic-period buildings or structures has included only those sources listed in the attached bibliography and should not be considered comprehensive.

4) If archaeological resources are encountered **during construction**, work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has

evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources. Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

5) It is recommended that any identified cultural resources be recorded on DPR 523 historic resource recordation forms, available online from the Office of Historic Preservation's website: http://ohp.parks.ca.gov/default.asp?page_id=1069

Thank you for using our services. Please contact this office if you have any questions, (707) 664-0880.

Sincerely,

L. Smirnoff
Researcher

LITERATURE REVIEWED

In addition to archaeological maps and site records on file at the Northwest Information Center of the Historical Resources Information System, the following literature was reviewed:

California Department of Parks and Recreation

1984 *The Chinese Laundry on Second Street*. In California Archaeological Reports 24. NWIC file #S-12204.

Fisher, Ray

1983 *Yolo Landmarks Tour*. Yolo County Historical Society.

Flynn, Katherine and Thomas Wheeler

1978 *City of Woodland Cultural Resource Study – Criteria for Significance and Methods of Historic Preservation*. NWIC file #S-2958.

Gudde, Erwin G.

1969 *California Place Names: The Origin and Etymology of Current Geographical Names*. Third Edition. University of California Press, Berkeley and Los Angeles.

Hart, James D.

1987 *A Companion to California*. University of California Press, Berkeley and Los Angeles.

Hoover, Mildred Brooke, Hero Eugene Rensch, and Ethel Rensch, revised by William N. Abeloe

1966 *Historic Spots in California*. Third Edition. Stanford University Press, Stanford.

Hoover, Mildred Brooke, Hero Eugene Rensch, and Ethel Rensch, William N. Abeloe, revised by Douglas E. Kyle

1990 *Historic Spots in California*. Fourth Edition. Stanford University Press, Stanford.

Johnson, Patti J.

1978 *Patwin*. In *California*, edited by Robert F. Heizer, pp. 350-360. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Kroeber, A.L.

1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D.C. (Reprint by Dover Publications, Inc., New York, 1976).

Roberts, George, and Jan Roberts

1988 *Discover Historic California*. Gem Guides Book Co., Pico Rivera, California.

State of California Department of Parks and Recreation

1976 *California Inventory of Historic Resources*. State of California Department of Parks and Recreation, Sacramento.

State of California Department of Parks and Recreation and Office of Historic Preservation

1988 *Five Views: An Ethnic Sites Survey for California*. State of California Department of Parks and Recreation and Office of Historic Preservation, Sacramento.

State of California Office of Historic Preservation **

2009 *Historic Properties Directory*. Listing by City (through October 2007). State of California Office of Historic Preservation, Sacramento.

Woodbridge, Sally B.

1988 *California Architecture: Historic American Buildings Survey*. Chronicle Books, San Francisco.

Works Progress Administration

1984 *The WPA Guide to California*. Reprint by Pantheon Books, New York. (Originally published as *California: A Guide to the Golden State* in 1939 by Books, Inc., distributed by Hastings House Publishers, New York.)

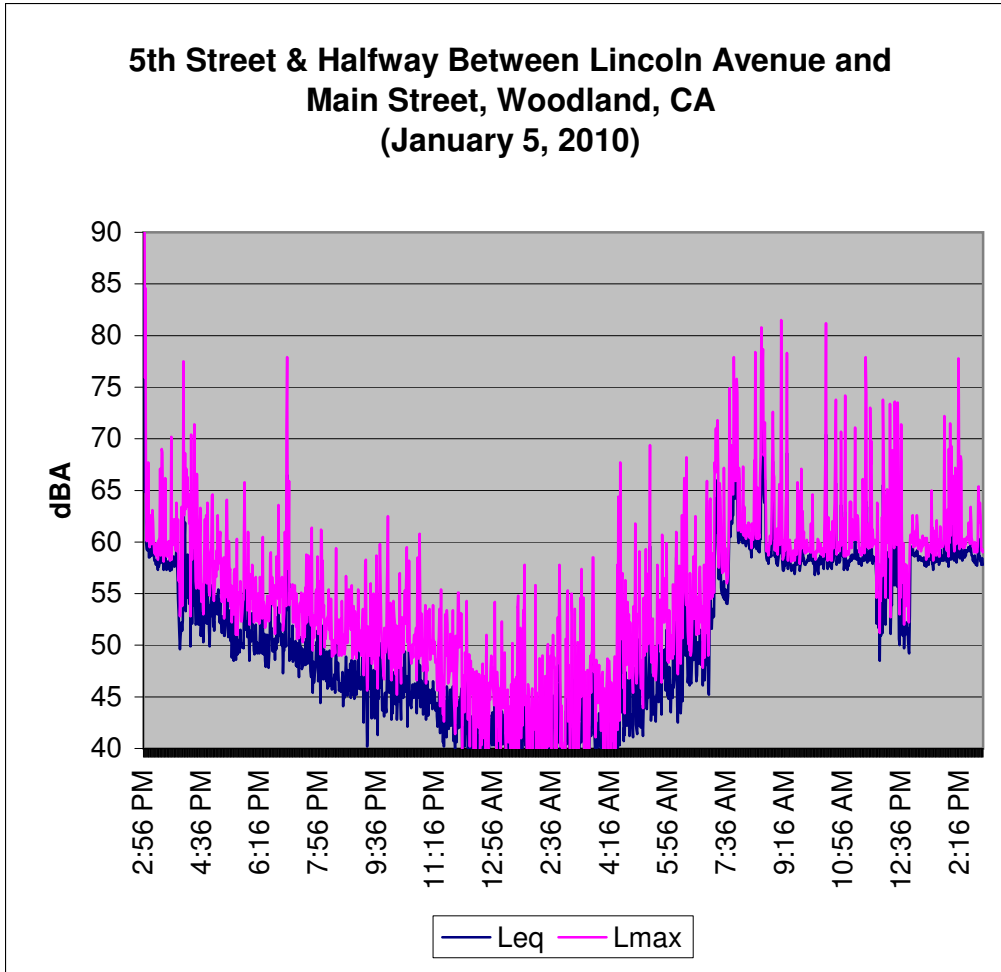
**Note that the Office of Historic Preservation's *Historic Properties Directory* includes National Register, State Registered Landmarks, California Points of Historical Interest, and the California Register of Historical Resources as well as Certified Local Government surveys that have undergone Section 106 review.

Appendix F
Noise Measurements

AOC Woodland

About 49 feet from edge of road (approximate)

Leq total = 58.9 dBA Ldn = 59.5 CNEL = 59.6



Date: 1/05/2010

917655 893507 5719246

	Leq	Lmax	L(99.9)	CNEL adj	Ldn Adjust	CNEL energy	Ldn energy
14:56:00	82.7	94.7		0	0	186208714	186208714
14:57:00	84.8	95.5		0	0	301995172	301995172
14:58:00	64.9	75.9		0	0	3090295	3090295
14:59:00	71.5	84.6		0	0	14125375	14125375
15:00:00	60.1	64.1		0	0	1023293	1023293
15:01:00	59.3	60.1		0	0	851138	851138
15:02:00	59.2	62		0	0	831764	831764
15:03:00	59.3	61.6		0	0	851138	851138
15:04:00	62	67.7		0	0	1584893	1584893
15:05:00	58.5	60.2		0	0	707946	707946
15:06:00	58.5	59.5		0	0	707946	707946
15:07:00	58.6	59.8		0	0	724436	724436
15:08:00	59.3	62.6		0	0	851138	851138

15:09:00	58.9	60	0	0	776247	776247
15:10:00	58.7	59.8	0	0	741310	741310
15:11:00	59.8	63.1	0	0	954993	954993
15:12:00	59.3	62	0	0	851138	851138
15:13:00	59	59.9	0	0	794328	794328
15:14:00	58.2	58.9	0	0	660693	660693
15:15:00	58.2	59	0	0	660693	660693
15:16:00	58.1	59.5	0	0	645654	645654
15:17:00	57.8	58.7	0	0	602560	602560
15:18:00	58.3	59.9	0	0	676083	676083
15:19:00	57.9	59.7	0	0	616595	616595
15:20:00	57.3	58.3	0	0	537032	537032
15:21:00	57.8	58.6	0	0	602560	602560
15:22:00	57.6	60.2	0	0	575440	575440
15:23:00	57.9	59.1	0	0	616595	616595
15:24:00	60.4	67.1	0	0	1096478	1096478
15:25:00	58	58.7	0	0	630957	630957
15:26:00	58	64.8	0	0	630957	630957
15:27:00	62	69	0	0	1584893	1584893
15:28:00	61.5	68.7	0	0	1412538	1412538
15:29:00	58.3	62.5	0	0	676083	676083
15:30:00	57.3	58.1	0	0	537032	537032
15:31:00	58.7	63.2	0	0	741310	741310
15:32:00	57.8	59.1	0	0	602560	602560
15:33:00	60.5	66.2	0	0	1122018	1122018
15:34:00	57.5	58.8	0	0	562341	562341
15:35:00	57.3	58.6	0	0	537032	537032
15:36:00	57.8	58.6	0	0	602560	602560
15:37:00	57.4	58.7	0	0	549541	549541
15:38:00	57.7	59.1	0	0	588844	588844
15:39:00	58.2	60.1	0	0	660693	660693
15:40:00	57.7	58.5	0	0	588844	588844
15:41:00	57.2	58.2	0	0	524807	524807
15:42:00	57.6	59.3	0	0	575440	575440
15:43:00	60.6	70.2	0	0	1148154	1148154
15:44:00	57.3	58.3	0	0	537032	537032
15:45:00	57.7	61.1	0	0	588844	588844
15:46:00	57.7	59.7	0	0	588844	588844
15:47:00	58.6	62.2	0	0	724436	724436
15:48:00	57.8	59.7	0	0	602560	602560
15:49:00	57.6	61	0	0	575440	575440
15:50:00	58.1	62.2	0	0	645654	645654
15:51:00	58.4	59.2	0	0	691831	691831
15:52:00	59.4	63.8	0	0	870964	870964
15:53:00	58	59.1	0	0	630957	630957
15:54:00	56.2	59.5	0	0	416869	416869
15:55:00	54.5	62.2	0	0	281838	281838
15:56:00	53	56.2	0	0	199526	199526
15:57:00	51.2	58.1	0	0	131826	131826

15:58:00	49.6	52.8	0	0	91201	91201
15:59:00	50.9	54.6	0	0	123027	123027
16:00:00	51.6	56.3	0	0	144544	144544
16:01:00	52.2	63.4	0	0	165959	165959
16:02:00	51.4	53.8	0	0	138038	138038
16:03:00	52.4	59.1	0	0	173780	173780
16:04:00	67.1	77.5	0	0	5128614	5128614
16:05:00	59.9	62.6	0	0	977237	977237
16:06:00	59.6	64.5	0	0	912011	912011
16:07:00	61.9	68.6	0	0	1548817	1548817
16:08:00	53.3	63.2	0	0	213796	213796
16:09:00	57.3	67.1	0	0	537032	537032
16:10:00	54.6	63.4	0	0	288403	288403
16:11:00	58.8	66.3	0	0	758578	758578
16:12:00	56.9	64.1	0	0	489779	489779
16:13:00	57.8	64	0	0	602560	602560
16:14:00	54	61.8	0	0	251189	251189
16:15:00	58	64.6	0	0	630957	630957
16:16:00	49.9	52.8	0	0	97724	97724
16:17:00	62.7	70.4	0	0	1862087	1862087
16:18:00	55.4	61.7	0	0	346737	346737
16:19:00	52.1	58.3	0	0	162181	162181
16:20:00	55.8	61.5	0	0	380189	380189
16:21:00	53.9	59.9	0	0	245471	245471
16:22:00	54	59.5	0	0	251189	251189
16:23:00	60.1	71.4	0	0	1023293	1023293
16:24:00	55	60.5	0	0	316228	316228
16:25:00	52	56.2	0	0	158489	158489
16:26:00	52.1	55.5	0	0	162181	162181
16:27:00	56.5	66.6	0	0	446684	446684
16:28:00	54.8	62.3	0	0	301995	301995
16:29:00	54.3	59.8	0	0	269153	269153
16:30:00	52	57.7	0	0	158489	158489
16:31:00	52.1	55.5	0	0	162181	162181
16:32:00	55.3	60.6	0	0	338844	338844
16:33:00	55.5	63.3	0	0	354813	354813
16:34:00	50.9	56.7	0	0	123027	123027
16:35:00	52.2	54.2	0	0	165959	165959
16:36:00	50.9	55.9	0	0	123027	123027
16:37:00	53.1	55.6	0	0	204174	204174
16:38:00	50.3	53	0	0	107152	107152
16:39:00	52	57.3	0	0	158489	158489
16:40:00	53.5	59.1	0	0	223872	223872
16:41:00	55.9	62.2	0	0	389045	389045
16:42:00	53.4	58.2	0	0	218776	218776
16:43:00	55.6	62.6	0	0	363078	363078
16:44:00	52.1	56	0	0	162181	162181
16:45:00	56.3	63.8	0	0	426580	426580
16:46:00	54.7	61	0	0	295121	295121

16:47:00	53.8	57.4	0	0	239883	239883
16:48:00	51.4	55.1	0	0	138038	138038
16:49:00	49.9	54.8	0	0	97724	97724
16:50:00	53.9	56	0	0	245471	245471
16:51:00	52.8	59	0	0	190546	190546
16:52:00	54.4	59.4	0	0	275423	275423
16:53:00	55.8	64.5	0	0	380189	380189
16:54:00	55.1	64.6	0	0	323594	323594
16:55:00	51.8	55.7	0	0	151356	151356
16:56:00	52.3	54.3	0	0	169824	169824
16:57:00	51.4	55	0	0	138038	138038
16:58:00	53.3	55.8	0	0	213796	213796
16:59:00	54.8	58.2	0	0	301995	301995
17:00:00	53.8	56.6	0	0	239883	239883
17:01:00	54	59.2	0	0	251189	251189
17:02:00	53	57.3	0	0	199526	199526
17:03:00	54.9	62.6	0	0	309030	309030
17:04:00	55.4	57.9	0	0	346737	346737
17:05:00	53.4	59.1	0	0	218776	218776
17:06:00	52.2	60.2	0	0	165959	165959
17:07:00	54.4	61	0	0	275423	275423
17:08:00	52.1	59.1	0	0	162181	162181
17:09:00	52.2	56	0	0	165959	165959
17:10:00	51.2	54.2	0	0	131826	131826
17:11:00	52.8	57	0	0	190546	190546
17:12:00	51.8	55.9	0	0	151356	151356
17:13:00	52.4	58.5	0	0	173780	173780
17:14:00	50.9	52.6	0	0	123027	123027
17:15:00	50.9	56.5	0	0	123027	123027
17:16:00	51.7	54.6	0	0	147911	147911
17:17:00	52.8	59.9	0	0	190546	190546
17:18:00	55.1	64.1	0	0	323594	323594
17:19:00	56.1	64.1	0	0	407380	407380
17:20:00	54.2	57.8	0	0	263027	263027
17:21:00	50.8	54.3	0	0	120226	120226
17:22:00	52.8	60.1	0	0	190546	190546
17:23:00	51	57.1	0	0	125893	125893
17:24:00	53.4	57.4	0	0	218776	218776
17:25:00	50.4	53.7	0	0	109648	109648
17:26:00	52.3	55.8	0	0	169824	169824
17:27:00	48.8	52.2	0	0	75858	75858
17:28:00	50.7	54.4	0	0	117490	117490
17:29:00	49.7	55.2	0	0	93325	93325
17:30:00	48.5	53	0	0	70795	70795
17:31:00	53.1	57	0	0	204174	204174
17:32:00	51.6	57.4	0	0	144544	144544
17:33:00	51.9	56.5	0	0	154882	154882
17:34:00	48.6	51	0	0	72444	72444
17:35:00	53	55.9	0	0	199526	199526

17:36:00	51.7	60.3	0	0	147911	147911
17:37:00	49.1	51	0	0	81283	81283
17:38:00	50.1	53.9	0	0	102329	102329
17:39:00	50.5	55.1	0	0	112202	112202
17:40:00	49.3	54.7	0	0	85114	85114
17:41:00	50.3	54.4	0	0	107152	107152
17:42:00	51.5	56.2	0	0	141254	141254
17:43:00	49.8	52.3	0	0	95499	95499
17:44:00	50	52.3	0	0	100000	100000
17:45:00	49.8	53.1	0	0	95499	95499
17:46:00	50.2	54.3	0	0	104713	104713
17:47:00	49.7	54.4	0	0	93325	93325
17:48:00	55	60.5	0	0	316228	316228
17:49:00	55.5	65.8	0	0	354813	354813
17:50:00	51.5	57.4	0	0	141254	141254
17:51:00	51.9	57.4	0	0	154882	154882
17:52:00	52.3	55.5	0	0	169824	169824
17:53:00	51.9	56.6	0	0	154882	154882
17:54:00	50.8	53.4	0	0	120226	120226
17:55:00	54	61	0	0	251189	251189
17:56:00	51.6	55.5	0	0	144544	144544
17:57:00	48.5	52	0	0	70795	70795
17:58:00	51.4	56.9	0	0	138038	138038
17:59:00	50.3	55.7	0	0	107152	107152
18:00:00	50.9	54.7	0	0	123027	123027
18:01:00	51.1	54.5	0	0	128825	128825
18:02:00	53.1	57.8	0	0	204174	204174
18:03:00	50.4	53.4	0	0	109648	109648
18:04:00	51.2	55.2	0	0	131826	131826
18:05:00	49.5	52.2	0	0	89125	89125
18:06:00	49.1	52.3	0	0	81283	81283
18:07:00	51	54.2	0	0	125893	125893
18:08:00	52	56.6	0	0	158489	158489
18:09:00	49.5	53	0	0	89125	89125
18:10:00	50.3	53.4	0	0	107152	107152
18:11:00	49.2	52.3	0	0	83176	83176
18:12:00	50.2	55	0	0	104713	104713
18:13:00	50.1	53	0	0	102329	102329
18:14:00	49.2	52.1	0	0	83176	83176
18:15:00	51.1	56.6	0	0	128825	128825
18:16:00	53	56.2	0	0	199526	199526
18:17:00	52.3	53.9	0	0	169824	169824
18:18:00	49.8	53.8	0	0	95499	95499
18:19:00	49.2	52.6	0	0	83176	83176
18:20:00	52.7	60.5	0	0	186209	186209
18:21:00	50.3	54.2	0	0	107152	107152
18:22:00	49.1	54.2	0	0	81283	81283
18:23:00	51.1	53.8	0	0	128825	128825
18:24:00	48.5	51.7	0	0	70795	70795

18:25:00	47.9	52	0	0	61660	61660
18:26:00	51	53.6	0	0	125893	125893
18:27:00	50.1	53	0	0	102329	102329
18:28:00	51	54.8	0	0	125893	125893
18:29:00	49.9	52.8	0	0	97724	97724
18:30:00	47.8	52.3	0	0	60256	60256
18:31:00	49.1	52.4	0	0	81283	81283
18:32:00	51.4	54.3	0	0	138038	138038
18:33:00	54.2	58.6	0	0	263027	263027
18:34:00	51.6	59	0	0	144544	144544
18:35:00	51.7	54	0	0	147911	147911
18:36:00	50.8	56.6	0	0	120226	120226
18:37:00	49.4	55.6	0	0	87096	87096
18:38:00	50.4	55.4	0	0	109648	109648
18:39:00	49.8	53.8	0	0	95499	95499
18:40:00	50.6	55.8	0	0	114815	114815
18:41:00	48.6	51.1	0	0	72444	72444
18:42:00	50.7	55.4	0	0	117490	117490
18:43:00	49.6	55.1	0	0	91201	91201
18:44:00	52.7	58.6	0	0	186209	186209
18:45:00	50.7	56.5	0	0	117490	117490
18:46:00	50.3	54.5	0	0	107152	107152
18:47:00	53.7	63.6	0	0	234423	234423
18:48:00	51.1	56.3	0	0	128825	128825
18:49:00	50.9	53.1	0	0	123027	123027
18:50:00	52.1	56.3	0	0	162181	162181
18:51:00	50.9	56.2	0	0	123027	123027
18:52:00	50	54.7	0	0	100000	100000
18:53:00	51.1	56.6	0	0	128825	128825
18:54:00	49.6	53.9	0	0	91201	91201
18:55:00	47.3	51.4	0	0	53703	53703
18:56:00	49.5	52.2	0	0	89125	89125
18:57:00	49.5	53.1	0	0	89125	89125
18:58:00	52.2	61	0	0	165959	165959
18:59:00	52	57.1	0	0	158489	158489
19:00:00	49.9	53.8	0	0	97724	97724
19:01:00	60.8	71	0	0	1202264	1202264
19:02:00	66.5	77.9	5	0	14125375	4466836
19:03:00	53.8	58.7	5	0	758578	239883
19:04:00	53.4	57.4	5	0	691831	218776
19:05:00	56	65.9	5	0	1258925	398107
19:06:00	48.5	53.9	5	0	223872	70795
19:07:00	50.5	55	5	0	354813	112202
19:08:00	50.6	55.4	5	0	363078	114815
19:09:00	48.7	55	5	0	234423	74131
19:10:00	48.8	54.5	5	0	239883	75858
19:11:00	51.9	55.9	5	0	489779	154882
19:12:00	48.4	52.2	5	0	218776	69183
19:13:00	48.7	52.2	5	0	234423	74131

19:14:00	48.7	52.5	5	0	234423	74131
19:15:00	49.8	55.8	5	0	301995	95499
19:16:00	50.4	53.8	5	0	346737	109648
19:17:00	48	51.8	5	0	199526	63096
19:18:00	49.1	55	5	0	257040	81283
19:19:00	47.9	50.6	5	0	194984	61660
19:20:00	50.2	53.8	5	0	331131	104713
19:21:00	49.1	53.8	5	0	257040	81283
19:22:00	46.9	50.7	5	0	154882	48978
19:23:00	49.9	53.3	5	0	309030	97724
19:24:00	50.8	54.1	5	0	380189	120226
19:25:00	48.7	53.3	5	0	234423	74131
19:26:00	49.8	55.1	5	0	301995	95499
19:27:00	47.7	53.8	5	0	186209	58884
19:28:00	47.9	51.8	5	0	194984	61660
19:29:00	48	50.3	5	0	199526	63096
19:30:00	48.1	52.6	5	0	204174	64565
19:31:00	49.6	55	5	0	288403	91201
19:32:00	48.1	50.8	5	0	204174	64565
19:33:00	50.3	55.6	5	0	338844	107152
19:34:00	48.1	52.1	5	0	204174	64565
19:35:00	52.9	58.8	5	0	616595	194984
19:36:00	49.1	52.2	5	0	257040	81283
19:37:00	48.2	53.8	5	0	208930	66069
19:38:00	53.2	58.7	5	0	660693	208930
19:39:00	49.2	53	5	0	263027	83176
19:40:00	51.8	56.2	5	0	478630	151356
19:41:00	49.6	55.4	5	0	288403	91201
19:42:00	47.5	52.2	5	0	177828	56234
19:43:00	46.9	51.9	5	0	154882	48978
19:44:00	53.2	61.4	5	0	660693	208930
19:45:00	45.8	50.6	5	0	120226	38019
19:46:00	45.4	49.5	5	0	109648	34674
19:47:00	48.4	52.9	5	0	218776	69183
19:48:00	46.4	50.7	5	0	138038	43652
19:49:00	47.1	52.3	5	0	162181	51286
19:50:00	47.7	51.9	5	0	186209	58884
19:51:00	48.1	55.1	5	0	204174	64565
19:52:00	50.3	55.4	5	0	338844	107152
19:53:00	49.3	52.3	5	0	269153	85114
19:54:00	51.4	58.6	5	0	436516	138038
19:55:00	46.5	51.1	5	0	141254	44668
19:56:00	48.3	52.6	5	0	213796	67608
19:57:00	47.9	52.6	5	0	194984	61660
19:58:00	48.9	56.2	5	0	245471	77625
19:59:00	44.4	49.1	5	0	87096	27542
20:00:00	50.4	61.2	5	0	346737	109648
20:01:00	51.9	61	5	0	489779	154882
20:02:00	49.1	52.7	5	0	257040	81283

20:03:00	50	58.2	5	0	316228	100000
20:04:00	46.7	52.9	5	0	147911	46774
20:05:00	49.6	53.9	5	0	288403	91201
20:06:00	47.3	49.8	5	0	169824	53703
20:07:00	47.6	52	5	0	181970	57544
20:08:00	47.8	50.6	5	0	190546	60256
20:09:00	46.5	51.4	5	0	141254	44668
20:10:00	49.4	52.6	5	0	275423	87096
20:11:00	45.8	52.7	5	0	120226	38019
20:12:00	48.5	52.9	5	0	223872	70795
20:13:00	47	55.4	5	0	158489	50119
20:14:00	46	51.5	5	0	125893	39811
20:15:00	49.5	51.9	5	0	281838	89125
20:16:00	47.4	50.6	5	0	173780	54954
20:17:00	49.1	54.5	5	0	257040	81283
20:18:00	46	51.4	5	0	125893	39811
20:19:00	45.7	48.9	5	0	117490	37154
20:20:00	46.1	49	5	0	128825	40738
20:21:00	45.8	49	5	0	120226	38019
20:22:00	46.7	50.5	5	0	147911	46774
20:23:00	47.2	50.5	5	0	165959	52481
20:24:00	45.4	49.2	5	0	109648	34674
20:25:00	48.3	51.9	5	0	213796	67608
20:26:00	50.1	59.4	5	0	323594	102329
20:27:00	47.2	51.4	5	0	165959	52481
20:28:00	46.7	50.2	5	0	147911	46774
20:29:00	48.3	52.5	5	0	213796	67608
20:30:00	46.7	50.7	5	0	147911	46774
20:31:00	45.6	49	5	0	114815	36308
20:32:00	45.9	50	5	0	123027	38905
20:33:00	46.3	51.5	5	0	134896	42658
20:34:00	45.5	52.6	5	0	112202	35481
20:35:00	45.7	49	5	0	117490	37154
20:36:00	46.4	54.3	5	0	138038	43652
20:37:00	47.4	50.6	5	0	173780	54954
20:38:00	44.1	49.6	5	0	81283	25704
20:39:00	46.2	51	5	0	131826	41687
20:40:00	44.9	49.1	5	0	97724	30903
20:41:00	46.2	49.6	5	0	131826	41687
20:42:00	47.3	51.8	5	0	169824	53703
20:43:00	48.9	56.7	5	0	245471	77625
20:44:00	47	53.8	5	0	158489	50119
20:45:00	45.1	50.2	5	0	102329	32359
20:46:00	47.6	53	5	0	181970	57544
20:47:00	46.3	52.8	5	0	134896	42658
20:48:00	47.3	55.4	5	0	169824	53703
20:49:00	45.6	51.9	5	0	114815	36308
20:50:00	48.2	53.1	5	0	208930	66069
20:51:00	44.9	51.5	5	0	97724	30903

20:52:00	46.8	52.2	5	0	151356	47863
20:53:00	48.6	55.8	5	0	229087	72444
20:54:00	45.2	48.7	5	0	104713	33113
20:55:00	48.3	53.4	5	0	213796	67608
20:56:00	48.4	53.8	5	0	218776	69183
20:57:00	44.8	49.1	5	0	95499	30200
20:58:00	48.5	53.3	5	0	223872	70795
20:59:00	47.1	51	5	0	162181	51286
21:00:00	47.4	49.8	5	0	173780	54954
21:01:00	45.2	48.7	5	0	104713	33113
21:02:00	47.1	53	5	0	162181	51286
21:03:00	46.1	52.6	5	0	128825	40738
21:04:00	49.3	55.4	5	0	269153	85114
21:05:00	45.8	51.5	5	0	120226	38019
21:06:00	45.9	49.5	5	0	123027	38905
21:07:00	46.9	50.7	5	0	154882	48978
21:08:00	45.7	51.4	5	0	117490	37154
21:09:00	45.9	49	5	0	123027	38905
21:10:00	46.7	51	5	0	147911	46774
21:11:00	48.8	52.2	5	0	239883	75858
21:12:00	47.7	53.5	5	0	186209	58884
21:13:00	42.5	47.1	5	0	56234	17783
21:14:00	48.1	52.7	5	0	204174	64565
21:15:00	45.1	49.8	5	0	102329	32359
21:16:00	50.4	57.8	5	0	346737	109648
21:17:00	48.4	58.3	5	0	218776	69183
21:18:00	44.5	48.5	5	0	89125	28184
21:19:00	40.2	45.6	5	0	33113	10471
21:20:00	41.9	46.5	5	0	48978	15488
21:21:00	45.8	51.8	5	0	120226	38019
21:22:00	45.8	49.6	5	0	120226	38019
21:23:00	46	49	5	0	125893	39811
21:24:00	45.8	50.1	5	0	120226	38019
21:25:00	49.7	56	5	0	295121	93325
21:26:00	44.5	50.8	5	0	89125	28184
21:27:00	42.9	48.2	5	0	61660	19498
21:28:00	45.5	48.2	5	0	112202	35481
21:29:00	46.2	51.4	5	0	131826	41687
21:30:00	47.6	55	5	0	181970	57544
21:31:00	44.3	51.2	5	0	85114	26915
21:32:00	42.9	48.6	5	0	61660	19498
21:33:00	45	49	5	0	100000	31623
21:34:00	44	47.7	5	0	79433	25119
21:35:00	50.6	58.7	5	0	363078	114815
21:36:00	45.9	52.1	5	0	123027	38905
21:37:00	41.3	45.8	5	0	42658	13490
21:38:00	46.7	50.6	5	0	147911	46774
21:39:00	44.8	49	5	0	95499	30200
21:40:00	48.8	54.3	5	0	239883	75858

21:41:00	50.2	59.8	5	0	331131	104713
21:42:00	47.9	55.8	5	0	194984	61660
21:43:00	45.9	51.7	5	0	123027	38905
21:44:00	46.9	51.2	5	0	154882	48978
21:45:00	43.7	48.8	5	0	74131	23442
21:46:00	43.9	49.1	5	0	77625	24547
21:47:00	44.6	47.1	5	0	91201	28840
21:48:00	43.1	46.7	5	0	64565	20417
21:49:00	44.8	51.7	5	0	95499	30200
21:50:00	45.4	49.4	5	0	109648	34674
21:51:00	44	49.3	5	0	79433	25119
21:52:00	43.5	50.6	5	0	70795	22387
21:53:00	47.3	55.9	5	0	169824	53703
21:54:00	50.4	59.4	5	0	346737	109648
21:55:00	54.1	62.5	5	0	812831	257040
21:56:00	46.2	49.8	5	0	131826	41687
21:57:00	45.4	48.7	5	0	109648	34674
21:58:00	45.7	50.3	5	0	117490	37154
21:59:00	46.5	54.1	5	0	141254	44668
22:00:00	45.4	49	5	0	109648	34674
22:01:00	42.8	46.6	5	0	60256	19055
22:02:00	45.9	49	10	10	389045	389045
22:03:00	43.4	47.8	10	10	218776	218776
22:04:00	46.9	54.3	10	10	489779	489779
22:05:00	47	53.3	10	10	501187	501187
22:06:00	47.4	52.7	10	10	549541	549541
22:07:00	44.3	52	10	10	269153	269153
22:08:00	44.3	47.2	10	10	269153	269153
22:09:00	46.4	51.9	10	10	436516	436516
22:10:00	42.8	45.2	10	10	190546	190546
22:11:00	44.3	51.8	10	10	269153	269153
22:12:00	46.1	49.2	10	10	407380	407380
22:13:00	45.7	50.7	10	10	371535	371535
22:14:00	44.6	47.8	10	10	288403	288403
22:15:00	49.9	57	10	10	977237	977237
22:16:00	44.8	49	10	10	301995	301995
22:17:00	42.8	46.3	10	10	190546	190546
22:18:00	46.6	52.3	10	10	457088	457088
22:19:00	47.8	52.7	10	10	602560	602560
22:20:00	46.3	51.6	10	10	426580	426580
22:21:00	44.9	49.3	10	10	309030	309030
22:22:00	46.6	52.3	10	10	457088	457088
22:23:00	48.2	52.7	10	10	660693	660693
22:24:00	49.4	55.3	10	10	870964	870964
22:25:00	45.5	52.1	10	10	354813	354813
22:26:00	45.7	56.3	10	10	371535	371535
22:27:00	47	59.5	10	10	501187	501187
22:28:00	42.1	50.3	10	10	162181	162181
22:29:00	45.6	52.2	10	10	363078	363078

22:30:00	44.5	49.5	10	10	281838	281838
22:31:00	49.4	58.2	10	10	870964	870964
22:32:00	44.6	49.5	10	10	288403	288403
22:33:00	44.2	49.5	10	10	263027	263027
22:34:00	44.2	49.1	10	10	263027	263027
22:35:00	43.9	48.2	10	10	245471	245471
22:36:00	45.2	49.8	10	10	331131	331131
22:37:00	46.2	50.1	10	10	416869	416869
22:38:00	45.9	48.8	10	10	389045	389045
22:39:00	44.9	50.7	10	10	309030	309030
22:40:00	45.8	51	10	10	380189	380189
22:41:00	46.3	50.1	10	10	426580	426580
22:42:00	46.2	51	10	10	416869	416869
22:43:00	45.6	51.7	10	10	363078	363078
22:44:00	43.4	46.6	10	10	218776	218776
22:45:00	45.5	56.6	10	10	354813	354813
22:46:00	51.2	58.5	10	10	1318257	1318257
22:47:00	47.9	55.4	10	10	616595	616595
22:48:00	44.9	48.7	10	10	309030	309030
22:49:00	48.1	60.8	10	10	645654	645654
22:50:00	48	53.5	10	10	630957	630957
22:51:00	44	49	10	10	251189	251189
22:52:00	46.6	53.1	10	10	457088	457088
22:53:00	46.4	50.3	10	10	436516	436516
22:54:00	44.9	50.2	10	10	309030	309030
22:55:00	43.3	47.5	10	10	213796	213796
22:56:00	45.5	49.4	10	10	354813	354813
22:57:00	44.1	49	10	10	257040	257040
22:58:00	48	52.6	10	10	630957	630957
22:59:00	47.8	53.9	10	10	602560	602560
23:00:00	42.8	46.3	10	10	190546	190546
23:01:00	45	48.6	10	10	316228	316228
23:02:00	43.2	47.5	10	10	208930	208930
23:03:00	46.5	53.3	10	10	446684	446684
23:04:00	43.2	50.6	10	10	208930	208930
23:05:00	45.7	52.2	10	10	371535	371535
23:06:00	45.4	53.5	10	10	346737	346737
23:07:00	44.4	48.6	10	10	275423	275423
23:08:00	45	49.8	10	10	316228	316228
23:09:00	45.1	50.4	10	10	323594	323594
23:10:00	45.7	50.4	10	10	371535	371535
23:11:00	43.8	49.2	10	10	239883	239883
23:12:00	46.5	53.9	10	10	446684	446684
23:13:00	44.7	49.2	10	10	295121	295121
23:14:00	45.5	50.4	10	10	354813	354813
23:15:00	45.5	50.3	10	10	354813	354813
23:16:00	43.7	48.3	10	10	234423	234423
23:17:00	43.8	48.6	10	10	239883	239883
23:18:00	44.4	48.2	10	10	275423	275423

23:19:00	43.1	46.6	10	10	204174	204174
23:20:00	42.1	45.6	10	10	162181	162181
23:21:00	44	49.8	10	10	251189	251189
23:22:00	44.3	50.7	10	10	269153	269153
23:23:00	45.9	53.5	10	10	389045	389045
23:24:00	41.5	44.1	10	10	141254	141254
23:25:00	45.2	49.4	10	10	331131	331131
23:26:00	45.5	55.4	10	10	354813	354813
23:27:00	43.4	47.4	10	10	218776	218776
23:28:00	42.4	46.3	10	10	173780	173780
23:29:00	40.6	43.3	10	10	114815	114815
23:30:00	42.1	46.6	10	10	162181	162181
23:31:00	40.2	42.6	10	10	104713	104713
23:32:00	43.2	47.8	10	10	208930	208930
23:33:00	44.3	53	10	10	269153	269153
23:34:00	44.6	49	10	10	288403	288403
23:35:00	41.1	49.4	10	10	128825	128825
23:36:00	46	53.4	10	10	398107	398107
23:37:00	45.5	52.1	10	10	354813	354813
23:38:00	42.9	46.3	10	10	194984	194984
23:39:00	41.9	46.6	10	10	154882	154882
23:40:00	43	47.1	10	10	199526	199526
23:41:00	42.8	47.8	10	10	190546	190546
23:42:00	45.7	51.1	10	10	371535	371535
23:43:00	42.2	47.6	10	10	165959	165959
23:44:00	42.8	47.5	10	10	190546	190546
23:45:00	43.1	48.6	10	10	204174	204174
23:46:00	46	53.4	10	10	398107	398107
23:47:00	40.7	47.1	10	10	117490	117490
23:48:00	41.9	45	10	10	154882	154882
23:49:00	40.9	43.4	10	10	123027	123027
23:50:00	39.8	41.4	10	10	95499	95499
23:51:00	42.2	50.9	10	10	165959	165959
23:52:00	40.6	44.1	10	10	114815	114815
23:53:00	41.9	47	10	10	154882	154882
23:54:00	41.9	49	10	10	154882	154882
23:55:00	44.4	55.1	10	10	275423	275423
23:56:00	44.5	55.1	10	10	281838	281838
23:57:00	42	49.8	10	10	158489	158489
23:58:00	44.8	50.7	10	10	301995	301995
23:59:00	43.9	49.9	10	10	245471	245471
0:00:00	45.1	53.1	10	10	323594	323594
0:01:00	45.8	53	10	10	380189	380189
0:02:00	39.8	39.8	10	10	95499	95499
0:03:00	41	46.9	10	10	125893	125893
0:04:00	42	47.1	10	10	158489	158489
0:05:00	41.4	46.7	10	10	138038	138038
0:06:00	40.2	43.5	10	10	104713	104713
0:07:00	44.9	49.3	10	10	309030	309030

0:08:00	41.4	47.5	10	10	138038	138038
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0:11:00	41.6	46.7	10	10	144544	144544
0:12:00	40	42.8	10	10	100000	100000
0:13:00	41.1	46.8	10	10	128825	128825
0:14:00	43.4	49.1	10	10	218776	218776
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0:18:00	40.1	45.3	10	10	102329	102329
0:19:00	40.3	45.5	10	10	107152	107152
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0:21:00	42.1	45.4	10	10	162181	162181
0:22:00	39.8	39.8	10	10	95499	95499
0:23:00	40.9	45	10	10	123027	123027
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0:26:00	42.5	47.4	10	10	177828	177828
0:27:00	41.3	47.5	10	10	134896	134896
0:28:00	41.9	47.2	10	10	154882	154882
0:29:00	40.9	45	10	10	123027	123027
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0:31:00	41.3	47.2	10	10	134896	134896
0:32:00	41.1	45.9	10	10	128825	128825
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0:34:00	41.9	45.8	10	10	154882	154882
0:35:00	39.8	40.3	10	10	95499	95499
0:36:00	41.1	45.4	10	10	128825	128825
0:37:00	42.3	48.2	10	10	169824	169824
0:38:00	40.6	44	10	10	114815	114815
0:39:00	41.5	44.6	10	10	141254	141254
0:40:00	39.8	41	10	10	95499	95499
0:41:00	42.2	47	10	10	165959	165959
0:42:00	39.8	39.8	10	10	95499	95499
0:43:00	41.2	48.9	10	10	131826	131826
0:44:00	45	51	10	10	316228	316228
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0:46:00	41.1	46.2	10	10	128825	128825
0:47:00	39.8	39.8	10	10	95499	95499
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0:54:00	43.5	47.8	10	10	223872	223872
0:55:00	40.8	45.8	10	10	120226	120226
0:56:00	41.3	45.3	10	10	134896	134896

0:57:00	40.3	44.2	10	10	107152	107152
0:58:00	44.3	54.2	10	10	269153	269153
0:59:00	40.5	45.1	10	10	112202	112202
1:00:00	40.4	44.6	10	10	109648	109648
1:01:00	39.8	39.8	10	10	95499	95499
1:02:00	41.5	47.4	10	10	141254	141254
1:03:00	41.9	46.2	10	10	154882	154882
1:04:00	41.4	45.8	10	10	138038	138038
1:05:00	40.6	45.8	10	10	114815	114815
1:06:00	39.8	40.7	10	10	95499	95499
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1:10:00	43.6	52.3	10	10	229087	229087
1:11:00	41.6	46.2	10	10	144544	144544
1:12:00	40.4	43.9	10	10	109648	109648
1:13:00	40.9	44.8	10	10	123027	123027
1:14:00	40.5	44.3	10	10	112202	112202
1:15:00	43.3	49.3	10	10	213796	213796
1:16:00	39.9	41.5	10	10	97724	97724
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1:20:00	41	45.7	10	10	125893	125893
1:21:00	39.8	40.6	10	10	95499	95499
1:22:00	41	44.1	10	10	125893	125893
1:23:00	40	43.4	10	10	100000	100000
1:24:00	39.9	43.3	10	10	97724	97724
1:25:00	39.8	39.9	10	10	95499	95499
1:26:00	41.3	46.2	10	10	134896	134896
1:27:00	39.8	39.8	10	10	95499	95499
1:28:00	42	50.2	10	10	158489	158489
1:29:00	39.8	39.8	10	10	95499	95499
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1:32:00	42.6	46.6	10	10	181970	181970
1:33:00	39.8	39.8	10	10	95499	95499
1:34:00	39.8	39.8	10	10	95499	95499
1:35:00	41.2	46.9	10	10	131826	131826
1:36:00	39.8	39.8	10	10	95499	95499
1:37:00	45.2	53.7	10	10	331131	331131
1:38:00	45.3	54.8	10	10	338844	338844
1:39:00	39.8	39.8	10	10	95499	95499
1:40:00	41	45.6	10	10	125893	125893
1:41:00	42.3	50.2	10	10	169824	169824
1:42:00	46	51.7	10	10	398107	398107
1:43:00	39.8	41	10	10	95499	95499
1:44:00	41	45	10	10	125893	125893
1:45:00	39.9	42.2	10	10	97724	97724

1:46:00	40.7	43.8	10	10	117490	117490
1:47:00	47	53.4	10	10	501187	501187
1:48:00	42.1	52.2	10	10	162181	162181
1:49:00	48.5	57.8	10	10	707946	707946
1:50:00	40.3	44.2	10	10	107152	107152
1:51:00	40.9	45.1	10	10	123027	123027
1:52:00	40.2	44.2	10	10	104713	104713
1:53:00	39.8	39.8	10	10	95499	95499
1:54:00	39.8	40	10	10	95499	95499
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1:57:00	39.9	40.5	10	10	97724	97724
1:58:00	39.8	40	10	10	95499	95499
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2:00:00	40.3	42.4	10	10	107152	107152
2:01:00	40.5	45.1	10	10	112202	112202
2:02:00	40.8	45.8	10	10	120226	120226
2:03:00	39.8	39.8	10	10	95499	95499
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2:05:00	40.7	44.8	10	10	117490	117490
2:06:00	41	44.6	10	10	125893	125893
2:07:00	39.9	41.8	10	10	97724	97724
2:08:00	47.5	55.8	10	10	562341	562341
2:09:00	39.8	39.8	10	10	95499	95499
2:10:00	40.7	45.4	10	10	117490	117490
2:11:00	39.8	39.8	10	10	95499	95499
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2:13:00	39.8	39.8	10	10	95499	95499
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2:16:00	41.4	46.7	10	10	138038	138038
2:17:00	39.9	41.6	10	10	97724	97724
2:18:00	39.8	39.8	10	10	95499	95499
2:19:00	41.8	45.5	10	10	151356	151356
2:20:00	43.4	49	10	10	218776	218776
2:21:00	39.8	39.9	10	10	95499	95499
2:22:00	39.8	39.8	10	10	95499	95499
2:23:00	39.8	39.8	10	10	95499	95499
2:24:00	39.8	39.8	10	10	95499	95499
2:25:00	41.7	47	10	10	147911	147911
2:26:00	40.2	42	10	10	104713	104713
2:27:00	39.8	39.8	10	10	95499	95499
2:28:00	42.3	48.4	10	10	169824	169824
2:29:00	44.1	50.1	10	10	257040	257040
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2:32:00	41.3	46.3	10	10	134896	134896
2:33:00	43	48.6	10	10	199526	199526
2:34:00	42.3	49	10	10	169824	169824

2:35:00	39.8	39.9	10	10	95499	95499
2:36:00	41.5	49.8	10	10	141254	141254
2:37:00	42.5	47.9	10	10	177828	177828
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2:39:00	42	47.8	10	10	158489	158489
2:40:00	42.3	48.8	10	10	169824	169824
2:41:00	39.8	39.8	10	10	95499	95499
2:42:00	41.8	47.9	10	10	151356	151356
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2:44:00	39.8	39.8	10	10	95499	95499
2:45:00	40.9	46.4	10	10	123027	123027
2:46:00	46.2	52.7	10	10	416869	416869
2:47:00	40.6	48.3	10	10	114815	114815
2:48:00	41.4	50.8	10	10	138038	138038
2:49:00	48.1	57.8	10	10	645654	645654
2:50:00	45	51.5	10	10	316228	316228
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2:52:00	40.2	44.2	10	10	104713	104713
2:53:00	40.3	43.9	10	10	107152	107152
2:54:00	39.8	39.8	10	10	95499	95499
2:55:00	39.8	39.8	10	10	95499	95499
2:56:00	39.8	39.8	10	10	95499	95499
2:57:00	39.8	39.8	10	10	95499	95499
2:58:00	39.8	40.6	10	10	95499	95499
2:59:00	39.8	39.8	10	10	95499	95499
3:00:00	43.6	50.6	10	10	229087	229087
3:01:00	40.4	45	10	10	109648	109648
3:02:00	43.5	54.6	10	10	223872	223872
3:03:00	47.1	55.3	10	10	512861	512861
3:04:00	40.7	42.6	10	10	117490	117490
3:05:00	42.2	48.1	10	10	165959	165959
3:06:00	40.5	44.5	10	10	112202	112202
3:07:00	39.8	39.8	10	10	95499	95499
3:08:00	39.9	42.1	10	10	97724	97724
3:09:00	40.6	45.5	10	10	114815	114815
3:10:00	44.7	55	10	10	295121	295121
3:11:00	45.2	53	10	10	331131	331131
3:12:00	39.8	39.8	10	10	95499	95499
3:13:00	39.8	39.8	10	10	95499	95499
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3:15:00	46.7	53.5	10	10	467735	467735
3:16:00	40.1	42.2	10	10	102329	102329
3:17:00	42.8	48.1	10	10	190546	190546
3:18:00	39.8	39.8	10	10	95499	95499
3:19:00	42	48	10	10	158489	158489
3:20:00	43	50.3	10	10	199526	199526
3:21:00	39.8	39.8	10	10	95499	95499
3:22:00	39.8	39.8	10	10	95499	95499
3:23:00	40.1	42.6	10	10	102329	102329

3:24:00	40.7	44.3	10	10	117490	117490
3:25:00	47.4	54.6	10	10	549541	549541
3:26:00	40.6	45	10	10	114815	114815
3:27:00	47	57.4	10	10	501187	501187
3:28:00	41.7	48.2	10	10	147911	147911
3:29:00	41.1	45.3	10	10	128825	128825
3:30:00	46.1	54.6	10	10	407380	407380
3:31:00	39.8	39.8	10	10	95499	95499
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3:33:00	42	47.4	10	10	158489	158489
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3:38:00	39.9	41.9	10	10	97724	97724
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3:42:00	42	49	10	10	158489	158489
3:43:00	41.2	45.4	10	10	131826	131826
3:44:00	42.2	49.1	10	10	165959	165959
3:45:00	44.1	49.5	10	10	257040	257040
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3:47:00	51.1	58.5	10	10	1288250	1288250
3:48:00	41.4	47.4	10	10	138038	138038
3:49:00	41.8	48.2	10	10	151356	151356
3:50:00	40.1	47	10	10	102329	102329
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3:52:00	42.5	48.6	10	10	177828	177828
3:53:00	40.4	46.6	10	10	109648	109648
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3:57:00	43.4	48.1	10	10	218776	218776
3:58:00	40.4	44.8	10	10	109648	109648
3:59:00	40.2	44.1	10	10	104713	104713
4:00:00	39.9	41.7	10	10	97724	97724
4:01:00	40.2	43.9	10	10	104713	104713
4:02:00	41.7	47.2	10	10	147911	147911
4:03:00	41	47.4	10	10	125893	125893
4:04:00	39.8	39.9	10	10	95499	95499
4:05:00	39.8	39.8	10	10	95499	95499
4:06:00	41.6	45.8	10	10	144544	144544
4:07:00	39.8	39.8	10	10	95499	95499
4:08:00	39.8	39.8	10	10	95499	95499
4:09:00	40	45.1	10	10	100000	100000
4:10:00	42.5	46.6	10	10	177828	177828
4:11:00	43.9	48.7	10	10	245471	245471
4:12:00	41.1	47.1	10	10	128825	128825

4:13:00	39.8	39.8	10	10	95499	95499
4:14:00	41.8	48.5	10	10	151356	151356
4:15:00	42.4	46.9	10	10	173780	173780
4:16:00	41	45.4	10	10	125893	125893
4:17:00	39.8	39.8	10	10	95499	95499
4:18:00	41.4	46.4	10	10	138038	138038
4:19:00	40.6	46.1	10	10	114815	114815
4:20:00	39.8	40.7	10	10	95499	95499
4:21:00	40.9	45.4	10	10	123027	123027
4:22:00	39.8	39.8	10	10	95499	95499
4:23:00	40.7	47.2	10	10	117490	117490
4:24:00	42.8	48.9	10	10	190546	190546
4:25:00	39.8	39.8	10	10	95499	95499
4:26:00	40.8	44.3	10	10	120226	120226
4:27:00	40.7	46.9	10	10	117490	117490
4:28:00	49.5	57.8	10	10	891251	891251
4:29:00	40.1	41.8	10	10	102329	102329
4:30:00	47.2	64.4	10	10	524807	524807
4:31:00	47.6	60.2	10	10	575440	575440
4:32:00	40.3	42.7	10	10	107152	107152
4:33:00	57.7	67.7	10	10	5888437	5888437
4:34:00	51.2	60.6	10	10	1318257	1318257
4:35:00	43.5	50.6	10	10	223872	223872
4:36:00	45.9	56.6	10	10	389045	389045
4:37:00	49.3	57	10	10	851138	851138
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4:39:00	40.7	45.8	10	10	117490	117490
4:40:00	42	47.2	10	10	158489	158489
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4:42:00	47.4	56.3	10	10	549541	549541
4:43:00	42.2	50.6	10	10	165959	165959
4:44:00	43.7	48.1	10	10	234423	234423
4:45:00	45.4	51.4	10	10	346737	346737
4:46:00	46.6	54.2	10	10	457088	457088
4:47:00	42.2	51.5	10	10	165959	165959
4:48:00	42.7	53	10	10	186209	186209
4:49:00	41.2	46.8	10	10	131826	131826
4:50:00	47.5	52.2	10	10	562341	562341
4:51:00	42.9	50.6	10	10	194984	194984
4:52:00	43.3	49	10	10	213796	213796
4:53:00	42.4	48.2	10	10	173780	173780
4:54:00	42	47	10	10	158489	158489
4:55:00	41.1	45.4	10	10	128825	128825
4:56:00	47.8	53.8	10	10	602560	602560
4:57:00	44.5	48.2	10	10	281838	281838
4:58:00	43.2	49	10	10	208930	208930
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5:00:00	42.3	47.4	10	10	169824	169824
5:01:00	41.8	46.3	10	10	151356	151356

5:02:00	41.4	47.3	10	10	138038	138038
5:03:00	46.2	53	10	10	416869	416869
5:04:00	42.2	53	10	10	165959	165959
5:05:00	45	53.2	10	10	316228	316228
5:06:00	50.6	59.1	10	10	1148154	1148154
5:07:00	42.9	51.7	10	10	194984	194984
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5:09:00	42	45.8	10	10	158489	158489
5:10:00	44.1	48.5	10	10	257040	257040
5:11:00	42.8	47.5	10	10	190546	190546
5:12:00	41.2	43.9	10	10	131826	131826
5:13:00	43.8	54.6	10	10	239883	239883
5:14:00	44.7	54.4	10	10	295121	295121
5:15:00	45.3	49	10	10	338844	338844
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5:17:00	50.8	59.3	10	10	1202264	1202264
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5:20:00	45.3	54.7	10	10	338844	338844
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5:22:00	46.4	57	10	10	436516	436516
5:23:00	48.9	55.9	10	10	776247	776247
5:24:00	59.6	69.4	10	10	9120108	9120108
5:25:00	47.6	52.2	10	10	575440	575440
5:26:00	42.7	49.3	10	10	186209	186209
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5:28:00	45.7	51.2	10	10	371535	371535
5:29:00	47.2	52.6	10	10	524807	524807
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5:31:00	44.5	49.8	10	10	281838	281838
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5:35:00	45.2	47.8	10	10	331131	331131
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5:41:00	49.2	54.4	10	10	831764	831764
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5:47:00	49.5	56	10	10	891251	891251
5:48:00	47.5	52.2	10	10	562341	562341
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5:50:00	49.6	56.5	10	10	912011	912011

5:51:00	45.6	53.4	10	10	363078	363078
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5:53:00	51.5	59.9	10	10	1412538	1412538
5:54:00	45.1	48.5	10	10	323594	323594
5:55:00	46.4	53.4	10	10	436516	436516
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5:57:00	47.9	53.4	10	10	616595	616595
5:58:00	46.6	51	10	10	457088	457088
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6:00:00	43.5	48.7	10	10	223872	223872
6:01:00	46.1	49.9	10	10	407380	407380
6:02:00	45.8	50.9	10	10	380189	380189
6:03:00	44.9	48.7	10	10	309030	309030
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6:05:00	45.9	49.1	10	10	389045	389045
6:06:00	46.6	52.4	10	10	457088	457088
6:07:00	48.4	52.6	10	10	691831	691831
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6:09:00	58.5	61	10	10	7079458	7079458
6:10:00	49.5	57.8	10	10	891251	891251
6:11:00	44.1	48.2	10	10	257040	257040
6:12:00	42.5	47.2	10	10	177828	177828
6:13:00	46	49.1	10	10	398107	398107
6:14:00	50.3	57.7	10	10	1071519	1071519
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6:16:00	45	48.7	10	10	316228	316228
6:17:00	43.4	48.2	10	10	218776	218776
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6:19:00	56.7	62.6	10	10	4677351	4677351
6:20:00	44.6	50.7	10	10	288403	288403
6:21:00	50.7	57.2	10	10	1174898	1174898
6:22:00	50.7	59	10	10	1174898	1174898
6:23:00	58.7	66.2	10	10	7413102	7413102
6:24:00	52.9	63.8	10	10	1949845	1949845
6:25:00	49	55.1	10	10	794328	794328
6:26:00	49.2	53.9	10	10	831764	831764
6:27:00	56.2	68.2	10	10	4168694	4168694
6:28:00	49.6	54.7	10	10	912011	912011
6:29:00	46.4	51.3	10	10	436516	436516
6:30:00	47.2	50.1	10	10	524807	524807
6:31:00	46.7	51.1	10	10	467735	467735
6:32:00	46.1	49.5	10	10	407380	407380
6:33:00	51.8	57	10	10	1513561	1513561
6:34:00	46.5	49	10	10	446684	446684
6:35:00	46.3	49.4	10	10	426580	426580
6:36:00	48.3	51.2	10	10	676083	676083
6:37:00	48.7	53.3	10	10	741310	741310
6:38:00	49.6	55	10	10	912011	912011
6:39:00	52.4	58.6	10	10	1737801	1737801

6:40:00	48.6	52.6	10	10	724436	724436
6:41:00	49.2	55.5	10	10	831764	831764
6:42:00	51.4	62.5	10	10	1380384	1380384
6:43:00	47.3	52	10	10	537032	537032
6:44:00	46.5	51	10	10	446684	446684
6:45:00	47.1	51.5	10	10	512861	512861
6:46:00	50.3	54.7	10	10	1071519	1071519
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6:48:00	48.2	51.1	10	10	660693	660693
6:49:00	49.8	56.6	10	10	954993	954993
6:50:00	51.5	57.6	10	10	1412538	1412538
6:51:00	49.8	54.7	10	10	954993	954993
6:52:00	48.1	52.2	10	10	645654	645654
6:53:00	50.3	53.8	10	10	1071519	1071519
6:54:00	47.4	51.4	10	10	549541	549541
6:55:00	46.1	47.8	10	10	407380	407380
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6:58:00	46.6	48.8	10	10	457088	457088
6:59:00	48.7	53	10	10	741310	741310
7:00:00	48.1	51.2	10	10	645654	645654
7:01:00	50.5	62.3	10	10	1122018	1122018
7:02:00	56.8	65.9	0	0	478630	478630
7:03:00	53	57.2	0	0	199526	199526
7:04:00	45.8	49	0	0	38019	38019
7:05:00	45.2	50.1	0	0	33113	33113
7:06:00	47.5	53	0	0	56234	56234
7:07:00	55	64	0	0	316228	316228
7:08:00	55.5	64.2	0	0	354813	354813
7:09:00	52.2	54.5	0	0	165959	165959
7:10:00	51.6	57.8	0	0	144544	144544
7:11:00	53.5	58.9	0	0	223872	223872
7:12:00	53.3	54.7	0	0	213796	213796
7:13:00	52.7	57.9	0	0	186209	186209
7:14:00	52.8	55.1	0	0	190546	190546
7:15:00	58.4	67.7	0	0	691831	691831
7:16:00	59.7	66.7	0	0	933254	933254
7:17:00	64.2	71	0	0	2630268	2630268
7:18:00	60.9	68	0	0	1230269	1230269
7:19:00	64.5	70.9	0	0	2818383	2818383
7:20:00	66	71.8	0	0	3981072	3981072
7:21:00	61.4	67.2	0	0	1380384	1380384
7:22:00	56.4	57.5	0	0	436516	436516
7:23:00	58.9	64.9	0	0	776247	776247
7:24:00	59	65.7	0	0	794328	794328
7:25:00	59.3	64.3	0	0	851138	851138
7:26:00	55.6	61.1	0	0	363078	363078
7:27:00	55	57.8	0	0	316228	316228
7:28:00	54.9	57	0	0	309030	309030

7:29:00	54.9	58.3	0	0	309030	309030
7:30:00	54.6	57.1	0	0	288403	288403
7:31:00	56.2	67.2	0	0	416869	416869
7:32:00	54.4	60.6	0	0	275423	275423
7:33:00	54.7	58.1	0	0	295121	295121
7:34:00	55.4	59.4	0	0	346737	346737
7:35:00	54.1	57.1	0	0	257040	257040
7:36:00	54	56	0	0	251189	251189
7:37:00	54	56.2	0	0	251189	251189
7:38:00	54.8	57	0	0	301995	301995
7:39:00	57.9	59.9	0	0	616595	616595
7:40:00	59.6	65.1	0	0	912011	912011
7:41:00	66.6	74.9	0	0	4570882	4570882
7:42:00	60.5	62.2	0	0	1122018	1122018
7:43:00	61.8	69.4	0	0	1513561	1513561
7:44:00	61.9	66.2	0	0	1548817	1548817
7:45:00	61.8	65.4	0	0	1513561	1513561
7:46:00	62.5	64.6	0	0	1778279	1778279
7:47:00	62.6	64.6	0	0	1819701	1819701
7:48:00	69.4	77.9	0	0	8709636	8709636
7:49:00	65.1	70.4	0	0	3235937	3235937
7:50:00	64.2	66.2	0	0	2630268	2630268
7:51:00	64.2	65.9	0	0	2630268	2630268
7:52:00	68.5	74.4	0	0	7079458	7079458
7:53:00	68	75.8	0	0	6309573	6309573
7:54:00	64.1	74.5	0	0	2570396	2570396
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7:56:00	59.9	61.3	0	0	977237	977237
7:57:00	62.2	67.2	0	0	1659587	1659587
7:58:00	62.1	65.9	0	0	1621810	1621810
7:59:00	60.6	61.5	0	0	1148154	1148154
8:00:00	60.3	61	0	0	1071519	1071519
8:01:00	60.1	61	0	0	1023293	1023293
8:02:00	60.3	61	0	0	1071519	1071519
8:03:00	59.9	61.1	0	0	977237	977237
8:04:00	61.3	67.3	0	0	1348963	1348963
8:05:00	59.9	60.6	0	0	977237	977237
8:06:00	60.4	63.4	0	0	1096478	1096478
8:07:00	60.1	61	0	0	1023293	1023293
8:08:00	59.9	60.6	0	0	977237	977237
8:09:00	59.6	60.3	0	0	912011	912011
8:10:00	60.2	61.6	0	0	1047129	1047129
8:11:00	59.9	60.6	0	0	977237	977237
8:12:00	60	60.7	0	0	1000000	1000000
8:13:00	60.4	61.9	0	0	1096478	1096478
8:14:00	60.1	60.7	0	0	1023293	1023293
8:15:00	59.3	60.4	0	0	851138	851138
8:16:00	59.6	60.8	0	0	912011	912011
8:17:00	59.3	60.6	0	0	851138	851138

8:18:00	58.5	59.4	0	0	707946	707946
8:19:00	59.5	61.8	0	0	891251	891251
8:20:00	59.4	60.3	0	0	870964	870964
8:21:00	59.5	60.2	0	0	891251	891251
8:22:00	59.5	60.7	0	0	891251	891251
8:23:00	60.2	67.9	0	0	1047129	1047129
8:24:00	62.6	67.7	0	0	1819701	1819701
8:25:00	66.2	78.4	0	0	4168694	4168694
8:26:00	62.5	70.7	0	0	1778279	1778279
8:27:00	59.3	60.3	0	0	851138	851138
8:28:00	61.7	65.3	0	0	1479108	1479108
8:29:00	59.7	60.6	0	0	933254	933254
8:30:00	59.1	60.3	0	0	812831	812831
8:31:00	59.5	60.8	0	0	891251	891251
8:32:00	59	60.4	0	0	794328	794328
8:33:00	60.3	66.4	0	0	1071519	1071519
8:34:00	60.3	68.3	0	0	1071519	1071519
8:35:00	73.1	80.8	0	0	20417379	20417379
8:36:00	68	73.4	0	0	6309573	6309573
8:37:00	69.3	75.7	0	0	8511380	8511380
8:38:00	71.4	78.7	0	0	13803843	13803843
8:39:00	64.6	68.4	0	0	2884032	2884032
8:40:00	63.8	68.6	0	0	2398833	2398833
8:41:00	66	71.6	0	0	3981072	3981072
8:42:00	65	67.6	0	0	3162278	3162278
8:43:00	59.2	63.4	0	0	831764	831764
8:44:00	58.4	59.1	0	0	691831	691831
8:45:00	58.2	59.7	0	0	660693	660693
8:46:00	58.5	59.4	0	0	707946	707946
8:47:00	57.9	58.7	0	0	616595	616595
8:48:00	58.2	59.5	0	0	660693	660693
8:49:00	59	59.8	0	0	794328	794328
8:50:00	58.6	60.6	0	0	724436	724436
8:51:00	58.9	59.8	0	0	776247	776247
8:52:00	58.6	60.3	0	0	724436	724436
8:53:00	59.5	62.6	0	0	891251	891251
8:54:00	62.5	67.5	0	0	1778279	1778279
8:55:00	67.8	72.6	0	0	6025596	6025596
8:56:00	62.3	66.7	0	0	1698244	1698244
8:57:00	60.5	66.3	0	0	1122018	1122018
8:58:00	58.6	59.2	0	0	724436	724436
8:59:00	59.1	60.2	0	0	812831	812831
9:00:00	58.6	59.7	0	0	724436	724436
9:01:00	57.9	59.1	0	0	616595	616595
9:02:00	58.5	61.3	0	0	707946	707946
9:03:00	57.7	58.8	0	0	588844	588844
9:04:00	58	60.2	0	0	630957	630957
9:05:00	58.6	61.5	0	0	724436	724436
9:06:00	60.2	65.6	0	0	1047129	1047129

9:07:00	58.9	59.7	0	0	776247	776247
9:08:00	59.4	62.1	0	0	870964	870964
9:09:00	65.4	81.5	0	0	3467369	3467369
9:10:00	61.9	73.8	0	0	1548817	1548817
9:11:00	58.3	61.6	0	0	676083	676083
9:12:00	57.3	58.3	0	0	537032	537032
9:13:00	57.2	58.6	0	0	524807	524807
9:14:00	57.4	58.7	0	0	549541	549541
9:15:00	58.2	60.2	0	0	660693	660693
9:16:00	57.7	59.2	0	0	588844	588844
9:17:00	58.6	63.1	0	0	724436	724436
9:18:00	59.8	65.1	0	0	954993	954993
9:19:00	68.6	78.3	0	0	7244360	7244360
9:20:00	58	61	0	0	630957	630957
9:21:00	57.4	58.2	0	0	549541	549541
9:22:00	58.4	60.2	0	0	691831	691831
9:23:00	58.1	59.5	0	0	645654	645654
9:24:00	59.2	60.2	0	0	831764	831764
9:25:00	58	59.4	0	0	630957	630957
9:26:00	57.3	58.1	0	0	537032	537032
9:27:00	57.2	58.4	0	0	524807	524807
9:28:00	57.4	58.4	0	0	549541	549541
9:29:00	57.4	58.2	0	0	549541	549541
9:30:00	57.8	59.2	0	0	602560	602560
9:31:00	57.3	58.5	0	0	537032	537032
9:32:00	56.9	58.2	0	0	489779	489779
9:33:00	57.1	58.4	0	0	512861	512861
9:34:00	58.4	60.2	0	0	691831	691831
9:35:00	58	58.9	0	0	630957	630957
9:36:00	57.8	58.8	0	0	602560	602560
9:37:00	59.2	65.8	0	0	831764	831764
9:38:00	58.1	63	0	0	645654	645654
9:39:00	59.2	65	0	0	831764	831764
9:40:00	58.9	61.9	0	0	776247	776247
9:41:00	57.2	57.9	0	0	524807	524807
9:42:00	57.7	59	0	0	588844	588844
9:43:00	58.1	60.2	0	0	645654	645654
9:44:00	59.4	67.1	0	0	870964	870964
9:45:00	58.2	59.4	0	0	660693	660693
9:46:00	59.6	63	0	0	912011	912011
9:47:00	58.6	59.8	0	0	724436	724436
9:48:00	58.4	61	0	0	691831	691831
9:49:00	57.9	59.1	0	0	616595	616595
9:50:00	57.8	58.9	0	0	602560	602560
9:51:00	57.8	58.9	0	0	602560	602560
9:52:00	58.1	59	0	0	645654	645654
9:53:00	58	60.2	0	0	630957	630957
9:54:00	58.3	59.8	0	0	676083	676083
9:55:00	58.2	59.1	0	0	660693	660693

9:56:00	58.7	59.4	0	0	741310	741310
9:57:00	58.2	59.2	0	0	660693	660693
9:58:00	58.2	59.1	0	0	660693	660693
9:59:00	58.4	59	0	0	691831	691831
10:00:00	59.5	61.8	0	0	891251	891251
10:01:00	58.3	59	0	0	676083	676083
10:02:00	58.2	59.2	0	0	660693	660693
10:03:00	58.3	64.6	0	0	676083	676083
10:04:00	57.9	58.6	0	0	616595	616595
10:05:00	58.4	59	0	0	691831	691831
10:06:00	58	59	0	0	630957	630957
10:07:00	56.8	58.9	0	0	478630	478630
10:08:00	57.5	58.3	0	0	562341	562341
10:09:00	57.9	59.1	0	0	616595	616595
10:10:00	58.2	59.2	0	0	660693	660693
10:11:00	58	59	0	0	630957	630957
10:12:00	57.2	60.3	0	0	524807	524807
10:13:00	56.9	60.2	0	0	489779	489779
10:14:00	58.4	59.7	0	0	691831	691831
10:15:00	57.8	59.1	0	0	602560	602560
10:16:00	58.7	59.9	0	0	741310	741310
10:17:00	58.4	59	0	0	691831	691831
10:18:00	57.9	58.8	0	0	616595	616595
10:19:00	58.4	59.3	0	0	691831	691831
10:20:00	58.2	59.4	0	0	660693	660693
10:21:00	57.7	58.6	0	0	588844	588844
10:22:00	57.4	58.6	0	0	549541	549541
10:23:00	57.9	59	0	0	616595	616595
10:24:00	59.3	63.4	0	0	851138	851138
10:25:00	62.3	68.4	0	0	1698244	1698244
10:26:00	70.4	81.2	0	0	10964782	10964782
10:27:00	58.3	59	0	0	676083	676083
10:28:00	58.7	60.7	0	0	741310	741310
10:29:00	57.4	58.2	0	0	549541	549541
10:30:00	58.2	62.4	0	0	660693	660693
10:31:00	57.6	58.3	0	0	575440	575440
10:32:00	57.8	58.6	0	0	602560	602560
10:33:00	57.8	59.7	0	0	602560	602560
10:34:00	57.8	59	0	0	602560	602560
10:35:00	58	61	0	0	630957	630957
10:36:00	57.4	58.2	0	0	549541	549541
10:37:00	58.7	62	0	0	741310	741310
10:38:00	58.1	59.9	0	0	645654	645654
10:39:00	58.4	59.4	0	0	691831	691831
10:40:00	58.8	61.8	0	0	758578	758578
10:41:00	59.4	63.8	0	0	870964	870964
10:42:00	62.2	68.8	0	0	1659587	1659587
10:43:00	65.7	73.8	0	0	3715352	3715352
10:44:00	57.8	58.8	0	0	602560	602560

10:45:00	58.3	59.4	0	0	676083	676083
10:46:00	58.8	59.5	0	0	758578	758578
10:47:00	58.5	59.8	0	0	707946	707946
10:48:00	58	60	0	0	630957	630957
10:49:00	58	59.1	0	0	630957	630957
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10:52:00	63.6	70.7	0	0	2290868	2290868
10:53:00	58.7	61	0	0	741310	741310
10:54:00	59	60.6	0	0	794328	794328
10:55:00	58.6	59.7	0	0	724436	724436
10:56:00	58.8	62.3	0	0	758578	758578
10:57:00	57.3	58.6	0	0	537032	537032
10:58:00	58.1	61.4	0	0	645654	645654
10:59:00	62.9	74.2	0	0	1949845	1949845
11:00:00	57.5	58.6	0	0	562341	562341
11:01:00	57.7	58.7	0	0	588844	588844
11:02:00	58.2	59	0	0	660693	660693
11:03:00	57.3	59.1	0	0	537032	537032
11:04:00	57.8	58.8	0	0	602560	602560
11:05:00	57.7	58.8	0	0	588844	588844
11:06:00	58.3	59.5	0	0	676083	676083
11:07:00	58.1	63.9	0	0	645654	645654
11:08:00	58.2	59.5	0	0	660693	660693
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11:10:00	58.2	59.4	0	0	660693	660693
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11:12:00	58.4	60.6	0	0	691831	691831
11:13:00	58.4	60.9	0	0	691831	691831
11:14:00	58.5	60.2	0	0	707946	707946
11:15:00	58.4	60.2	0	0	691831	691831
11:16:00	61.5	71.1	0	0	1412538	1412538
11:17:00	58.9	60.8	0	0	776247	776247
11:18:00	59.1	60.2	0	0	812831	812831
11:19:00	58.3	62.4	0	0	676083	676083
11:20:00	59.2	62.6	0	0	831764	831764
11:21:00	59	62.3	0	0	794328	794328
11:22:00	57.9	59.9	0	0	616595	616595
11:23:00	57.9	59	0	0	616595	616595
11:24:00	58.4	59.4	0	0	691831	691831
11:25:00	58.1	59.1	0	0	645654	645654
11:26:00	57.9	59	0	0	616595	616595
11:27:00	57.7	58.7	0	0	588844	588844
11:28:00	58.3	61.2	0	0	676083	676083
11:29:00	58.7	66.1	0	0	741310	741310
11:30:00	58.8	62.8	0	0	758578	758578
11:31:00	58.2	59.9	0	0	660693	660693
11:32:00	58.2	58.9	0	0	660693	660693
11:33:00	58.3	61	0	0	676083	676083

11:34:00	63.8	77.9	0	0	2398833	2398833
11:35:00	63.9	74.3	0	0	2454709	2454709
11:36:00	58.4	60.2	0	0	691831	691831
11:37:00	58	59.5	0	0	630957	630957
11:38:00	58.3	59.9	0	0	676083	676083
11:39:00	58.3	59.4	0	0	676083	676083
11:40:00	59.1	61.8	0	0	812831	812831
11:41:00	58.2	59.4	0	0	660693	660693
11:42:00	63.4	73	0	0	2187762	2187762
11:43:00	59.7	67.5	0	0	933254	933254
11:44:00	60.6	69.8	0	0	1148154	1148154
11:45:00	58.3	59.5	0	0	676083	676083
11:46:00	57.9	61.2	0	0	616595	616595
11:47:00	58.6	59.8	0	0	724436	724436
11:48:00	58.5	59.8	0	0	707946	707946
11:49:00	58.2	59.8	0	0	660693	660693
11:50:00	58.3	60.2	0	0	676083	676083
11:51:00	58.1	60	0	0	645654	645654
11:52:00	56.7	59.6	0	0	467735	467735
11:53:00	52.1	54.6	0	0	162181	162181
11:54:00	57.8	63.8	0	0	602560	602560
11:55:00	52.9	61.4	0	0	194984	194984
11:56:00	51.7	57.4	0	0	147911	147911
11:57:00	52.4	57.8	0	0	173780	173780
11:58:00	48.5	51.2	0	0	70795	70795
11:59:00	51.3	55.2	0	0	134896	134896
12:00:00	50.9	54.3	0	0	123027	123027
12:01:00	51	57.8	0	0	125893	125893
12:02:00	55.6	62.4	0	0	363078	363078
12:03:00	51.2	56.7	0	0	131826	131826
12:04:00	65.5	73.8	0	0	3548134	3548134
12:05:00	60.7	68	0	0	1174898	1174898
12:06:00	56.4	64	0	0	436516	436516
12:07:00	56.2	62.7	0	0	416869	416869
12:08:00	52	54.6	0	0	158489	158489
12:09:00	56.1	60.3	0	0	407380	407380
12:10:00	58.6	64.1	0	0	724436	724436
12:11:00	59	65.1	0	0	794328	794328
12:12:00	56.1	63.8	0	0	407380	407380
12:13:00	54.6	59.9	0	0	288403	288403
12:14:00	58.1	65	0	0	645654	645654
12:15:00	54.7	58.5	0	0	295121	295121
12:16:00	62.8	73.4	0	0	1905461	1905461
12:17:00	51.1	52.7	0	0	128825	128825
12:18:00	54.2	59.1	0	0	263027	263027
12:19:00	53.9	63.9	0	0	245471	245471
12:20:00	62.7	68.9	0	0	1862087	1862087
12:21:00	58.3	63.2	0	0	676083	676083
12:22:00	58.4	61.8	0	0	691831	691831

12:23:00	55.8	59.4	0	0	380189	380189
12:24:00	63.8	73.6	0	0	2398833	2398833
12:25:00	58.7	65.9	0	0	741310	741310
12:26:00	61.3	68.9	0	0	1348963	1348963
12:27:00	57.3	67.8	0	0	537032	537032
12:28:00	55.7	59.7	0	0	371535	371535
12:29:00	64.7	73.5	0	0	2951209	2951209
12:30:00	58	68.9	0	0	630957	630957
12:31:00	50.6	55.9	0	0	114815	114815
12:32:00	50	53	0	0	100000	100000
12:33:00	54.4	62	0	0	275423	275423
12:34:00	51.1	54.6	0	0	128825	128825
12:35:00	60.4	71.4	0	0	1096478	1096478
12:36:00	52.2	61.3	0	0	165959	165959
12:37:00	51.9	56.2	0	0	154882	154882
12:38:00	50.9	56.1	0	0	123027	123027
12:39:00	53.4	59.9	0	0	218776	218776
12:40:00	49.7	52	0	0	93325	93325
12:41:00	52	57.9	0	0	158489	158489
12:42:00	51	55	0	0	125893	125893
12:43:00	51.6	53.8	0	0	144544	144544
12:44:00	52.2	57.8	0	0	165959	165959
12:45:00	51.5	56.6	0	0	141254	141254
12:46:00	51.7	56.3	0	0	147911	147911
12:47:00	50.2	53.7	0	0	104713	104713
12:48:00	49.3	52.2	0	0	85114	85114
12:49:00	49.2	56.2	0	0	83176	83176
12:50:00	52.9	59.8	0	0	194984	194984
12:51:00	59.5	60.7	0	0	891251	891251
12:52:00	59.5	60.6	0	0	891251	891251
12:53:00	58.8	59.9	0	0	758578	758578
12:54:00	59.6	61.8	0	0	912011	912011
12:55:00	59.6	62.6	0	0	912011	912011
12:56:00	58.7	59.5	0	0	741310	741310
12:57:00	58.7	60.2	0	0	741310	741310
12:58:00	58.6	59.8	0	0	724436	724436
12:59:00	58.9	59.6	0	0	776247	776247
13:00:00	59	61.1	0	0	794328	794328
13:01:00	58.7	60.5	0	0	741310	741310
13:02:00	59.2	62.6	0	0	831764	831764
13:03:00	59.1	61.6	0	0	812831	812831
13:04:00	58.2	59.3	0	0	660693	660693
13:05:00	58.3	59.4	0	0	676083	676083
13:06:00	58.6	60	0	0	724436	724436
13:07:00	58.4	60.2	0	0	691831	691831
13:08:00	58.6	59.8	0	0	724436	724436
13:09:00	58.2	59.1	0	0	660693	660693
13:10:00	58.2	59.7	0	0	660693	660693
13:11:00	58.3	59.5	0	0	676083	676083

13:12:00	58.4	60.6	0	0	691831	691831
13:13:00	58.1	60.2	0	0	645654	645654
13:14:00	58.5	59.7	0	0	707946	707946
13:15:00	57.7	59.8	0	0	588844	588844
13:16:00	58.3	60.4	0	0	676083	676083
13:17:00	58.2	59.9	0	0	660693	660693
13:18:00	57.6	58.3	0	0	575440	575440
13:19:00	57.8	60.4	0	0	602560	602560
13:20:00	58.2	59.2	0	0	660693	660693
13:21:00	58.3	59.8	0	0	676083	676083
13:22:00	57.8	58.6	0	0	602560	602560
13:23:00	58.4	59.4	0	0	691831	691831
13:24:00	58.3	59	0	0	676083	676083
13:25:00	58.3	59.4	0	0	676083	676083
13:26:00	58.4	59.5	0	0	691831	691831
13:27:00	59.4	65	0	0	870964	870964
13:28:00	57.9	58.9	0	0	616595	616595
13:29:00	57.9	61.4	0	0	616595	616595
13:30:00	57.3	58.2	0	0	537032	537032
13:31:00	58.3	61.1	0	0	676083	676083
13:32:00	58.5	60.3	0	0	707946	707946
13:33:00	58	59	0	0	630957	630957
13:34:00	58.1	59	0	0	645654	645654
13:35:00	58.1	58.7	0	0	645654	645654
13:36:00	58.6	62.1	0	0	724436	724436
13:37:00	58.3	59.4	0	0	676083	676083
13:38:00	58.1	59.2	0	0	645654	645654
13:39:00	58.6	60.2	0	0	724436	724436
13:40:00	57.8	58.6	0	0	602560	602560
13:41:00	58	58.6	0	0	630957	630957
13:42:00	59.3	61.5	0	0	851138	851138
13:43:00	58.2	59.6	0	0	660693	660693
13:44:00	58.2	59.9	0	0	660693	660693
13:45:00	58.2	59.7	0	0	660693	660693
13:46:00	58.4	59.5	0	0	691831	691831
13:47:00	58.7	59.7	0	0	741310	741310
13:48:00	58.2	60.3	0	0	660693	660693
13:49:00	62.2	72.2	0	0	1659587	1659587
13:50:00	58.8	61.8	0	0	758578	758578
13:51:00	58.7	60.6	0	0	741310	741310
13:52:00	58.6	59.5	0	0	724436	724436
13:53:00	58.1	59.2	0	0	645654	645654
13:54:00	58.2	59.4	0	0	660693	660693
13:55:00	59	63.2	0	0	794328	794328
13:56:00	57.6	58.6	0	0	575440	575440
13:57:00	60.7	69	0	0	1174898	1174898
13:58:00	58.6	59.9	0	0	724436	724436
13:59:00	63.1	71.5	0	0	2041738	2041738
14:00:00	58.3	60.6	0	0	676083	676083

14:01:00	61.7	69.3	0	0	1479108	1479108
14:02:00	58.8	61.8	0	0	758578	758578
14:03:00	59	66.3	0	0	794328	794328
14:04:00	58.4	66.4	0	0	691831	691831
14:05:00	58.3	60.1	0	0	676083	676083
14:06:00	58.2	59.1	0	0	660693	660693
14:07:00	58.6	59.8	0	0	724436	724436
14:08:00	61.1	67.2	0	0	1288250	1288250
14:09:00	58.4	60.2	0	0	691831	691831
14:10:00	58	59.8	0	0	630957	630957
14:11:00	58.7	61	0	0	741310	741310
14:12:00	59.4	63	0	0	870964	870964
14:13:00	65.6	77.8	0	0	3630781	3630781
14:14:00	65.3	74.2	0	0	3388442	3388442
14:15:00	58.6	59.3	0	0	724436	724436
14:16:00	58.4	59.6	0	0	691831	691831
14:17:00	60.8	68.3	0	0	1202264	1202264
14:18:00	59.7	67.8	0	0	933254	933254
14:19:00	58.6	60.3	0	0	724436	724436
14:20:00	58.2	59.5	0	0	660693	660693
14:21:00	58.5	59.8	0	0	707946	707946
14:22:00	58.5	59.4	0	0	707946	707946
14:23:00	59.3	60.3	0	0	851138	851138
14:24:00	58.5	59.5	0	0	707946	707946
14:25:00	59	60.2	0	0	794328	794328
14:26:00	58.7	59.8	0	0	741310	741310
14:27:00	59.2	60.4	0	0	831764	831764
14:28:00	59.1	60.5	0	0	812831	812831
14:29:00	59.1	60.2	0	0	812831	812831
14:30:00	59.5	60.9	0	0	891251	891251
14:31:00	59.5	61.9	0	0	891251	891251
14:32:00	59.3	60.3	0	0	851138	851138
14:33:00	59.1	59.8	0	0	812831	812831
14:34:00	59.7	63.4	0	0	933254	933254
14:35:00	59.1	61.8	0	0	812831	812831
14:36:00	58.7	60.4	0	0	741310	741310
14:37:00	58.7	60.1	0	0	741310	741310
14:38:00	58.2	59.5	0	0	660693	660693
14:39:00	58.4	59.7	0	0	691831	691831
14:40:00	58	59	0	0	630957	630957
14:41:00	58.7	60	0	0	741310	741310
14:42:00	58.3	59.1	0	0	676083	676083
14:43:00	57.8	59	0	0	602560	602560
14:44:00	57.9	59.8	0	0	616595	616595
14:45:00	57.7	59	0	0	588844	588844
14:46:00	58.3	59.5	0	0	676083	676083
14:47:00	59.8	65.3	0	0	954993	954993
14:48:00	60.3	65.4	0	0	1071519	1071519
14:49:00	58.4	61.9	0	0	691831	691831

14:50:00	58.6	63.8	0	0	724436	724436
14:51:00	58.1	62.6	0	0	645654	645654
14:52:00	58.3	59.6	0	0	676083	676083
14:53:00	57.8	59.2	0	0	602560	602560
14:54:00	58.4	59.3	0	0	691831	691831
14:55:00	57.8	59	0	0	602560	602560
14:56:00	58.6	60.2	0	0		
14:57:00	59.7	67.5				
14:58:00	57.2	58.2				
14:59:00	59.1	61.9				
15:00:00	58	58.7				
15:01:00	57.9	58.6				
15:02:00	57.8	58.6				
15:03:00	58.1	59.4				
15:04:00	58	59				
15:05:00	58.7	60.3				
15:06:00	59	62.2				
15:07:00	60.5	72.2				
15:08:00	83.5	97				

95.5 Lmax
69.593543 Max Leq(hr)
41.145102 Min Leq(hr)
50.7257 Min Leq(hr) between 6 AM and 6PM
During peak hour

Calculation of Leq(hr)

769003

Leq	Energy	Energy-Mc	Leq(hr)
186208714	9106558.7	69.5935429	
301995172	6006405.5	67.7861465	
3090295.4	975349.77	59.8916038	
14125375	925364.86	59.66313	
1023293	691992.39	58.4010132	
851138.04	677346.57	58.3081094	
831763.77	665926.91	58.2342657	
851138.04	654364.82	58.1581995	
1584893.2	643075.52	58.0826198	
707945.78	702137.54	58.4642219	
707945.78	706625.73	58.4918944	
724435.96	710026.81	58.5127475	
851138.04	723766.49	58.5959847	

776247.12	713144.12	58.5317731
741310.24	709157.2	58.5074252
954992.59	701608.75	58.46095
851138.04	698335.17	58.4406391
794328.23	692312.51	58.4030218
660693.45	689116.37	58.3829257
660693.45	682291.29	58.3396983
645654.23	681795.69	58.3365425
602559.59	672663.51	58.2779787
676082.98	693655.64	58.4114392
616595	688166.54	58.3769355
537031.8	680592.97	58.3288746
602559.59	677978.93	58.312162
575439.94	672027.45	58.2738701
616595	666623.26	58.2388047
1096478.2	673401.56	58.2827412
630957.34	660397.39	58.1980535
630957.34	652522.92	58.1459577
1584893.2	644709.98	58.093644
1412537.5	625739.82	57.9639379
676082.98	607230.78	57.8335378
537031.8	600448.63	57.7847585
741310.24	594139.58	57.7388849
602559.59	584487.43	57.6677518
1122018.5	580092.17	57.6349701
562341.33	567305.42	57.5381693
537031.8	559983.51	57.4817524
602559.59	553798.96	57.4335214
549540.87	545806.75	57.370389
588843.66	540050.63	57.3243448
660693.45	532022.44	57.2592995
588843.66	523652.37	57.1904307
524807.46	517569.51	57.1396868
575439.94	515306.8	57.1206588
1148153.6	509362.41	57.0702689
537031.8	496277.82	56.9572486
588843.66	490030.3	56.9022294
588843.66	487325.9	56.8781949
724435.96	482430.52	56.8343478
602559.59	474354.64	56.7610316
575439.94	466612.62	56.6895648
645654.23	458650.69	56.6148205
691830.97	451980.96	56.5512014
870963.59	443626.22	56.470172
630957.34	433700.54	56.3718996
416869.38	429521.07	56.3298447
281838.29	427966.48	56.3140975
199526.23	425791.77	56.2919727
131825.67	425296.74	56.2869206

91201.084	425400.29	56.2879778
123026.88	427443.54	56.3087876
144543.98	430426.35	56.3389885
165958.69	432015.33	56.3549916
138038.43	433435.83	56.3692481
173780.08	434460.63	56.3795043
5128613.8	436714.79	56.401979
977237.22	357016.84	55.526887
912010.84	344375.82	55.3703265
1548816.6	331941.62	55.2106171
213796.21	310718.39	54.9236696
537031.8	309858.14	54.911629
288403.15	303673.58	54.8240701
758577.58	301063.96	54.7865877
489778.82	291596.77	54.647827
602559.59	285956.39	54.562998
251188.64	278810.06	54.4530845
630957.34	276674.03	54.419684
97723.722	268208.53	54.2847258
1862087.1	269044.98	54.2982489
346736.85	241185.96	53.8235202
162181.01	240800.24	53.8165692
380189.4	244886.9	53.8896555
245470.89	242934.19	53.8548863
251188.64	240846.78	53.8174084
1023293	239836.07	53.799145
316227.77	224879.39	53.5194966
158489.32	223255.2	53.4880158
162181.01	222441.18	53.4721518
446683.59	222568.57	53.4746383
301995.17	216388.13	53.3523344
269153.48	213313.04	53.2901741
158489.32	210382.58	53.2300977
162181.01	208921	53.1998209
338844.16	209620.88	53.2143453
354813.39	206382.54	53.1467296
123026.88	203050.35	53.0760373
165958.69	202207.29	53.0579681
123026.88	202766.75	53.0699674
204173.79	203181.48	53.0788413
107151.93	201133.3	53.0348399
158489.32	201052.93	53.033104
223872.11	200281.47	53.0164077
389045.14	197968.83	52.9659682
218776.16	193270.61	52.8616582
363078.05	191978.57	52.8325275
162181.01	187518.92	52.730451
426579.52	186482.57	52.7063825
295120.92	180964.57	52.5759355

239883.29	177791.1	52.4991002
138038.43	175348.47	52.4390198
97723.722	178318.29	52.511959
245470.89	182603.12	52.6150819
190546.07	180866.17	52.5735734
275422.87	180271.76	52.559277
380189.4	178511.79	52.5166689
323593.66	174756.66	52.4243373
151356.12	171367.2	52.3392771
169824.37	173031.08	52.3812411
138038.43	172609.74	52.3706529
213796.21	171489.01	52.3423629
301995.17	170226.38	52.3102686
239883.29	166978.99	52.2266183
251188.64	165031.38	52.1756654
199526.23	162991.99	52.1216626
309029.54	163069.45	52.123726
346736.85	159746.42	52.0343113
218776.16	156164.57	51.935825
165958.69	154003.72	51.875312
275422.87	152592.45	51.8353306
162181.01	150100.28	51.7638151
165958.69	150038.75	51.7620345
131825.67	148758.19	51.724809
190546.07	148346.97	51.7127867
151356.12	146557.47	51.6600796
173780.08	145780.08	51.6369819
123026.88	144589.24	51.6013596
123026.88	143925.06	51.5813642
147910.84	144021.7	51.5842792
190546.07	144881.95	51.6101429
323593.66	144536.59	51.5997781
407380.28	140735.02	51.4840217
263026.8	135331.62	51.3139928
120226.44	134051.32	51.2727109
190546.07	133833.41	51.2656454
125892.54	132012.36	51.2061459
218776.16	132061.23	51.2077535
109647.82	129594.87	51.1258782
169824.37	128795.07	51.0989923
75857.758	128062.87	51.0742323
117489.76	128504.06	51.0891686
93325.43	128644.11	51.093899
70794.578	128717.41	51.0963731
204173.79	128541.77	51.0904428
144543.98	126493.59	51.0206852
154881.66	126385.17	51.016961
72443.596	128187.58	51.0784596
199526.23	129389.26	51.1189822

147910.84	128529	51.0900113
81283.052	128067.59	51.0743925
102329.3	128164.48	51.0776769
112201.85	128286.46	51.0818081
85113.804	128008.08	51.0723739
107151.93	128503.11	51.0891363
141253.75	127924.64	51.0695419
95499.259	127528.57	51.0560749
100000	127456.93	51.0536346
95499.259	128893.74	51.1023184
104712.85	129260.25	51.11465
93325.43	129300.9	51.1160156
316227.77	131652.53	51.194292
354813.39	128529.15	51.0900163
141253.75	124666.04	50.9574816
154881.66	125014.83	50.9696152
169824.37	124483.91	50.9511323
154881.66	123320.17	50.9103413
120226.44	122885.9	50.8950204
251188.64	122402.14	50.8778901
144543.98	119110.72	50.7595083
70794.578	118187.07	50.7256996
138038.43	118492.58	50.7369114
107151.93	118957.91	50.7539334
123026.88	119813.54	50.7850589
128824.96	119391.82	50.7697456
204173.79	137282.48	51.376151
109647.82	208326.84	53.1874524
131825.67	210497.44	53.2324681
89125.094	211946.61	53.2622648
81283.052	217096.31	53.3665245
125892.54	216921.5	53.3630261
158489.32	216693.33	53.3584554
89125.094	215965.43	53.3438423
107151.93	215715.53	53.338814
83176.377	215193.96	53.3283007
104712.85	216389.04	53.3523527
102329.3	215796.88	53.3404516
83176.377	215326.91	53.3309831
128824.96	215176.15	53.3279414
199526.23	214620.73	53.3167166
169824.37	213122.75	53.2862982
95499.259	211343.94	53.249898
83176.377	211107	53.2450264
186208.71	210748.39	53.2376427
107151.93	209390.13	53.209562
81283.052	208958.98	53.2006104
128824.96	208420.56	53.1894056
70794.578	207902.2	53.1785909

61659.5	208726.07	53.1957669
125892.54	208933.93	53.2000897
102329.3	208427.37	53.1895476
125892.54	207703.29	53.1744338
97723.722	206632.74	53.1519914
60255.959	206055.61	53.1398444
81283.052	206127.43	53.1413579
138038.43	206292.73	53.1448393
263026.8	205068.18	53.1189828
144543.98	202470.27	53.0636126
147910.84	201137.29	53.034926
120226.44	201921.85	53.0518332
87096.359	201272.8	53.0378508
109647.82	200922.35	53.0302824
95499.259	202577.04	53.0659022
114815.36	202371.66	53.0614969
72443.596	202980.67	53.0745469
117489.76	203293.3	53.0812306
91201.084	202272.37	53.0593656
186208.71	201568.65	53.0442299
117489.76	201947.33	53.0523812
107151.93	200622.82	53.0238033
234422.88	199414.85	52.9975749
128824.96	196660.85	52.9371792
123026.88	195241.3	52.9057168
162181.01	194045.62	52.8790384
123026.88	192324.01	52.840335
100000	191349.65	52.8182767
128824.96	191468.85	52.8209812
91201.084	190740.33	52.8044252
53703.18	191520.95	52.8221629
89125.094	191370.37	52.818747
89125.094	191011.76	52.810601
165958.69	190554	52.8001806
158489.32	189081.76	52.7664964
97723.722	186899.31	52.7160771
1202264.4	187098.05	52.7206926
4466835.9	169641.67	52.2953254
239883.29	96549.121	49.8474832
218776.16	94217.733	49.7413265
398107.17	91351.022	49.6071341
70794.578	86235.92	49.356882
112201.85	85951.064	49.3425126
114815.36	85040.1	49.2962376
74131.024	84130.776	49.249549
75857.758	83639.732	49.2241263
154881.66	83827.042	49.2338414
69183.097	81879.33	49.1317428
74131.024	81906.188	49.1331671

74131.024	81505.983	49.1118949
95499.259	80933.978	49.0813088
109647.82	80827.742	49.0756044
63095.734	79916.179	49.0263471
81283.052	80219.301	49.0427887
61659.5	79528.096	49.0052058
104712.85	79119.663	48.9828443
81283.052	78053.416	48.9239191
48977.882	77332.347	48.8836119
97723.722	77295.608	48.8815482
120226.44	76541.558	48.838973
74131.024	75115.679	48.757306
95499.259	75006.967	48.751016
58884.366	75120.801	48.7576021
61659.5	75014.074	48.7514275
63095.734	74765.974	48.7370399
64565.423	74841.183	48.7414065
91201.084	74544.651	48.7241649
64565.423	73629.763	48.6705341
107151.93	73202.082	48.6452343
64565.423	72127.182	48.5809896
194984.46	71642.447	48.5517041
81283.052	69011.932	48.3892418
66069.345	68384.741	48.349592
208929.61	68199.486	48.337811
83176.377	65145.725	48.1388592
151356.12	64454.235	48.0925146
91201.084	62446.682	47.9550937
56234.133	61621.446	47.8973189
48977.882	61579.263	47.8943449
208929.61	62056.711	47.9278875
38018.94	59409.862	47.7385855
34673.685	59315.536	47.7316846
69183.097	59696.708	47.7595038
43651.583	59254.622	47.7272223
51286.138	59422.149	47.7394835
58884.366	59172.51	47.7211999
64565.423	59292.26	47.72998
107151.93	58731.219	47.6886901
85113.804	57743.07	47.6149987
138038.43	57531.9	47.5990871
44668.359	55783.145	47.4650299
67608.298	56165.477	47.4946945
61659.5	56191.723	47.4967235
77624.712	55667.39	47.4560086
27542.287	55553.555	47.4471185
109647.82	55949.286	47.4779455
154881.66	55037.724	47.4066046
81283.052	53008.248	47.2434345

100000	52508.299	47.2022795
46773.514	51520.6	47.1198091
91201.084	52159.604	47.1733429
53703.18	51273.235	47.0989072
57543.994	51026.591	47.0779655
60255.959	50883.822	47.0657973
44668.359	50498.782	47.032809
87096.359	50402.718	47.0245395
38018.94	49730.67	46.9662431
70794.578	50361.317	47.0209708
50118.723	50162.814	47.0038189
39810.717	49623.882	46.9569073
89125.094	50036.46	46.9928658
54954.087	49090.365	46.9099626
81283.052	50001.927	46.9898674
39810.717	49800.261	46.9723162
37153.523	49606.479	46.9553841
40738.028	49161.775	46.9162756
38018.94	48740.944	46.8789394
46773.514	48740.944	46.8789394
52480.746	48595.035	46.865919
34673.685	48383.868	46.8470058
67608.298	48439.622	46.8520074
102329.3	48868.241	46.8902671
52480.746	47632.483	46.7790322
46773.514	47082.778	46.7286208
67608.298	46894.575	46.711226
46773.514	46462.552	46.6710306
36307.805	46642.06	46.6877773
38904.514	46485.519	46.6731769
42657.952	46162.085	46.6428542
35481.339	45978.165	46.6255164
37153.523	45805.457	46.6091722
43651.583	47099.821	46.7301926
54954.087	47020.704	46.7228912
25703.958	46329.629	46.6585883
41686.938	46680.789	46.6913818
30902.954	46489.332	46.673533
41686.938	47238.578	46.7429682
53703.18	48289.01	46.838483
77624.712	48421.616	46.8503928
50118.723	47776.279	46.7921232
32359.366	47757.265	46.7903945
57543.994	47608.647	46.7768584
42657.952	47058.699	46.7263991
53703.18	46828.405	46.7050936
36307.805	46273.641	46.6533368
66069.345	46171.836	46.6437715
30902.954	45648.575	46.5942723

47863.009	45552.174	46.5850911
72443.596	45127.577	46.5444202
33113.112	44815.237	46.514257
67608.298	46090.816	46.6361439
69183.097	49248.004	46.9238863
30199.517	48789.734	46.8832845
70794.578	48864.304	46.8899171
51286.138	48303.619	46.8397967
54954.087	48193.323	46.8298687
33113.112	47855.316	46.7993019
51286.138	47621.008	46.7779858
40738.028	47414.648	46.7591253
85113.804	47100.307	46.7302374
38018.94	46498.042	46.6743467
38904.514	46699.705	46.6931414
48977.882	46967.198	46.7179465
37153.523	46599.489	46.6838116
38904.514	46428.853	46.6678795
46773.514	46507.971	46.6752739
75857.758	46045.989	46.631918
58884.366	45230.282	46.554293
17782.794	44927.843	46.5251557
64565.423	45250.689	46.5562519
32359.366	44655.27	46.4987272
109647.82	45744.676	46.6034056
69183.097	44420.538	46.4758381
28183.829	43585.063	46.3933768
10471.285	43877.146	46.4223837
15488.166	44706.891	46.5037446
38018.94	45159.72	46.5475124
38018.94	45041.121	46.5360919
39810.717	45169.285	46.5484322
38018.94	45606.929	46.5903083
93325.43	46424.886	46.6675085
28183.829	45460.818	46.5763724
19498.446	45610.313	46.5906305
35481.339	46120.651	46.6389543
41686.938	45799.597	46.6086165
57543.994	45709.944	46.6001069
26915.348	45220.608	46.553364
19498.446	46223.625	46.64864
31622.777	46379.323	46.6632441
25118.864	46290.655	46.6549332
114815.36	46310.385	46.6567839
38904.514	44805.914	46.5133534
13489.629	44709.39	46.5039875
46773.514	45179.346	46.5493994
30199.517	45048.196	46.536774
75857.758	45059.92	46.5379041

104712.85	44429.273	46.476692
61659.5	43395.024	46.3743994
38904.514	43062.148	46.3409569
48977.882	43018.87	46.33659
23442.288	42567.199	46.2907507
24547.089	42767.849	46.3111741
28840.315	44555.826	46.489045
20417.379	45102.812	46.5420362
30199.517	45277.572	46.5588313
34673.685	45850.337	46.6134253
25118.864	46324.038	46.6580641
22387.211	46324.038	46.6580641
53703.18	46712.731	46.6943526
109647.82	46545.205	46.6787494
257039.58	45232.79	46.5545338
41686.938	41305.124	46.1600393
34673.685	41201.698	46.1491511
37153.523	41052.202	46.1333646
44668.359	41484.572	46.1788662
34673.685	41744.366	46.2059787
19054.607	41484.048	46.1788112
38904.514	41693.517	46.2006853
21877.616	41393.325	46.1693031
48977.882	41773.17	46.2089744
50118.723	41305.088	46.1600356
54954.087	41089.002	46.1372559
26915.348	40750.995	46.1013822
26915.348	40761.444	46.1024956
43651.583	40839.901	46.1108468
19054.607	40651.697	46.0907868
26915.348	40953.346	46.1228939
40738.028	40904.562	46.1177175
37153.523	40970.068	46.1246668
28840.315	40842.711	46.1111456
97723.722	40953.394	46.122899
30199.517	39916.021	46.0114725
19054.607	39803.401	45.9992018
45708.819	39885.63	46.0081645
60255.959	39582.854	45.9750711
42657.952	38918.878	45.9016031
30902.954	38478.214	45.852149
45708.819	38381.812	45.8412548
66069.345	38068.588	45.8056676
87096.359	37615.84	45.7537077
35481.339	36399.657	45.610973
37153.523	36360.187	45.6062611
50118.723	36332.317	45.602931
16218.101	35861.632	45.5463005
36307.805	35880.964	45.548641

28183.829	35467.193	45.4982681
87096.359	35267.764	45.4737792
28840.315	33990.679	45.3135984
26302.68	33858.223	45.2966417
26302.68	33868.435	45.2979512
24547.089	33910.729	45.3033712
33113.112	33716.319	45.2784015
41686.938	33827.945	45.2927562
38904.514	33724.519	45.2794576
30902.954	33401.084	45.2376056
38018.94	33144.171	45.2040716
42657.952	32843.066	45.1644369
41686.938	32449.677	45.1121037
36307.805	32374.12	45.1019797
21877.616	32045.588	45.0576824
35481.339	31998.537	45.0513013
131825.67	31747.471	45.0170914
61659.5	30213.889	44.8020663
30902.954	29382.047	44.6808204
64565.423	29125.134	44.6426793
63095.734	28254.088	44.5108129
25118.864	27361.658	44.3714241
45708.819	27219.608	44.3488187
43651.583	26649.153	44.2568341
30902.954	26179.763	44.1796571
21379.621	25922.85	44.1368274
35481.339	26025.561	44.154001
25703.958	25903.936	44.1336575
63095.734	25739.685	44.1060323
60255.959	25191.415	44.0125256
19054.607	24596.267	43.908692
31622.777	24818.013	43.9476701
20892.961	24924.616	43.9662847
44668.359	24735.565	43.9332184
20892.961	24200.914	43.8383176
37153.523	24116.846	43.8232052
34673.685	23727.685	43.7525537
27542.287	23324.312	43.6780884
31622.777	23380.323	43.688505
32359.366	23083.341	43.6329866
37153.523	22868.992	43.5924702
23988.329	23011.58	43.6194644
44668.359	22852.681	43.5893716
29512.092	22274.875	43.4781528
35481.339	21997.715	43.4237758
35481.339	21770.987	43.3787811
23442.288	21338.796	43.2916992
23988.329	21114.758	43.2458612
27542.287	21055.243	43.2336025

20417.379	20766.753	43.173686
16218.101	20605.05	43.1397368
25118.864	20652.325	43.1496896
26915.348	20503.979	43.1183815
38904.514	20214.555	43.056642
14125.375	19771.192	42.9603285
33113.112	19825.402	42.9722201
35481.339	19432.682	42.8853275
21877.616	19137.707	42.818899
17378.008	18997.907	42.7870576
11481.536	18966.41	42.7798512
16218.101	18980.095	42.7829839
10471.285	18868.959	42.7574794
20892.961	18919.265	42.7690426
26915.348	18785.757	42.738287
28840.315	18496.333	42.6708565
12882.496	18273.798	42.6182881
39810.717	18218.255	42.6050677
35481.339	17769.451	42.4967401
19498.446	17461.136	42.420725
15488.166	17327.521	42.3873643
19952.623	17304.808	42.3816678
19054.607	17131.429	42.337936
37153.523	17090.45	42.3275351
16595.869	16630.391	42.2090245
19054.607	16573.502	42.1941429
20417.379	16782.972	42.2486886
39810.717	16601.847	42.2015642
11748.976	16153.044	42.0825437
15488.166	16116.393	42.0726785
12302.688	16017.422	42.0459262
9549.9259	16032.087	42.0499006
16595.869	16064.28	42.0586128
11481.536	16002.391	42.0418487
15488.166	16159.248	42.0842114
15488.166	16079.698	42.062779
27542.287	16194.682	42.0937244
28183.829	15936.022	42.0237991
15848.932	15691.118	41.956539
30199.517	15605.556	41.9327925
24547.089	15550.82	41.9175329
32359.366	15328.705	41.8550546
38018.94	14972.128	41.7528354
9549.9259	14497.645	41.6129746
12589.254	14573.902	41.6357586
15848.932	14622.218	41.6501324
13803.843	14588.133	41.6399971
10471.285	14549.428	41.6284591
30902.954	14534.072	41.623873

13803.843	14214.839	41.5274194
19498.446	14143.94	41.5057041
45708.819	14019.343	41.4672767
14454.398	13639.341	41.3479339
10000	13639.341	41.3479339
12882.496	13655.421	41.3530508
21877.616	13645.757	41.3499764
9549.9259	13468.133	41.2930741
10000	13665.295	41.3561901
20417.379	13661.501	41.3549842
10232.93	13480.377	41.2970204
10715.193	13510.206	41.3066196
19054.607	13527.435	41.3121546
16218.101	13419.679	41.2774214
9549.9259	13308.543	41.2413051
12302.688	13359.199	41.257804
17378.008	13320.82	41.2453097
9549.9259	13194.06	41.2037845
17782.794	13194.06	41.2037845
13489.629	13122.507	41.1801682
15488.166	13056.845	41.1583826
12302.688	13062.858	41.1603821
9549.9259	13016.979	41.145102
13489.629	13154.193	41.1906422
12882.496	13219	41.2119859
9549.9259	13307.575	41.2409891
15488.166	13307.575	41.2409891
9549.9259	13208.604	41.2085692
12882.496	13269.148	41.2284304
16982.437	13213.605	41.2102133
11481.536	13482.45	41.2976881
14125.375	13855.831	41.4163258
9549.9259	13779.574	41.3923578
16595.869	13830.229	41.4082938
9549.9259	13836.672	41.4103165
13182.567	14341.018	41.5658
31622.777	14280.474	41.5474264
9549.9259	13963.249	41.4498649
12882.496	13966.957	41.4510178
9549.9259	13948.065	41.4451395
9549.9259	14624.211	41.6507245
13182.567	14735.347	41.6836038
11481.536	15695.548	41.9577647
12882.496	15682.775	41.9542292
20892.961	15673.112	41.9515523
10715.193	15499.417	41.9031537
22387.211	15479.996	41.8977085
12022.644	15266.041	41.8372643
13489.629	15266.041	41.8372643

10715.193	15241.592	41.8303032
26915.348	15225.878	41.8258234
11220.185	14936.454	41.7424751
10964.782	14908.617	41.7343734
9549.9259	14904.457	41.7331615
14125.375	14932.294	41.7412654
15488.166	14897.249	41.7310607
13803.843	14798.278	41.7021119
11481.536	14750.96	41.688203
9549.9259	14755.418	41.6895151
11748.976	14806.073	41.7043989
9549.9259	14773.13	41.6947252
12022.644	15551.2	41.9176391
22908.677	15509.988	41.9061146
14454.398	15323.993	41.8537194
10964.782	15242.252	41.8304913
12302.688	15218.671	41.8237672
11220.185	15172.791	41.8106549
21379.621	15144.954	41.8026795
9772.3722	15113.601	41.7936795
9549.9259	15180.792	41.8129443
12022.644	15184.5	41.8140048
11748.976	15143.288	41.8022017
12589.254	15199.732	41.8183592
9549.9259	15354.538	41.8623674
12589.254	15354.538	41.8623674
10000	15303.882	41.8480161
9772.3722	15296.381	41.8458869
9549.9259	15292.673	41.8448341
13489.629	15380.026	41.8695707
9549.9259	15329.72	41.8553423
15848.932	15329.72	41.8553423
9549.9259	15348.612	41.8606911
17782.794	15617.846	41.9362113
17378.008	15480.631	41.8978867
18197.009	15391.375	41.8727743
9549.9259	15312.919	41.8505799
9549.9259	15486.297	41.8994759
13182.567	15610.173	41.934077
9549.9259	15549.629	41.9172002
33113.112	15625.886	41.9384465
33884.416	15370.381	41.8668462
9549.9259	15344.963	41.8596585
12589.254	15449.947	41.8892698
16982.437	15523.166	41.9098031
39810.717	15399.291	41.8750073
9549.9259	14988.039	41.7574483
12589.254	14988.039	41.7574483
9772.3722	14937.384	41.7427454

11748.976	14979.556	41.7549894
50118.723	15478.522	41.8972949
16218.101	14834.569	41.7127493
70794.578	14794.331	41.7009534
10715.193	14690.512	41.6703693
12302.688	15038.972	41.7721814
10471.285	14993.092	41.7589121
9549.9259	14993.092	41.7589121
9549.9259	15012.513	41.7645341
12022.644	15012.513	41.7645341
12022.644	14971.301	41.7525955
9772.3722	14930.089	41.7406241
9549.9259	14926.382	41.7395455
9549.9259	14926.382	41.7395455
10715.193	14926.382	41.7395455
11220.185	15129.607	41.7982764
12022.644	15125.35	41.7970543
9549.9259	15298.093	41.8463729
10964.782	15993.696	42.0394885
11748.976	16006.766	42.043036
12589.254	16087.548	42.0648985
9772.3722	16064.73	42.0587343
56234.133	16061.023	42.0577319
9549.9259	15286.66	41.843126
11748.976	15318.853	41.8522626
9549.9259	15614.905	41.9353935
9549.9259	16007.625	42.043269
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9549.9259	16007.625	42.043269
19498.446	16007.625	42.043269
13803.843	16462.21	42.1648813
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15135.612	16557.398	42.1899209
21877.616	16569.287	42.1930382
9549.9259	16537.204	42.1846208
9549.9259	16537.204	42.1846208
9549.9259	16537.204	42.1846208
9549.9259	16548.587	42.1876092
14791.084	16585.238	42.1972171
10471.285	17254.621	42.3690543
9549.9259	17271.459	42.3732902
16982.437	17947.605	42.5400651
25703.958	17911.083	42.5312184
9549.9259	17697.392	42.4790927
12022.644	18217.194	42.6048147
13489.629	18175.982	42.5949787
19952.623	18110.32	42.5792612
16982.437	18041.925	42.5628287

9549.9259	17950.243	42.5407034
14125.375	17950.243	42.5407034
17782.794	17873.986	42.5222141
32359.366	17841.755	42.5143757
15848.932	17465.305	42.4217617
16982.437	17360.321	42.3955776
9549.9259	17236.446	42.3644773
15135.612	17335.417	42.3893429
9549.9259	17347.306	42.3923203
9549.9259	17407.85	42.4074513
12302.688	17525.282	42.4366502
41686.938	17748.637	42.49165
11481.536	18645.509	42.7057423
13803.843	20601.232	43.138932
64565.423	20601.232	43.138932
31622.777	19777.402	42.9616924
9549.9259	19420.905	42.8826945
10471.285	19424.612	42.8835235
10715.193	19546.471	42.9106835
9549.9259	19550.63	42.9116076
9549.9259	19562.014	42.9141356
9549.9259	19589.851	42.9203114
9549.9259	19635.731	42.9304707
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9549.9259	19864.773	42.9808361
22908.677	19880.129	42.984192
10964.782	19661.191	42.9360982
22387.211	19652.966	42.934281
51286.138	19526.364	42.9062137
11748.976	18881.416	42.7603455
16595.869	18844.765	42.7519072
11220.185	18727.332	42.7247592
9549.9259	18781.236	42.7372417
9772.3722	18781.236	42.7372417
11481.536	18777.529	42.7363843
29512.092	18752.836	42.7306696
33113.112	18557.348	42.6851591
9549.9259	18414.581	42.6516184
9549.9259	18470.124	42.664698
9549.9259	18470.124	42.664698
46773.514	18563.219	42.6865328
10232.93	18073.293	42.570373
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9549.9259	17954.154	42.5416495
15848.932	18025.053	42.5587654
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9549.9259	17824.764	42.5102379
10232.93	17824.764	42.5102379

11748.976	17850.031	42.5163898
54954.087	17971.792	42.5459138
11481.536	17215.056	42.3590844
50118.723	17224.074	42.3613589
14791.084	16584.578	42.1970444
12882.496	17823.479	42.5099247
40738.028	17779.319	42.4991513
9549.9259	17975.031	42.5466965
9549.9259	18774.932	42.7357838
15848.932	18794.353	42.7402739
11481.536	28344.266	44.5246521
9549.9259	30350.001	44.8215871
9549.9259	30563.956	44.8520956
15848.932	31053.199	44.9210635
9772.3722	32207.614	45.0795855
9549.9259	32473.14	45.1152428
9549.9259	32509.791	45.1201418
15488.166	32614.774	45.1341438
15848.932	32581.465	45.1297061
13182.567	33233.218	45.2157239
16595.869	33290.106	45.2231518
25703.958	33404.213	45.2380125
95499.259	33553.709	45.2574053
128824.96	32723.868	45.1486463
13803.843	30853.383	44.8930279
15135.612	30933.667	44.9043141
10232.93	30901.116	44.8997417
9772.3722	31667.803	45.0061793
17782.794	31829.904	45.0283533
10964.782	31889.851	45.036525
10232.93	31996.738	45.0510571
11220.185	32090.339	45.063743
12302.688	32118.044	45.0674908
21877.616	32917.265	45.1742374
10964.782	33022.368	45.1880822
10471.285	33187.838	45.2097896
9772.3722	33724.283	45.2794272
10471.285	33844.45	45.2948746
14791.084	33922.189	45.3048387
12589.254	33905.735	45.3027316
9549.9259	34390.696	45.3644097
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14454.398	34876.01	45.4252679
9549.9259	36548.692	45.6287184
9549.9259	36714.501	45.6483763
10000	36825.637	45.6615027
17782.794	36923.12	45.6729839
24547.089	37055.139	45.6884845
12882.496	36963.598	45.6777423

9549.9259	36968.599	45.6783299
15135.612	37209.239	45.7065079
17378.008	37448.847	45.7343845
12589.254	37723.954	45.766172
9549.9259	38162.541	45.8163729
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11481.536	40316.409	46.0548184
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12302.688	40930.43	46.1204631
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11748.976	41808.795	46.2126765
19054.607	42906.724	46.3252536
9549.9259	57789.328	47.6184765
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11748.976	58699.2	47.6863218
89125.094	58931.783	47.7034958
10232.93	58065.59	47.6391884
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22387.211	46793.325	46.701839
38904.514	46972.09	46.7183988
85113.804	46888.421	46.7106561
25703.958	47718.129	46.7868341
11748.976	47829.053	46.7969178
15848.932	48102.967	46.8217187
13489.629	48458.044	46.8536588
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23442.288	49625.379	46.9570384
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18620.871	51743.249	47.1385369
13182.567	52370.136	47.190837
56234.133	53087.662	47.249936
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21379.621	53950.601	47.3199629
17378.008	54429.586	47.3583503
15848.932	56494.182	47.5200372
12882.496	56769.356	47.5411396
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42657.952	57752.759	47.6157273
16982.437	57633.148	47.6067234
15135.612	57723.228	47.6135061

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16595.869	58373.787	47.6621787
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776247.12	728687.03	58.6254104
812830.52	717896.66	58.5606194
676082.98	708733.27	58.5048282
831763.77	701556.4	58.4606259
794328.23	718728.46	58.5656484
616595	716757.7	58.5537237
616595	718011.64	58.5613148
691830.97	714071.54	58.5374173
645654.23	742521.57	58.7070908
616595	744115.84	58.7164055
588843.66	756321.97	58.7870672
676082.98	755458.44	58.7821058
741310.24	750382.65	58.7528278
758577.58	787214.3	58.9609297
660693.45	785087.29	58.9491795
660693.45	775989.32	58.8985575
676082.98	766644.43	58.8459399

2398832.9	759966.76	58.807946
2454708.9	722133.3	58.5861737
691830.97	699496.12	58.4478531
630957.34	690731.58	58.3930931
676082.98	682796.99	58.342916
676082.98	673579.39	58.2838879
812830.52	665957.61	58.2344658
660693.45	653965.85	58.1555507
2187761.6	645595.78	58.0996069
933254.3	611231.3	57.8620559
1148153.6	598086.13	57.7676373
676082.98	581716.21	57.6471117
616595	572802.39	57.5800482
724435.96	564990.99	57.5204152
707945.78	554662.27	57.4402863
660693.45	544281.74	57.3582376
676082.98	534656.45	57.2807481
645654.23	526638.15	57.2151231
467735.14	530731.42	57.248748
162181.01	537790.02	57.3061274
602559.59	547729.96	57.385665
194984.46	552887.48	57.4263676
147910.84	564837.92	57.5192385
173780.08	574727.91	57.5946229
70794.578	584186.75	57.665517
134896.29	595080.77	57.7457592
123026.88	605769.95	57.8230773
125892.54	616958.31	57.9025582
363078.05	627215.27	57.9741662
131825.67	635026.7	58.0279199
3548133.9	646376.78	58.1048575
1174897.6	598252.77	57.7688472
436515.83	589939.2	57.7080725
416869.38	594737.86	57.7432559
158489.32	599320.56	57.7765918
407380.28	608753	57.8444112
724435.96	612974.89	57.8744268
794328.23	611912.51	57.8668933
407380.28	609941.76	57.8528837
288403.15	614682.6	57.8865092
645654.23	620636.79	57.9283751
295120.92	621674.98	57.9356339
1905460.7	626570.36	57.9696985
128824.96	606080.73	57.8253048
263026.8	614945.21	57.8883642
245470.89	620152.09	57.9249821
1862087.1	626103.57	57.9664618
676082.98	606080.34	57.825302
691830.97	606080.34	57.825302

380189.4	604592.48	57.8146274
2398832.9	609786.51	57.8517781
741310.24	581074.01	57.6423145
1348962.9	579986.89	57.6341818
537031.8	569034.69	57.5513874
371535.23	574600.22	57.5936579
2951209.2	578684.55	57.6244189
630957.34	539774.31	57.3221221
114815.36	538208.89	57.3095087
100000	547563.35	57.3843437
275422.87	557695.78	57.4639736
128824.96	563621.35	57.5098744
1096478.2	572235.17	57.5757455
165958.69	564721.44	57.5183428
154881.66	574029.4	57.5893413
123026.88	582716.09	57.6545701
218776.16	591426.54	57.7190081
93325.43	599854.2	57.7804571
158489.32	608341.44	57.841474
125892.54	616215.91	57.8973291
144543.98	628303.33	57.9816936
165958.69	636905.82	58.0407522
141253.75	645151.4	58.0966165
147910.84	653808.73	58.1545072
104712.85	662874.07	58.2143103
85113.804	673484.02	58.283273
83176.377	683077.02	58.3446967
194984.46	709350.53	58.5086089
891250.94	718743.74	58.5657408
891250.94	716244.73	58.5506144
758577.58	713464.48	58.5337236
912010.84	711582.43	58.5222521
912010.84	707393.8	58.4966125
741310.24	705432.43	58.4845542
741310.24	702667.92	58.4675013
724435.96	709894.38	58.5119374
776247.12	709894.38	58.5119374
794328.23	730985.89	58.6390899
741310.24	729015.14	58.6273655
831763.77	741311.77	58.700009
812830.52	740092	58.6928571
660693.45	739783.63	58.6910472
676082.98	740302.59	58.6940927
724435.96	740302.59	58.6940927
691830.97	739240.22	58.6878558
724435.96	739783.63	58.6910472
660693.45	749180.52	58.7458648
660693.45	749699.48	58.7488721
676082.98	749203.88	58.7460002

691830.97	750291	58.7522974
645654.23	753276.55	58.7695445
707945.78	803028.65	59.0473104
588843.66	847703.58	59.2824402
676082.98	849963.45	59.2940025
660693.45	850225.92	59.2953434
575439.94	859252.1	59.341206
602559.59	865215.68	59.3712438
660693.45	867246.95	59.3814278
676082.98	867246.95	59.3814278
602559.59	867778	59.3840863
691830.97	869534.43	59.3928678
676082.98	872189.55	59.4061088
676082.98	872720.6	59.4087523
691830.97	874691.35	59.4185483
870963.59	875516.01	59.4226409
616595	874862.68	59.4193989
616595	878133.27	59.4356043
537031.8	881403.86	59.4517495
676082.98	887307.51	59.4807416
707945.78	890893.64	59.4982586
630957.34	893280.18	59.509877
645654.23	896311.4	59.5245892
645654.23	901104.74	59.5477527
724435.96	903891.01	59.5611607
676082.98	904172.24	59.5625117
645654.23	905259.37	59.5677303
724435.96	905510.02	59.5689326
602559.59	904966.6	59.5663255
630957.34	905439.9	59.5685963
851138.04	907279.11	59.5774091
660693.45	904361.53	59.5634208
660693.45	903392.63	59.5587654
660693.45	902657.66	59.5552307
691830.97	901460.16	59.5494654
741310.24	901197.69	59.5482007
660693.45	904759.07	59.5653294
1659586.9	911606.16	59.5980725
758577.58	895476.9	59.5205439
741310.24	894907.87	59.5177833
724435.96	893313.61	59.5100395
645654.23	892507.72	59.5061198
660693.45	891789.48	59.5026234
794328.23	892308.44	59.50515
575439.94	889112.29	59.4895661
1174897.6		
724435.96		
2041737.9		
676082.98		

1479108.4
758577.58
794328.23
691830.97
676082.98
660693.45
724435.96
1288249.6
691830.97
630957.34
741310.24
870963.59
3630780.5
3388441.6
724435.96
691830.97
1202264.4
933254.3
724435.96
660693.45
707945.78
707945.78
851138.04
707945.78
794328.23
741310.24
831763.77
812830.52
812830.52
891250.94
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851138.04
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812830.52
741310.24
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660693.45
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630957.34
741310.24
676082.98
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588843.66
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954992.59
1071519.3
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724435.96
645654.23
676082.98
602559.59
691830.97
602559.59

End of 24 hours

*Appendix G
Traffic Study*

TRAFFIC IMPACT ANALYSIS
YOLO COUNTY NEW SUPERIOR COURT
COURTHOUSE
WOODLAND, CALIFORNIA

February 15, 2010

Prepared for: Administrative Office of the Courts
State of California

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TRAFFIC AND PARKING IMPACT ANALYSIS YOLO COUNTY NEW SUPERIOR COURT COURTHOUSE

I. INTRODUCTION, PROJECT LOCATION AND BACKGROUND

At the request of the Administrative Office of the Courts (AOC), State of California, Crane Transportation Group has analyzed traffic issues associated with the proposed Yolo County New Superior Court Courthouse. The proposed project site is in the City of Woodland, Yolo County, California, approximately 0.9 mile west of State Route 113, and 1.0 mile east of Interstate 5 (see **Figure 1**). Main Street, 5th Street, Lincoln Avenue, and 6th Street border the site. The site is directly north (across Lincoln Avenue) from the Woodland Police Station, and is located west of the Woodland Joint Unified School District offices.

The following land uses are immediately adjacent to the proposed project site:

- North: across Main Street, from west to east includes, Freeman Park, the Woodland Toy Library, and a chain motel (Budget Inn);
- East: across 6th Street, a multi-tenant commercial building;
- South: across Lincoln Avenue, the City of Woodland Police Department; and
- West: across 5th Street, from north to south includes, Enterprise Rent-A-Car, Colombara's Cabinet and Millworking, and Elfrink Power Equipment.

The purpose of the proposed project is to provide a new courthouse that meets the needs of the Superior Court and consolidates the existing facilities to ensure safer and more efficient operations in the long-term. The proposed project's objectives are to:

- Consolidate seven unsafe and/or overcrowded or inadequate facilities in poor condition;
- Increase court operational efficiency and improve public service through consolidation of all adult and juvenile court operations in one location; and
- Expand court services by increasing the capacity for judicial proceedings from 13 to 14 courtrooms, including consolidating 13 existing courtrooms and providing for one additional courtroom for the new judgeship authorized in Assembly Bill 159 in fiscal year 2007-2008.

The AOC proposes to acquire property to construct a new 14-courtroom courthouse and associated parking, and operate the courthouse for the Superior Court of California, County of Yolo (Superior Court).

The new courthouse will become the courthouse facility for the Superior Court of California, County of Yolo, and will replace seven court facilities in Yolo County. The new courthouse will

also provide additional courtrooms for proposed new judgeships; court support space for court administration, the court clerk, court security operations, and holding areas for in-custody detainees; and building support space.

Project Background: The Superior Court of California, County of Yolo, currently serves the residents of Yolo County in seven separate facilities. These facilities are in need of security and operational upgrades in order to more efficiently and safely serve the community. In addition, the lack of consolidated facilities exacerbates the functional inefficiencies of the court facilities. The main courthouse is the historic Woodland Courthouse, which was constructed in 1917 as a shared court and county facility, and is a national historic registered property. The county vacated the building in 1985 except for the district attorney’s office, which remained in the building until 1993. The historic courthouse has been renovated as the court has grown and now houses eight marginal courtrooms. To meet current space needs, the court operates other facilities, many with courtrooms, in Downtown Woodland (See **Table 1**).

Table 1. Yolo County Superior Court’s Current Court Facilities in Woodland, to be Relocated to the Proposed New Courthouse

Facility	Address	Notes
Historic Courthouse	725 Court Street,	45,160 BGSF with 8 courtrooms
Old Jail	213 Third Street	6,730 BGSF with 1 courtrooms
Family Support and ADR	238 W. Beamer Street	3,300 BGSF with 1 courtroom NOT IN USE
Family and Designated ADA Courtroom	812 Court Street	2,700 BGSF with 1 courtroom NOT IN USE
Fiscal, Human Resources, and Training	601 Court Street	6,120 BGSF
Traffic/Small Claims/UD and Drug	275 First Street	4,100 BGSF with 2 courtrooms
Family Law Facilitator and children's waiting room.	1100 Main Street	7,701 BGSF 2 courtrooms
PROPOSED PROJECT TOTALS: 75,811 BGSF with 13 courtrooms (existing)		
BGSF - building gross square feet		

After completion of the new courthouse, the Superior Court will vacate these leased properties.

The facility will include court support space for court administration, the court clerk, court security operations, and holding; and building support space. Secure parking, a sallyport, and in-custody holding will be located at the basement level. In addition, the project will include 198 parking spaces on site, including secured (restricted) parking spaces for judicial officers. An additional 223 off street parking spaces would be provided in off-site parking lots provided by the AOC and available for exclusive use of the courts during court hours of operation.

Since the AOC is the project's lead agency and is acting for the State of California on behalf of the Judicial Council of California, local governments' land use planning and zoning regulations do not apply to the proposed courthouse project. The AOC will base the design of the new courthouse on its Principles of Design for California Court Buildings, and will apply the following codes and standards: California Building Code (edition in effect as of the commencement of schematic design phase of a particular court project); California Government Code, California Code of Regulations, Title 24; California Energy Code, Americans With Disabilities Act; American Disability Act Accessibility Guidelines (Section 11); and Division of the State Architect's Access Checklist.

Existing Land Uses

As described in the Phase I ESA for the property (GEOCON, 2009), the proposed project site consists of six contiguous parcels approximately 3.75 acres (160,000 square feet). They consist of the following (listed north to south):

- **Parcel 1 – 1001-1022 Main Street:** Parcel 1 consists of 0.83 acre at the northern end of the proposed site. The parcel is vacant and undeveloped and is currently used by Hoblit Chrysler to store vehicles for sale. The number of vehicles stored on the site was observed to vary from none to 20 during the survey period, with minimal to no inbound and outbound activity during peak traffic periods. There are sidewalks fronting the western, northern, and eastern sides of the parcel.
- **Parcels 2 and 3 – 425 5th Street and 430 6th Street:** Parcels 2 and 3 are contiguous, located adjacent and just south of the 1001-1022 Main Street parcel. They extend between 5th and 6th streets, across the full width of the proposed site. The combined parcels are about 0.97 acres in size. Both parcels are currently vacant and unused. Sidewalks are present along the western and eastern property lines.
- **Parcel 4 – 445 5th Street:** Parcel 4 consists of 1.07 acres adjacent and just south of Parcels 2 and 3. It extends from 5th Street to 6th Street across the full width of the proposed site. The parcel is developed with a well/pump house for city water supply on its northern side, two

office structures, a radio room and tower near the southwestern corner of the parcel, and four two-door storage sheds along the southern side of the parcel

- **Parcel 5 – 1011 Lincoln Avenue:** Parcel 5 consists of 0.47 acre adjacent to, and south of Parcel 4 in the southwest corner of the site. This parcel is bordered by 5th Street on the west and Lincoln Avenue on the south. The parcel is currently used by AJ Towing as a storage yard for equipment, office space, and towed vehicles. The site is mostly unpaved with gravel undercover and some asphalt paving and concrete slabs.
- **Parcel 6 – 1021 Lincoln Avenue:** Parcel 6 covers 0.4 acre adjacent and to the south of Parcel 4 in the southeastern corner of the proposed project site. This parcel is bordered by 6th Street on the east and Lincoln Avenue on the south. There are two structures on the parcel: a single-story, brick and concrete building in the southern portion, and a corrugated metal siding storage shed in the northern portion. Tenants in the brick/concrete building from west to east include:
 - *The Undresser* – a furniture refinishing shop and art studio;
 - *Studio Artist Gallery* - an art gallery and studio; and
 - Two contractors' offices.

During the traffic count periods, the existing facilities had minimal to no traffic or parking demand associated with the current occupants.

The AOC plans to acquire the site and begin construction in 2010 and 2011, complete construction in 2013, and begin operation in 2013. After completion of the new courthouse, the Superior Court will vacate the current leased facilities. Re-use of these facilities is anticipated at some time, but there are currently no planned uses of the vacated facilities.

Major work tasks for this traffic analysis consisted of:

- Conduct of weekday AM and PM peak period traffic counts at sixteen intersections expected to be affected by the shift courthouse traffic in Downtown Woodland.
- Survey of existing courthouse staff and visitors on a peak activity day to determine times of arrival and departure, mode of travel, parking location (if applicable) and trip origins and destinations.
- Determination of the future year 2013 Base Case (without courthouse project) traffic volumes at the sixteen study intersections.
- Projection of weekday AM and PM peak hour trip generation associated with the proposed courthouse in consultation with city, county and state representatives.

- Removal of the component of courthouse traffic to be relocated, and distribution of the courthouse traffic to be relocated to the sixteen study intersections.
- Determination of whether the proposed location of the courthouse would negatively impact operation of the intersections analyzed.
- Determination of whether the relocated parking demand for the courthouse would exceed proposed supply.

II. SUMMARY

1. Existing AM peak hour operating conditions (levels of service) at the fifteen analyzed intersections are acceptable (at or better than LOS D) at all but one location, the 4th Street/Main Street intersection, where the minor street (4th Street) southbound approach operates unacceptably at LOS F. Existing PM peak hour operating conditions (levels of service) at the fifteen analyzed intersections are acceptable (at or better than LOS D) at all but two locations, the 4th Street/Main Street intersection and 6th Street/Main Street intersection, where the minor street (both 4th Street approaches and the southbound driveway opposite 6th Street)) operate unacceptably at LOS F.

2. The following improvements are planned within the near vicinity of the project in the analysis time period:¹

- Realignment of North Street/ Lemen Avenue/East Street realignment project – This project is in the City’s capital budget and is planned for construction in 2010. This project consists of realigning Lemen Ave with North St. This new intersection will be signalized and have northbound and southbound left turn lanes, two northbound and two southbound through lanes, one eastbound through/left/right lane and one westbound through/left/right lane. This project also includes a median on East Street at Court Street that will prevent all left turn movements at this intersection.
- Main Street widening project – This project is in the City’s capital budget but it is currently dependent on development of an adjacent parcel. If the development does not occur, then the project will move forward without the adjacent parcel development within the next two years. This project will widen westbound Main Street from one to two lanes between East St and 6th Street. The second westbound lane will become a right turn only lane at 6th Street.

The Woodland City Center Lofts project, a mixed use residential/commercial project, has received approval for construction in the downtown, but is currently considered unlikely to move ahead within the future horizon analysis time frame for the proposed Courthouse

¹ Brent Meyer, P.E., S.E., T.E., Principal Civil Engineer/City Engineer, City Traffic Engineer, City of Woodland Community Development Department, e-mail and telephone communications, November, 2009.

project (2013). For this reason, traffic volumes from the City Center Lofts project have not been added to volumes on the 2013 roadway network.

3. Future (year 2013 - without project) operation at analyzed intersections would continue at or better than LOS D, with the exception of two side street stop sign-controlled intersections along Main Street (4th Street and 6th Street) where LOS would be an unacceptable LOS E during the AM peak hour for the 4th Street southbound approach and an unacceptable LOS F for both 4th Street approaches and for the southbound 6th Street approach during the PM peak hour.

4. The proposed project would be expected to generate at most, on a peak activity day during the 2013 AM peak commute traffic hour (7:45 – 8:45) about 430 inbound and 106 outbound vehicle trips, and during the 2013 PM peak commute traffic hour (4:30 – 5:30) about 52 inbound and 166 outbound vehicle trips. These projections take into account the addition of one courtroom and minor growth in overall court activity by 2013. These trips would be dispersed to and from all directions surrounding the site, based upon origin/destination information obtained through surveys of courthouse staff and visitors. Of these trips, about 26 AM peak hour inbound trips would follow the routes taken today, traveling to the employee lot located in the northeast quadrant of the Court Street/3rd Street intersection, reserved for County employees today (and routinely used by Court employees). These 26 inbound trips are not included in the net new trips to and from the proposed new courthouse, as this parking would continue to be used by court employees. Similarly, the inbound AM peak hour trips to the parking lot serving the 1100 Main Street court facility would follow the same route traveled today to reach the lot entrance on 6th Street. These approximately 54 inbound trips are not included in the net new trips projected to be transferred to the new courthouse location (project site). Thus, a projected 350 net new inbound vehicle trips and about 100 outbound vehicle trips have been applied to the roadway system that would serve the new courthouse. They have been routed to the main courthouse under two alternative parking lot configurations.

5. Year 2013 Base Case + project operating conditions (levels of service) at each analyzed intersection for the weekday AM and PM peak hours will continue at or better than LOS D at all intersections, with the exception of those operating unacceptably at LOS E or F under base case (without project) conditions. At the intersections with existing and 2013 (without project) unacceptable operation, it is likely that the project's addition of a traffic signal at the Main Street/ 5th Street intersection will provide some relief, as drivers may choose to divert by one block east or west to take advantage of lesser delays for turns from this improved intersection. Project traffic would not result in any analyzed intersection currently operating acceptably to operate unacceptably with the addition of project volumes.

6. The proposed courthouse project does not include closure of any public through street that is currently used for emergency services, and would not be expected to interfere with any adopted emergency response plan. Therefore, no significant impacts are anticipated to emergency service access.

7. The project would provide 198 parking spaces on-site, and an additional 223 parking spaces off-site, with parking provided off-site in two alternative parking lot configurations. All parking would be exclusively used for court purposes during the hours of court operation. Extensive additional parking would be available on-street along the project's Lincoln Avenue, 5th Street, and 6th Street frontages. This amount of parking would comply with the City's recent study of parking demand for the new Superior Court Courthouse.

III. SETTING

A. ROADWAYS AND INTERSECTIONS

Regional access is provided to the project site vicinity by the following facilities:

The State Route (S.R.) 113 freeway and Interstate 5 provide regional access to downtown Woodland.

The following major roadways provide primary circulation routes within the project site vicinity: Most streets provide on-street parking and sidewalks on both sides.

Main Street provides a connection between commercial uses along Interstate 5, downtown Woodland, and residential neighborhoods west of S.R 113. It is a four-lane east-west arterial, narrowing to two lanes through the central downtown. The proposed project would front along Main Street and the Main Street access would be the primary public access to the new courthouse. On-street parking is prohibited on Main Street fronting the proposed project site.

East Street is a four-lane, north-south, major arterial through the City of Woodland. It extends from north of County Road 25A north to County Road 17A north of Interstate 5 where it becomes S.R 113. East Street provides access to the Yolo county Fairgrounds, the County Fair Mall, and a range of commercial uses.

Court Street is a two-lane, east-west minor arterial that parallels Main Street. Court Street is the location of the most intensive existing courthouse-related uses, with the Historic Courthouse fronting Court Street (at 725 Court Street), and two other major court facilities accessible via Court Street (Department 9 at 213 Third Street, and Traffic/Small Claims/UC and Drug Court at 275 First Street). Court Street also provides access to the City Hall, public library, post office, and County Administration offices.

College Avenue is a two-lane, north-south, collector street extending between County Road 24 A on the south and Kentucky Avenue on the north. It provides access to the City Hall, Douglas Junior High School, and residential neighborhoods. It is used by courthouse traffic to reach parking areas on-street and public parking lots, such as the heavily-used public library lot accessible via College Avenue and North Street.

Lincoln Avenue is a two-lane, east-west, local street providing access to the Police Station directly south of the proposed project site and the Woodland Community School District offices accessible via the eastern terminus of the street.

5th Street and 6th Street are two-lane, north-south, local streets providing access between Main Street and Lincoln Avenue, and local streets to the south. These streets border the east and west sides of the proposed project site. Sidewalks are provided and on-street parking is permitted on both sides of 5th and 6th streets. Sixth Street currently provides access to the Yolo Superior Court

at 1100 Main Street, serving Family and Civil court functions. It occupies the building's third floor with two courtrooms (non-jury courts) and family law facilitators. Sixth Street also provides access to the parking lot serving the Woodland Community School District offices, located east of the proposed project site.

B. EXISTING AND FUTURE BASE CASE (YEAR 2013 - WITHOUT PROJECT) TRAFFIC VOLUMES

1. EXISTING CONDITIONS

Weekday traffic counts were conducted at the request of Crane Transportation Group on a day in mid-November, 2009 from 7:00 – 9:00 AM and 4:00 – 6:00 PM at the following intersections:

1. East Street/ Lemen Avenue (Stop Sign)
2. East Street/ North Street (Stop Sign)
3. Court Street/ 3rd Street (Signal)
4. Court Street/ East Street (Stop Sign)
5. College Avenue/ Main Street (Signal)
6. Main Street/ 3rd Street (Signal)
7. Main Street/ 4th Street (Stop Sign)
8. Main Street/ 5th Street (Stop Sign)
9. Main Street/ 6th Street (Stop Sign)
10. Main Street/ East Street (Signal).
11. College Avenue/ Lincoln Avenue (All-Way Stop)
12. Lincoln Avenue/ 3rd Street (All-Way Stop)
13. Lincoln Avenue /5th Street (Stop Sign)
14. Lincoln Avenue/ 6th Street (Stop Sign)
15. Cross Street/ 3rd Street (All-Way Stop)
16. Cross Street/ East Street (Signal)

Since the courts generally end daily sessions prior to the weekday ambient PM peak traffic hour, court-related traffic volumes are far less during the ambient PM peak hour than during the ambient AM peak hour.

Figure 1 shows the roadway system, **Figure 2** shows intersection geometry and control, **Figure 3** shows AM peak hour traffic volumes, and **Figure 4** shows PM peak hour traffic volumes, at all analyzed locations. The morning and late afternoon ambient peak traffic hours at intersections nearest the court facilities were determined to be 7:45 to 8:45 AM and 4:3- 5:30 PM.

The court's morning peak traffic hour (associated with start of court activity and support services) was found to coincide with the morning ambient peak traffic commute hour (7:45 – 8:45) along the major east-west traffic corridors: Main Street and Court Street.

2. FUTURE CONDITIONS (YEAR 2013)

Year 2013 Base Case (without project) traffic projections were developed for the sixteen analyzed intersections for two analysis time periods (AM peak hour and PM peak hour). This planning horizon was chosen for analysis as it is anticipated that if approved, the court could be constructed and operating by 2013. Growth rates utilized to factor existing counts to year 2013 conditions were based upon a 1% per year growth rate, and incorporates two roadway improvement projects that would be constructed in the downtown area by 2013:

- Realignment of North Street/ Lemen Avenue/East Street realignment project – This project is in the City’s capital budget and is planned for construction in 2010. This project consists of realigning Lemen Ave with North St. This new intersection will be signalized and have northbound and southbound left turn lanes, two northbound and two southbound through lanes, one eastbound through/left/right lane and one westbound through/left/right lane. This project also includes a median on East Street at Court Street that will prevent all left turn movements at this intersection.
- Main Street widening project – This project is in the City’s capital budget but it is currently dependent on development of an adjacent parcel. If the development does not occur, then the project will move forward without the adjacent parcel development within the next two years. This project will widen westbound Main Street from one to two lanes between East St and 6th Street. The second westbound lane will become a right turn only lane at 6th Street.

The Woodland City Center Lofts project, a mixed use residential/commercial project, has received approval for construction in the downtown, but is currently considered unlikely to move ahead within the future horizon analysis time frame for the proposed Courthouse project (2013). For this reason, traffic volumes from the Woodland City Center Lofts project have not been added to volumes on the 2013 roadway network.

Resultant year 2013 AM and PM peak hour volumes for the study area roadway network are shown on **Figures 5 and 6**, and planned roadway changes are shown in **Figure 7**.

C. METHODOLOGY

1. INTERSECTION LEVEL OF SERVICE

Transportation engineers and planners commonly use a grading system called level of service (LOS) to measure and describe the operational status of the local roadway network. LOS is a description of the quality of a roadway facility's operation, ranging from LOS A (indicating free-flow traffic conditions with little or no delay) to LOS F (representing oversaturated conditions where traffic flows exceed design capacity, resulting in long queues and delays). Intersections, rather than roadway segments between intersections, are almost always the capacity controlling locations for any circulation system.

Signalized Intersections. For signalized intersections, the 2000 *Highway Capacity Manual* (Transportation Research Board, National Research Council) methodology was utilized. With this methodology, operations are defined by the level of service and average control delay per vehicle (measured in seconds) for the entire intersection. For a signalized intersection, control delay is the portion of the total delay attributed to traffic signal operation. This includes delay associated with deceleration, acceleration, stopping, and moving up in the queue. The following table summarizes the relationship between delay and LOS for signalized intersections.

Table 2
Signalized Intersection LOS Criteria

Level of Service	Description	Average Control Delay (Seconds Per Vehicle)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	< 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and/or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	> 80.0

Source: 2000 Highway Capacity Manual (Transportation Research Board, 2000).

Unsignalized Intersections. For unsignalized (all-way stop-controlled and side-street stop-controlled) intersections, the 2000 *Highway Capacity Manual* (Transportation Research Board,

National Research Council) methodology for unsignalized intersections was utilized. For side-street stop-controlled intersections, operations are defined by the level of service and average control delay per vehicle (measured in seconds), with delay typically represented for the stop sign controlled approaches or turn movements. For all-way stop-controlled intersections, operations are defined by the average control delay for the entire intersection (measured in seconds per vehicle). The delay at an unsignalized intersection incorporates delay associated with deceleration, acceleration, stopping, and moving up in the queue. The following table summarizes the relationship between delay and LOS for unsignalized intersections.

Table 3
Unsignalized Intersection LOS Criteria

Level of Service	DESCRIPTION	Average Control Delay (Seconds Per Vehicle)
A	Little or no conflicting traffic; little or no delays	< 10.0
B	The approach begins to notice absence of available gaps; short traffic delays	> 10.1 to 15.0
C	The approach begins experiencing delay for available gaps; average traffic delays	>15.1 to 25.0
D	The approach experiences queuing due to a reduction in available gaps; long traffic delays	> 25.1 to 35.0
E	Extensive queuing due to insufficient gaps; very long traffic delays	> 35.1 to 50.0
F	Insufficient gaps of suitable size to allow traffic demand to cross safely through a major traffic stream; extreme traffic delays with intersection capacity exceeded (for an all-way stop), or with approach/turn movement capacity exceeded (for a side street stop controlled intersection).	> 50.0

Source: 2000 Highway Capacity Manual (Transportation Research Board, 2000), City of Woodland Downtown Specific Plan, March 18, 2003.

Minimum Acceptable Standard. The City of Woodland *Downtown Specific Plan* considers LOS D to be the minimum acceptable operation at intersections within the Downtown Specific Plan area. LOS D is applicable to all but two of the sixteen analyzed intersections: at the intersections of Cross Street/3rd Street and Cross Street/East Street, LOS C is the minimum acceptable operation.²

² City of Woodland Downtown Specific Plan, March 18, 2003, *Circulation*.

D. EXISTING (WITHOUT PROJECT) INTERSECTION OPERATION

1. INTERSECTION LEVEL OF SERVICE

Tables 4 and 5 show existing operating conditions (levels of service) at each intersection for the AM and PM peak hours, respectively. Existing AM peak hour operating conditions (levels of service) at the sixteen analyzed intersections are acceptable (at or better than LOS D) at all but one location, the 4th Street/Main Street intersection, where the minor street (4th Street) southbound approach operates unacceptably at LOS F. Existing PM peak hour operating conditions (levels of service) at the sixteen analyzed intersections are acceptable (at or better than LOS D) at all but two locations, the 4th Street/Main Street intersection and 6th Street/Main Street intersection, where both 4th Street approaches and the southbound driveway opposite 6th Street, operate unacceptably at LOS F. This poor level of service operation occurs due to high peak hour volumes on Main Street causing the minor, single-lane approaches at the 4th Street and 6th Street intersections to experience extended delay during the peak hour. It should be noted that this is not the case throughout the day at these intersections, when gaps in Main Street traffic are observed to be sufficient to permit side street turning movements without long delays; for most of the hours of the day, these intersections operate at good (acceptable) levels of service.

E. YEAR 2013 BASE CASE (WITHOUT PROJECT) INTERSECTION OPERATION

1. INTERSECTION LEVEL OF SERVICE

Tables 4 and 5 show future (year 2013) operating conditions (levels of service) at each intersection for the AM and PM peak hours, respectively. Year 2013 - without project operation at analyzed intersections would continue to operate acceptably, at or better than LOS D, with the exception of two side street stop sign-controlled intersections along Main Street (4th Street and 6th Street) where LOS would be an unacceptable LOS E during the AM peak hour for the 4th Street southbound approach and an unacceptable LOS F for both 4th Street approaches and for the southbound 6th Street approach during the PM peak hour.

F. PUBLIC BUS ACCESS

The project site is served by the Yolo County Transportation District (YCTD) through “Yolobus.” There are four local routes that provide service along Court Street, and one serves Main Street at East Street. Route 42A provides intercity bus service between Davis, Sacramento and Woodland, with a timed stop on East Street.

**Table 4
AM PEAK HOUR INTERSECTION LEVEL OF SERVICE**

INTERSECTION	AM Peak Hour			
	Existing	Near Term 2013	2013 Plus Project Alt 1	2013 Plus Project Alt 2
1. East Street/ Lemen Avenue. (Stop Sign)	B-13.3/A-8.2 (1)	NA	NA	NA
2. East Street/ North Street (Stop Sign)	B-12.8/A-8.5 (2)	C-25.3 (3)	C-23.3 (3)	C-23.1 (3)
3. Court Street/ 3 rd Street (Signal)	A-7.5 (3)	A-8.1 (3)	A-8.1 (3)	A-8.0 (3)
4. Court Street/ East Street (Stop Sign)	D-25.9/B-10.3 (2)	B-10.9 (7)	B-11.1 (7)	B-11.0 (7)
5. College Avenue/ Main Street (Signal)	A-8.1 (3)	A-7.7 (3)	A-7.6 (3)	A-7.6 (3)
6. Main Street/ 3 rd Street (Signal)	A-5.3 (3)	A-5.3 (3)	A-5.2 (3)	A-5.3 (3)
7. Main Street/ 4 th Street (Stop Sign)	D-26.7/ F-51.2 / A-8.4/A-8.1 (8)	C-23.0/ E-37.9 / A-8.2/A-8.1 (8)	C-23.9/ F-51.0 / A-8.2/A-8.2 (8)	D-26.8/ F-52.4 / A-8.3/A-8.2 (8)
8. Main Street/ 5 th Street (Stop Sign)	B-13.4 (5)	B-12.3 (5)	A-8.1 (3)	A-7.6 (3)
9. Main Street/ 6 th Street (Stop Sign)	B-15.0/C-23.8/ A-8.6/A-8.6 (8)	B-14.3/C-21.6/ A-8.3/A-8.5 (8)	C-24.4/D-30.3/ A-8.5/A-8.9 (8)	C-22.2/D-28.9/ A-8.6/A-8.8 (8)
10. Main Street/ East Street (Signal).	C-26.7 (3)	C-26.2 (3)	C-26.3 (3)	C-26.3 (3)
11. College Avenue/ Lincoln Avenue (All-Way Stop)	A-9.9 (6)	A-9.9 (6)	A-9.9 (6)	A-9.9 (6)
12. Lincoln Avenue/ 3 rd Street (All-Way Stop)	A-8.5 (6)	A-8.3 (6)	A-8.7 (6)	A-8.4 (6)
13. Lincoln Avenue /5 th Street (Stop Sign)	B-10.3/A-9.5 (4)	B-10.4/A-9.5 (4)	B-11.2/B-11.2 (4)	B-11.0/A-9.6 (4)
14. Lincoln Avenue/ 6 th Street (Stop Sign)	B-10.5/A-9.8 (4)	B-10.9/A-10.0 (4)	B-11.8/B-14.3 (4)	B-11.9/B-10.3 (4)
15. Cross Street/ Third Street (All-Way Stop)	B-10.6 (6)	B-10.1 (6)	B-10.2 (6)	B-10.1 (6)
16.. Cross Street/ East Street (Signal)	B-18.1 (3)	B-18.1 (3)	B-18.3 (3)	B-10.8 (3)

- (1) Side street stop sign controlled LOS – Average Control Delay in seconds – westbound left/ southbound left.
- (2) Side street stop sign controlled LOS – Average Control Delay in seconds – eastbound left/ northbound left.
- (3) Signalized LOS – Average Control Delay in seconds.
- (4) Side street stop sign controlled LOS – Average Control Delay in seconds – northbound approach/ Southbound approach.
- (5) Side street stop sign controlled LOS – Average Control Delay in seconds – northbound approach.
- (6) All-Way Stop Sign Controlled LOS – Average Control Delay in seconds.
- (7) Side street stop sign controlled LOS – Average Control Delay in seconds – eastbound right turn.
- (8) Side street stop sign controlled LOS – Average Control Delay in seconds – northbound approach/southbound approach/ eastbound left/ westbound left.

Bold typeface indicates unacceptable level of service operation per City standards.

Source: Crane Transportation Group

**Table 5
PM PEAK HOUR INTERSECTION LEVEL OF SERVICE**

INTERSECTION	AM Peak Hour			
	Existing	Near Term 2013	2013 Plus Project Alt 1	2013 Plus Project Alt 2
1. East Street/ Lemen Avenue. (Stop Sign)	B-13.9/A-8.0 (1)	NA	NA	NA
2. East Street/ North Street (Stop Sign)	C-23.3/A-8.9 (2)	C-32.2 (3)	C-23.8 (3)	C-23.8 (3)
3. Court Street/ 3 rd Street (Signal)	A-7.1 (3)	A-7.2 (3)	A-6.9 (3)	A-6.8 (3)
4. Court Street/ East Street (Stop Sign)	C-23.9/B-10.4 (2)	B-14.1 (7)	B-14.0 (7)	B-13.9 (7)
5. College Avenue/ Main Street (Signal)	A-7.6N(3)	A-7.8 (3)	A-7.0 (3)	A-7.0 (3)
6. Main Street/ 3rd Street (Signal)	A-5.3 (3)	A-5.2 (3)	A-4.8 (3)	A-4.9 (3)
7.Main Street/ 4 th Street (Stop Sign)	F->80.0/F->80.0/ A-8.7/A-9.2 (8)	F-> 80.0/ F-> 80.0/A-8.6/ A-8.8 (8)	F- 80.0/ F-> 80.0/ A-8.8/A-8.8 (8)	F- 80.0/ F-79.5/ A-8.7/A-8.8 (8)
8. Main Street/ 5 th Street (Stop Sign)	C-18.4 (5)	C-16.8 (5)	A-6.2 (3)	A-6.0 (3)
9. Main Street/ 6 th Street (Stop Sign)	C-19.8/ F-61.2 / A-8.8/A-9.8 (8)	C-17.8/ F-51.6 / A-8.8/A-9.5 (8)	D-30.6/ F-73.4 / A-8.8/A-9.6 (8)	C-24.5/ F-70.0 / A-8.8/A-9.6 (8)
10. Main Street/ East Street (Signal).	C-28.7 (3)	C-27.9 (3)	C-27.7 (3)	C-27.6 (3)
11. College Avenue/ Lincoln Avenue (All-Way Stop)	B-10.7 (6)	B-11.0 (6)	B-11.1 (6)	B-11.1 (6)
12. Lincoln Avenue/ 3 rd Street (All-Way Stop)	A-9.1 (6)	A-9.2 (6)	A-9.3 (6)	A-9.3 (6)
13. Lincoln Avenue /5 th Street (Stop Sign)	B-11.3/A-10.0 (4)	B-11.3/A-9.6 (4)	B-11.8/B-10.3 (4)	B-12.0/B-10.2 (4)
14. Lincoln Avenue/ 6 th Street (Stop Sign)	B-11.0/A-9.6 (4)	B-11.1/A-9.6 (4)	B-11.7/B-10.5 (4)	B-11.2/B-10.1 (4)
15. Cross Street/ Third Street (All-Way Stop)	B-10.0 (6)	B-10.2 (6)	B-10.2 (6)	B-10.2 (6)
16.. Cross Street/ East Street (Signal)	B-16.9 (3)	B-17.1 (3)	B-17.3 (3)	B-17.3 (3)

- (1) Side street stop sign controlled LOS – Average Control Delay in seconds – westbound left/ southbound left.
- (2) Side street stop sign controlled LOS – Average Control Delay in seconds – eastbound left/ northbound left.
- (3) Signalized LOS – Average Control Delay in seconds.
- (4) Side street stop sign controlled LOS – Average Control Delay in seconds – northbound approach/ southbound approach.
- (5) Side street stop sign controlled LOS – Average Control Delay in seconds – northbound approach.
- (6) All-Way Stop Sign Controlled LOS – Average Control Delay in seconds.
- (7) Side street stop sign controlled LOS – Average Control Delay in seconds – eastbound right turn.
- (8) Side street stop sign controlled LOS – Average Control Delay in seconds – northbound approach/southbound approach/ eastbound left/ westbound left.

Bold typeface indicates unacceptable level of service operation per City standards.

Source: Crane Transportation Group

G. PLANNING CONTEXT

Woodland General Plan

The city adopted its general plan on 17 December 2002. The General Plan consists of the following two documents:

- *General Plan Summary* – The Summary provides background information about the General Plan and reviews the plan’s guiding principles and major themes and proposals.
- *Policy Document* – The Policy Document contains the city’s formal statements of the General Plan policy in the form of goals, policies, standards, and implementation programs. The General Plan elements reviewed in the preparation of this traffic study include *Transportation and Circulation* and *Public Facilities; Health and Safety*.

Downtown Specific Plan

The Downtown Specific Plan was adopted by the City Council in August 2003, and is consistent with the direction and policy of the General Plan. Specific to transportation issues, the Downtown Specific Plan was developed concurrently with the City’s General Plan Update to address:

- Removal or update of concepts that are now considered outdated, e.g., the proposed two-way couplet on Lincoln Avenues and Court Street;
- Provide information on current and future traffic flows in the Downtown area and improvements needed to maintain adequate levels of service in the Downtown area;
- Intersection level of service standards and applicable areas of town for each standard.

IV. PROJECT IMPACTS

Significance Criteria

The following criteria have been used for this study to determine impact significance. They are consistent with standards employed by the City of Woodland in its Draft Impact Analysis Guidelines (2003), General Plan Update (2002) and Level of Service Guidelines (2002).

The proposed project would have significant impacts relating to transportation and circulation if traffic resulting from the project would lead to any of the outcomes listed below:

- The level of service at a signalized intersection degrades from LOS C or D or better under existing or future base case conditions to LOS E or F under with-project conditions.

- Create inconsistencies with the road system policies or standards of plans adopted by the City of Woodland, Yolo County, the Yolo County Transportation District, or Caltrans.
- Create conflicts between modes of transportation;
- Result in a demand for parking substantially greater than the parking supply;
- Create demand for public transit services above that which is provided or planned to be provided by the Yolo County Transportation District;
- Does not provide sheltered public transit stops with turnouts, where sufficient population or employment concentrations warrant an existing or future bus route;
- Does not install and finance pedestrian pathways, as appropriate;
- Disrupt existing bicycle facilities or interfere with planned bicycle facilities;
- Does not include on-site bicycle facilities in accordance with the Bikeway Master Plan.

A. DESCRIPTION OF THE PROPOSED PROJECT

The new courthouse would front on Main Street, occupying the block bounded by Main Street, 5th Street, 6th Street and Lincoln Avenue. It would include 14 courtrooms and the administrative components necessary to operate the courts. The new facility would consolidate seven existing courthouse facilities in Woodland into one new building. All facilities planned for consolidation are currently located in downtown Woodland, in close proximity to the project site. Courthouse days and hours of operation would be the same as today: Monday through Friday, 8:00 AM to 5:00 PM (or as late as jury trials go, sometimes as late as 6:00 PM).

New signalized intersection: The project would provide a signalized intersection at the 5th Street/Main Street intersection. It would be equipped with pedestrian controls and crosswalks to facilitate pedestrian access to and from the 26-space staff parking lot located at Court Street/3rd Street.

Improved sidewalks around the site perimeter and pedestrian-friendly access throughout the site: The existing sidewalks along Main Street, Lincoln Avenue, 5th and 6th streets are in need of repair, and would be replaced consistent with AOC-approved design standards as part of the project.

Bicycle facilities: The courthouse would provide for bicycle access and parking, consistent with the City's Bicycle Master Plan and AOC-approved designs.

Transit access and facilities: The AOC would work with the Yolo County Transportation District to provide bus service and bus facilities convenient to encouraging use of public transit to and from the proposed new courthouse.

The facility would have 198 parking spaces on site, including secured (restricted) parking spaces for judicial officers. Access to all on-site public parking areas would be via driveway connections to 5th and 6th streets. Sheriff's vehicle/bus access and judicial access would be via a two-way driveway intersecting Lincoln Avenue. There would be no public access via the Avenue driveway. An additional 26 parking spaces would be reserved for the court at the existing above-mentioned Court Street parking lot, and an additional 197 off street parking spaces would be provided nearby at either:

Project Parking Alternative 1: the Union Pacific parcel, located in the southeast quadrant of the Lincoln Avenue/6th Street intersection; this is Project Parking Alternative 1,

or

Project Parking Alternative 2: in four nearby lots: two lots located along 4th Street providing 66 spaces, one lot located at Lincoln Avenue and 6th Street (northeast quadrant) providing 81 spaces, and one located at 901 Main Street, providing 50 spaces.

Detainee buses would travel to the site via Main Street, turning right onto 5th Street if traveling from the west, or turning left on 6th Street if traveling from the east, then turning onto Lincoln Avenue to enter the courthouse driveway. The sallyport would be located in the building's basement. Buses would exit the sallyport and turn left or right onto Lincoln Avenue, then proceed to 5th Street or 6th Street, turning onto East Main Street.

Access and Parking at the New Courthouse

Visitors and staff accessing the new courthouse would, in general, travel the same routes as they currently travel to access the courthouse locations in Downtown Woodland. This is a key element of the traffic study for this project: most of the traffic that would be accessing the new courthouse is *currently on the roadway system, whether arriving from within the city, or driving from somewhere in the region*. The major routes followed today to access existing court facilities in Woodland would be the same routes followed to access the new facility, until reaching the downtown area. The following description provides a sampling of the many routes that are followed today to access court facilities, generally applicable to *major routes* taken to access existing court facilities.

- For visitors and staff traveling from the north on East Avenue, instead of turning right onto Court Street, they would continue to Main Street, turning left (west) on Main Street then turn left onto 6th Street or 5th Street to access the New Courthouse parking lot. For those turning left on Main Street today, they would then turn left onto 6th or 5th streets.
- For visitors traveling from the east along Main Street, instead of turning right onto East Avenue, then turning left at Court Street, they would continue west on Main Street then turn left onto 6th Street or 5th Street to access the New Courthouse parking lot. For those continuing west of Main Street today, they would then turn left onto 6th or 5th streets.
- For visitors traveling from the south along East Street, instead of turning left onto Court Street, they would turn left to travel west on Main Street, then turn left onto 6th Street or 5th Street to access the New Courthouse parking lot. For those turning left at Main Street today, they would then turn left onto 6th or 5th streets.

- For visitors traveling from the west along Main Street, instead of turning left to access court facilities, they would turn right, to access parking in the near vicinity of the courthouse, via 5th or 6th streets to reach the New Courthouse parking lot.
- Visitors traveling north on College Avenue from south of downtown Woodland could divert to Lincoln Avenue or other local streets to reach the New Courthouse from the south.

Visitors would park, then access the courthouse as pedestrians via a public entrance fronting Main Street; the majority of staff would access the courthouse as pedestrians using either the public entrance on Main Street or the staff entrance located on the south side of the courthouse. The judges assigned to the new courthouse, and some of the executive staff, as well as delivery and maintenance vehicles, would have access via Lincoln Avenue and would use the on-site parking.

Based on surveys completed at the existing facilities, a small percent of staff and visitors use alternatives modes of transportation i.e., carpool passenger, walking or a combination of these, to get to existing court facilities, including:

Staff: 2 % walk, 2% carpool passenger or drop-off
 Public: 5 % walk, 10% carpool passenger or drop-off

These alternative modes of transportation have been included in the analysis to determine net new vehicle trip generation for the project site.

B. PROJECT VEHICLE TRIP GENERATION

1. INBOUND TRAFFIC – AM PEAK HOUR

The following describes inbound courthouse traffic based on counts and surveys conducted November 16, 2009. Peak traffic generation occurs when the courts have a full-schedule and are fully staffed. This occurred on Monday, November 16. There were six (6) jury panels associated with this court day, with three panels reporting in the morning, and three in the afternoon.

Staff Arrivals

The majority of court staff arrived at or before 8:00 AM, with a few arriving later, but no later than 8:30 AM @ 1 vehicle per staff member. Staff consisted of:

81	(Historic Courthouse, 725 Court St.)
5	(Old Jail, Department 9, 213 Third St.)
22	(Fiscal, Human Res. and Traffic Dept., 601/603 Court St.)
8	(Traffic/Small Claims/UC and Drug Ct, 275 First St.)
<u>12</u>	<u>(Family Law, 1100 Main St.)</u>
128	(Total)

128 total staff members, minus the 4% (or 5 staff members) that travel via alternative modes of transportation equals 123 total vehicles arriving at the new courthouse during a peak day. The 4% alternative mode factor was determined through written survey responses at the existing facilities.

Total Staff Arrivals 7:45 - 8:45 AM: 123 vehicles

Visitor Arrivals

The greatest number of visitors arrive between 8:00 and 8:45 AM. Visitors consist of:

- 126 (jurors, at the Historic Courthouse, 725 Court St.)
- 92 (legal staff, visitors, public and others at the Historic Courthouse, 725 Court St.)
- 45 (at the Old Jail, Department 9, 213 Third St.)
- 2 (at the Fiscal, Human Res. and Traffic Dept., 601/603 Court St.)
- 35 (at the Traffic/Small Claims/UC and Drug Ct, 275 First St.)
- 42 (at Dept.14/15, 1100 Main St.)
- 342 (Total)

342 total visitors, minus the 15% (or 51 visitors) that were found to travel via alternative modes of transportation equals 291 vehicles arriving at the courthouse facilities during a peak day. The 15% alternative mode factor was determined through written survey responses at the existing facilities.

Total Staff + Visitor Arrivals 7:45 - 8:45 AM: 414 vehicles

2. OUTBOUND PROJECT TRAFFIC – AM PEAK HOUR

Outbound traffic is based on counts and survey responses. There were a large number of brief stays for early arrivals, occurring at the 275 First Street facility and 725 Court St - Historic Courthouse. There were some drop-offs (i.e., the outbound trip from having dropped off a staff member or visitor), and trips include a few outbound delivery or maintenance vehicles.

Total outbound vehicles 7:45 – 8:45 AM: 102 vehicles

3. INBOUND AND OUTBOUND PROJECT TRAFFIC – PM PEAK HOUR

There would be six (6) *jury panels* associated with this court day, with three panels reporting in the morning, and three in the afternoon. Two of the three afternoon jury court sessions ran until 5:15 PM.

The volume of inbound and outbound traffic to and from the courts during the afternoon was substantially less than the morning peak period. By 4:00 PM Department 9 and Traffic and Small Claims courts had little to no activity, and visitors to and from all other court facilities had greatly lessened. However, on the survey day, two of the three afternoon jury court sessions ran until 5:15 PM.

Total PM peak hour vehicle trips were determined to be **50 inbound and 163 outbound.**

4. PROJECTED INBOUND PLUS OUTBOUND PROJECT TRAFFIC AT THE PROPOSED NEW COURTHOUSE - AM AND PM PEAK HOURS

The proposed project would add one courtroom and, by 2013, court visitors and staff might experience slight increases. Based on the survey data, the new court facility would be expected to generate at most, on a peak activity day during the AM peak commute traffic hour, 430 inbound and 106 outbound trips. During the PM peak commute traffic hour, the new court facility would be expected to generate at most 52 inbound and 166 outbound trips.

C. PROJECT TRIP DISTRIBUTION

AM and PM Peak Hour Trip Distribution of peak activity day: Trips to and from the court facilities, based on all survey responses.

Inbound and Outbound Trips:

48 % within Woodland, distributed evenly in all directions.

52 % within region, distributed as follows:

5 % to/from north
24 % to/from east
15 % to/from south
8 % to/from west

D. PARKING AT THE PROPOSED NEW COURTHOUSE

The parking choices for staff and visitors to the new courthouse would be vastly improved in contrast to existing conditions, with a planned minimum of 421 off-street parking spaces dedicated to court use (under parking Alternative 2). Parking Alternative 1, which would provide off-site parking on the nearby Union Pacific parcel, could provide in excess of the planned 421 minimum. In addition, there would be extensive on-street parking available with either alternative. During periods of peak demand, the available parking supply would be expected to exceed 480 spaces. This is the parking requirement for the new courthouse as determined in the City's recent parking study for the downtown.³

³ *City of Woodland Downtown Parking Analysis*, Fehr and Peers, September 28, 2009.

E. BACKGROUND SYSTEM OF TRAFFIC VOLUMES TO WHICH PROJECT TRAFFIC IS ADDED

The component of courthouse traffic to be relocated was determined (see appendix Figures A and B), and removed from the roadway network prior to re-distributing it back onto the roadway system according to the location of available parking facilities at the proposed New Courthouse. Trip distribution varies according to parking destinations. Trips were distributed to the “Project Site plus UP Parking Lot” (Parking Alternative 1), or to the “Project Site plus Other Nearby Parking Lots” (Parking Alternative 2).

Project-generated traffic at the proposed project site is conservatively considered to include all trips to the existing court facilities, with the exception of the following:

- 26 parking spaces currently reserved for court and county employees will be reserved for court employee use at the existing parking lot located in the northeast quadrant of the Court Street/3rd Street intersection.
- 54 inbound vehicles currently arriving at the Yolo Superior Courthouse located at 1100 Main Street will follow the same route taken today (to the 6th Street access driveway) to access the project site via 6th Street.

All other courthouse traffic traveling inbound and outbound during the 7:45 – 8:45 AM ambient traffic peak hour, and all traffic traveling inbound and outbound during the 4:30 – 5:30 ambient PM traffic peak hour is considered “net new” to the streets serving the proposed project site.

Resultant 2013 + Project Volumes for the AM and PM peak hours are shown on **Figures 8 through 11**.

F. INTERSECTION OPERATION

1. INTERSECTION LEVEL OF SERVICE

Year 2013 Base Case + project operating conditions (levels of service) at each analyzed intersection for the weekday AM and PM peak hours will continue at or better than LOS D at all intersections, with the exception of those operating unacceptably at LOS E or F under base case (without project) conditions. At the intersections with existing and 2013 (without project) unacceptable operation, it is expected that the project’s addition of a traffic signal at the Main Street/ 5th Street intersection will provide an attractive alternative, as drivers may choose to divert by one block east or west to take advantage of lesser delays for turns from this improved intersection. Project traffic would not result in any analyzed intersection currently operating acceptably to operate unacceptably with the addition of project volumes, thus, the project is considered to result in no significant impacts to intersection operation.

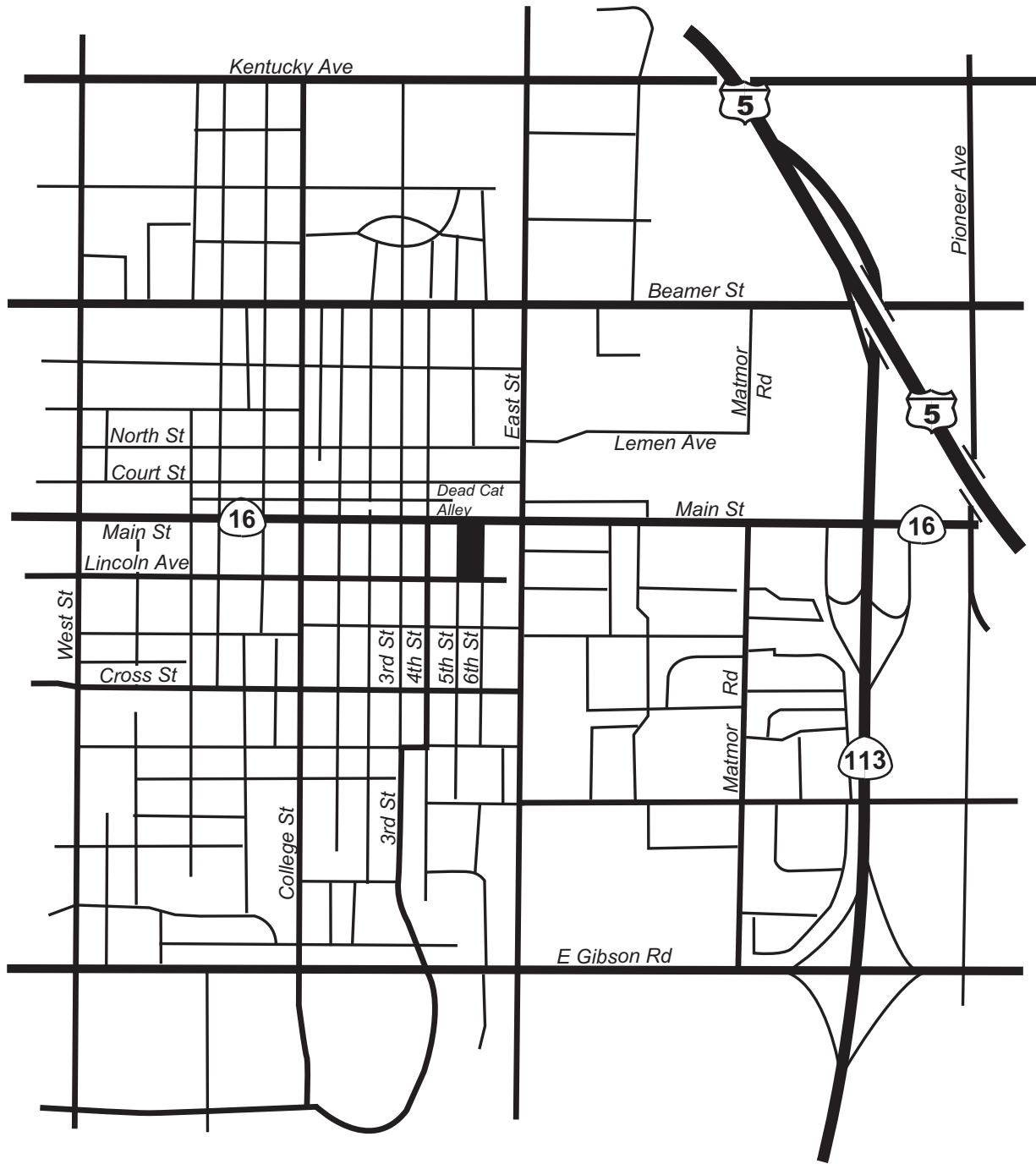
G. EMERGENCY ACCESS.

The AOC's development of the project site will conform to recommendations of the Superior Court of California (Yolo County), the Yolo County Sheriff's Department, and the City of Woodland Fire Department to ensure adequate emergency access. The proposed project does not include closure of any public through street that is currently used for emergency services, and would not be expected to interfere with the adopted emergency response plan. Therefore, no significant impacts are anticipated.

H. PUBLIC TRANSIT, PEDESTRIAN AND BICYCLE ACCESS.

The proposed project would not be expected to conflict with adopted policies, plans, or programs supporting alternative transportation. Bus transportation is available to the project site today, and the AOC will work with the Yolo County Transportation District (YCTD) to determine the appropriate level of transit access and facilities that should be provided at the proposed New Courthouse. Bicyclists would have access to the site via the Class III Bike Route (on-street, signed) along Lincoln Avenue. Bicycle parking would be provided on the site in compliance with city and state standards. Therefore, no significant impacts are anticipated in this regard. Pedestrian access to and from the site would be an issue of careful focus for the site, with pedestrian signal and crosswalks provided at the 5th Street/Main Street intersection. Sidewalks would be replaced and re-designed along the perimeter of the site and pathways would be provided to direct pedestrians through the site. No significant impacts are anticipated in relation to provision of good pedestrian access.

Not To Scale



 = Project Site

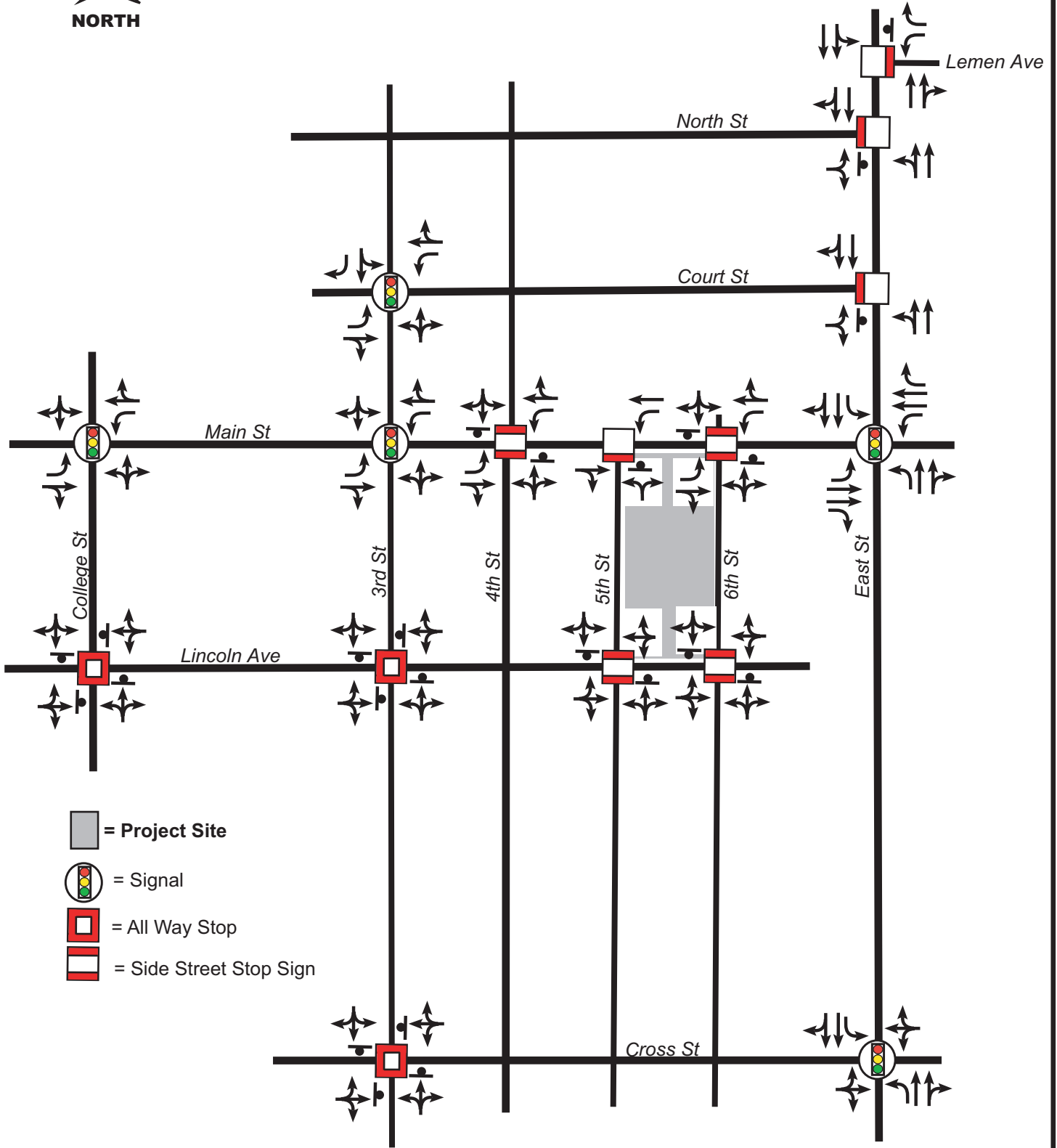
New Yolo County Superior Courthouse Traffic Impact Analysis



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Figure 1
Area Map

Not To Scale



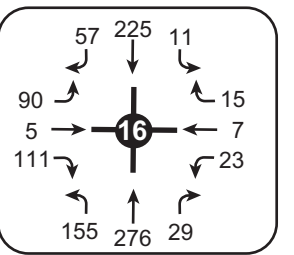
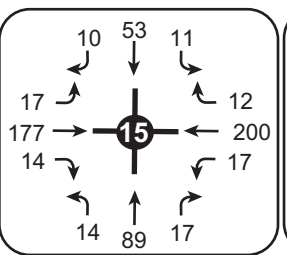
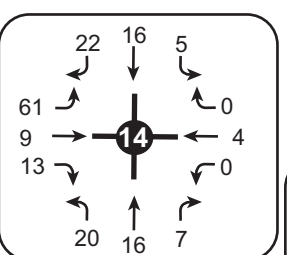
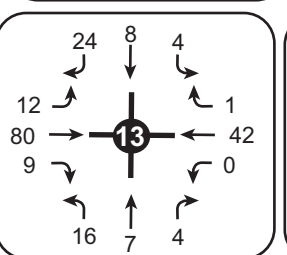
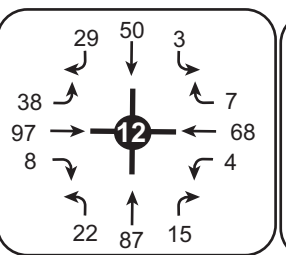
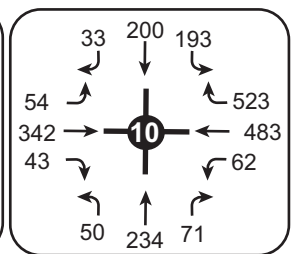
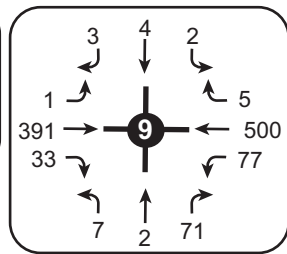
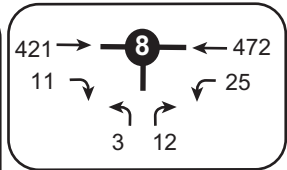
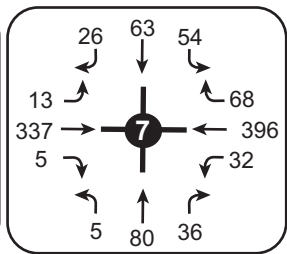
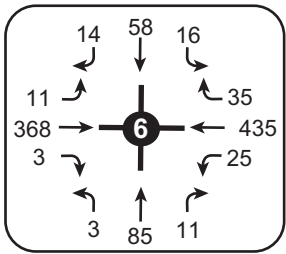
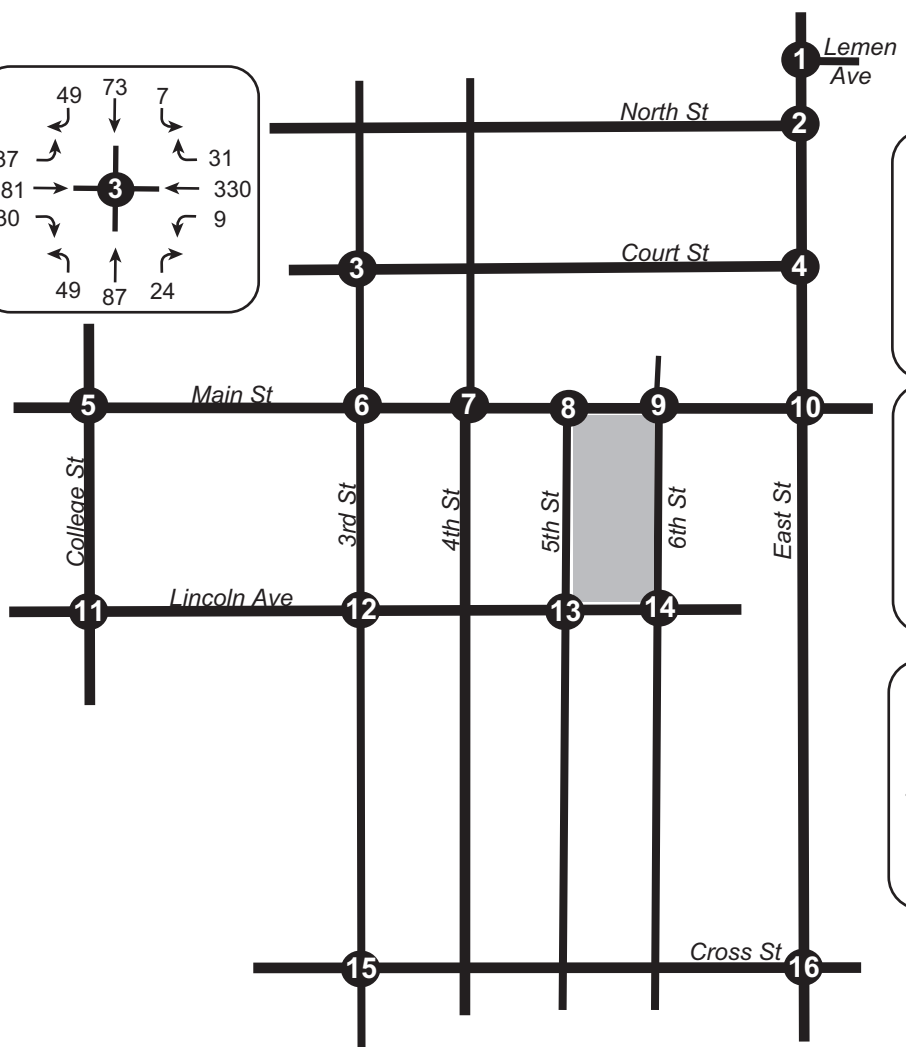
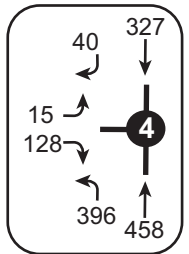
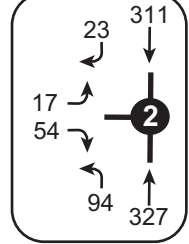
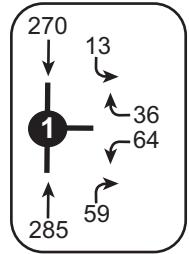
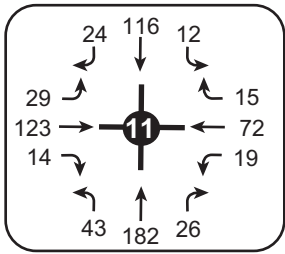
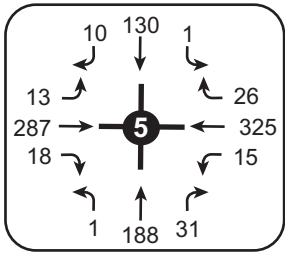
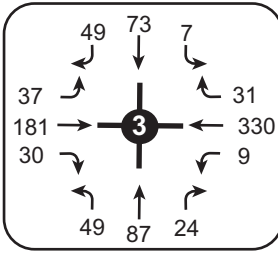
New Yolo County Superior Courthouse Traffic Impact Analysis

Figure 2
Existing
Intersection Lane Geometrics
and Control



CRANE TRANSPORTATION GROUP

Not To Scale



= Project Site

New Yolo County Superior Courthouse Traffic Impact Analysis

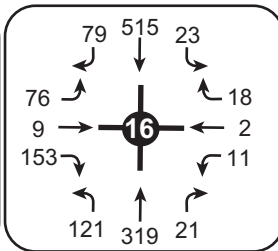
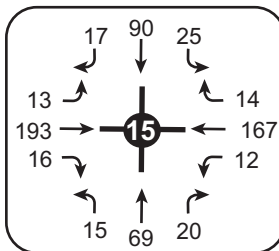
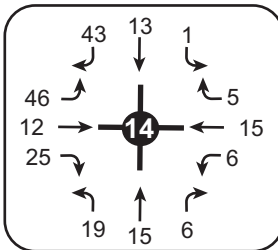
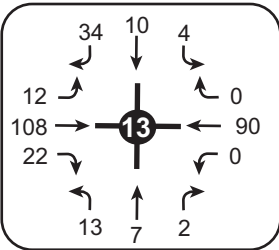
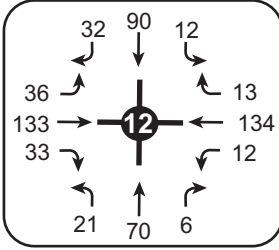
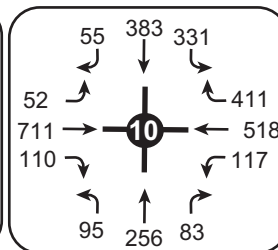
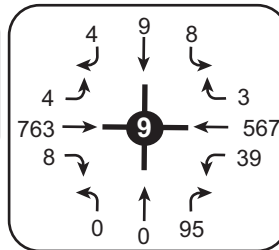
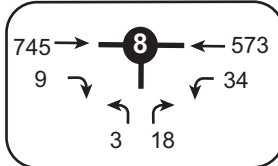
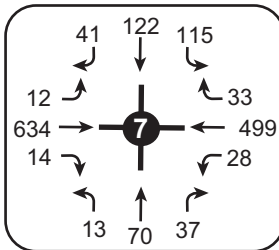
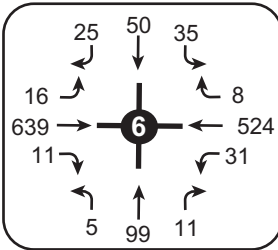
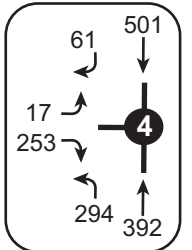
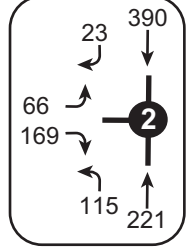
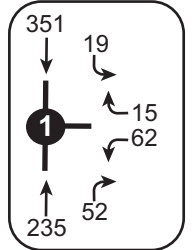
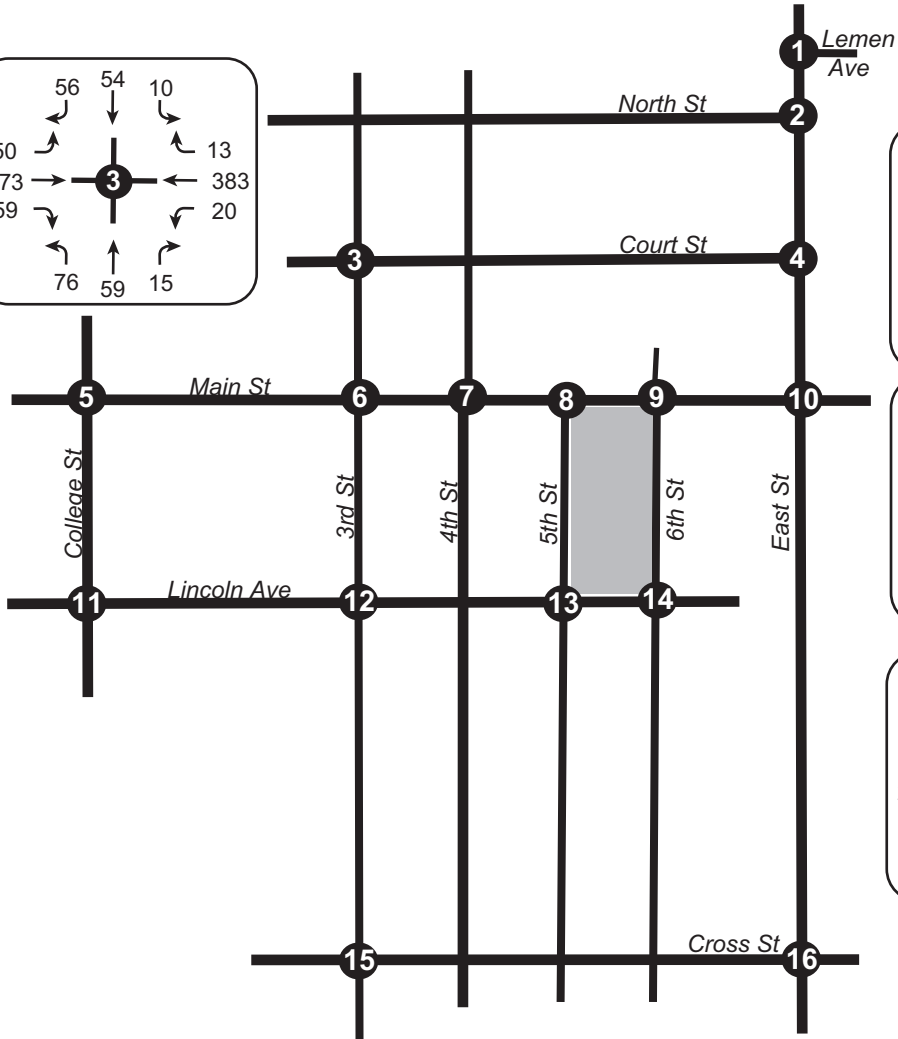
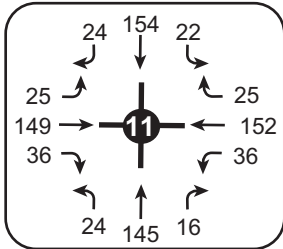
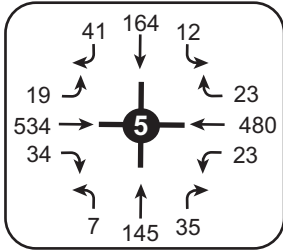
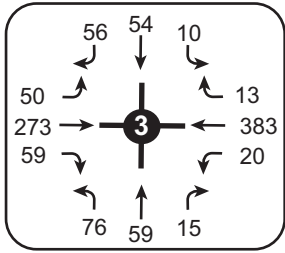


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Figure 3

Existing AM Peak Hour Volumes

Not To Scale



= Project Site

New Yolo County Superior Courthouse Traffic Impact Analysis

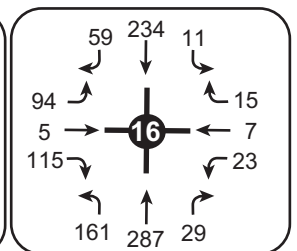
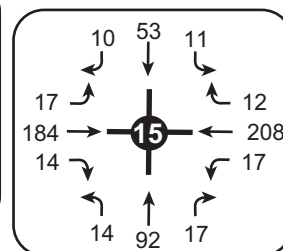
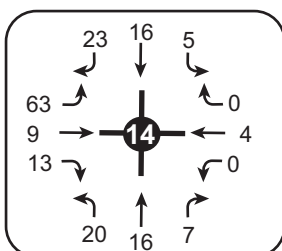
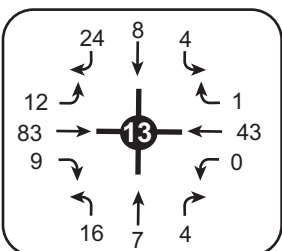
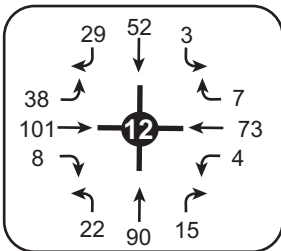
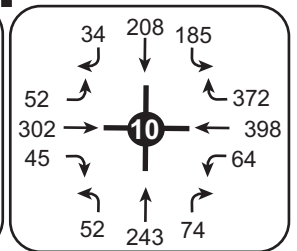
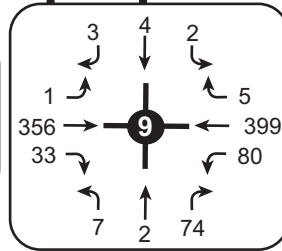
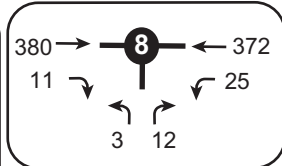
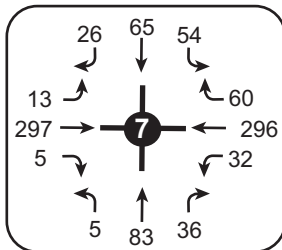
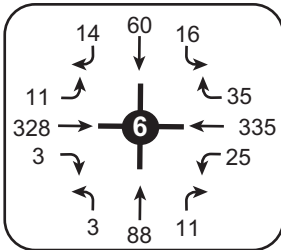
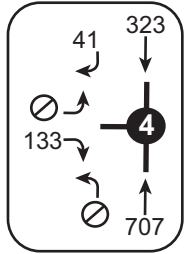
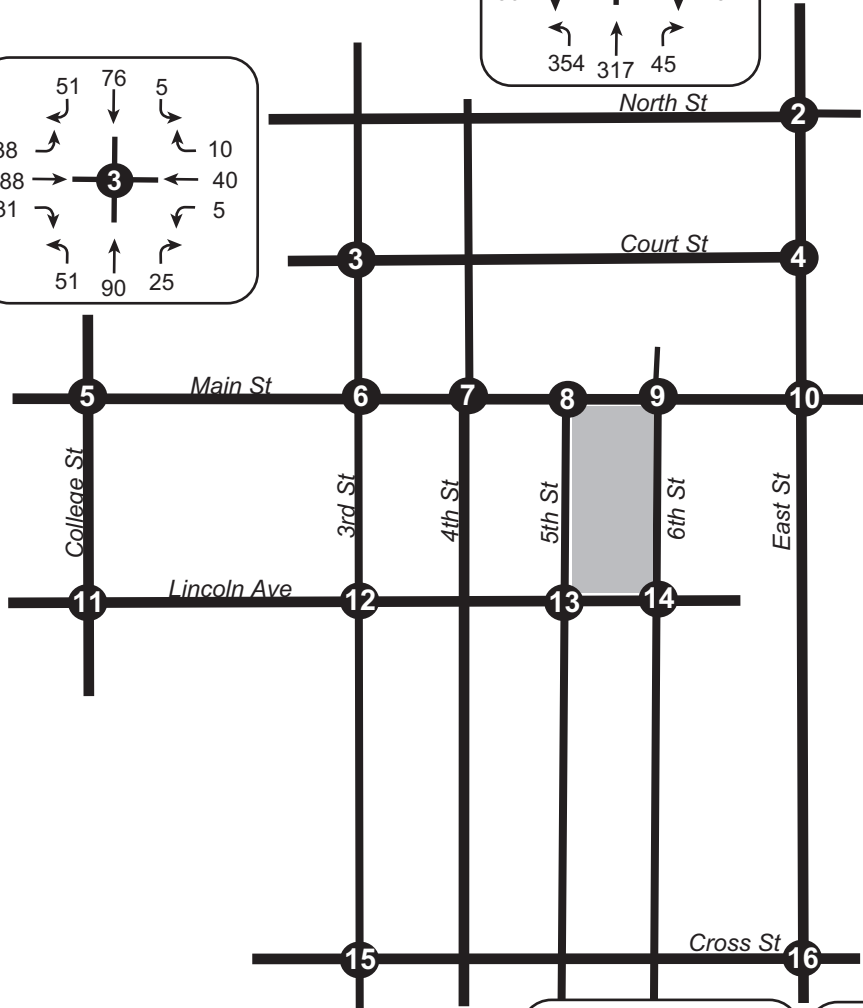
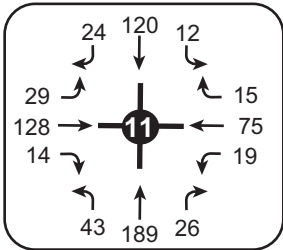
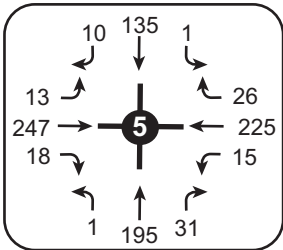
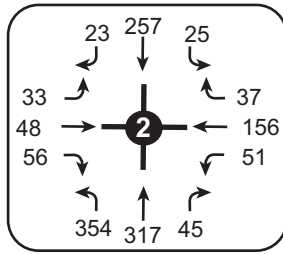
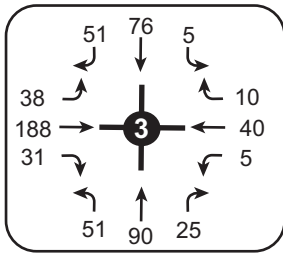
Figure 4

Existing PM Peak Hour Volumes



CRANE TRANSPORTATION GROUP

Not To Scale



= Project Site

New Yolo County Superior Courthouse Traffic Impact Analysis

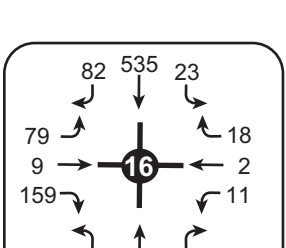
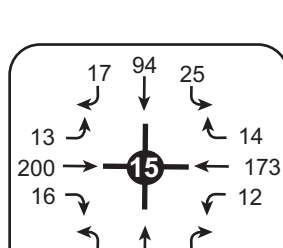
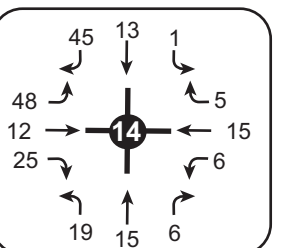
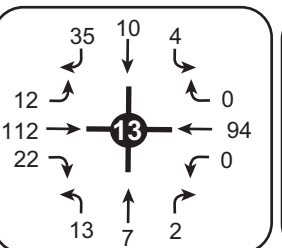
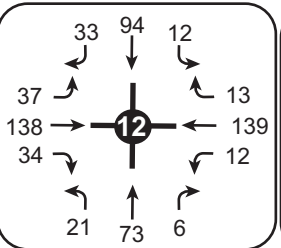
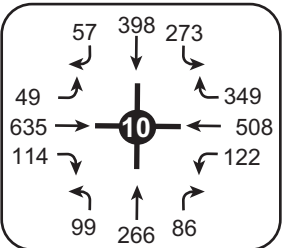
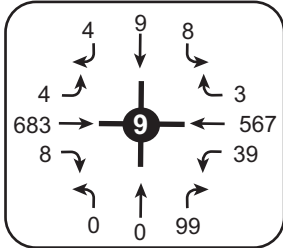
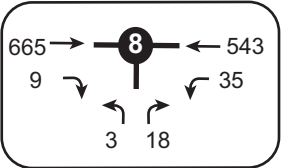
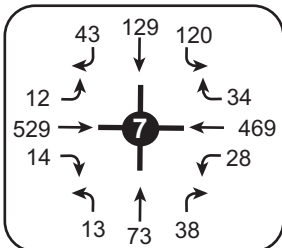
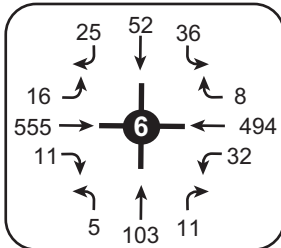
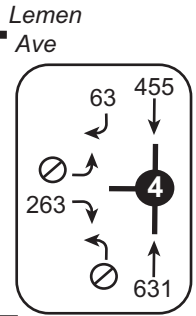
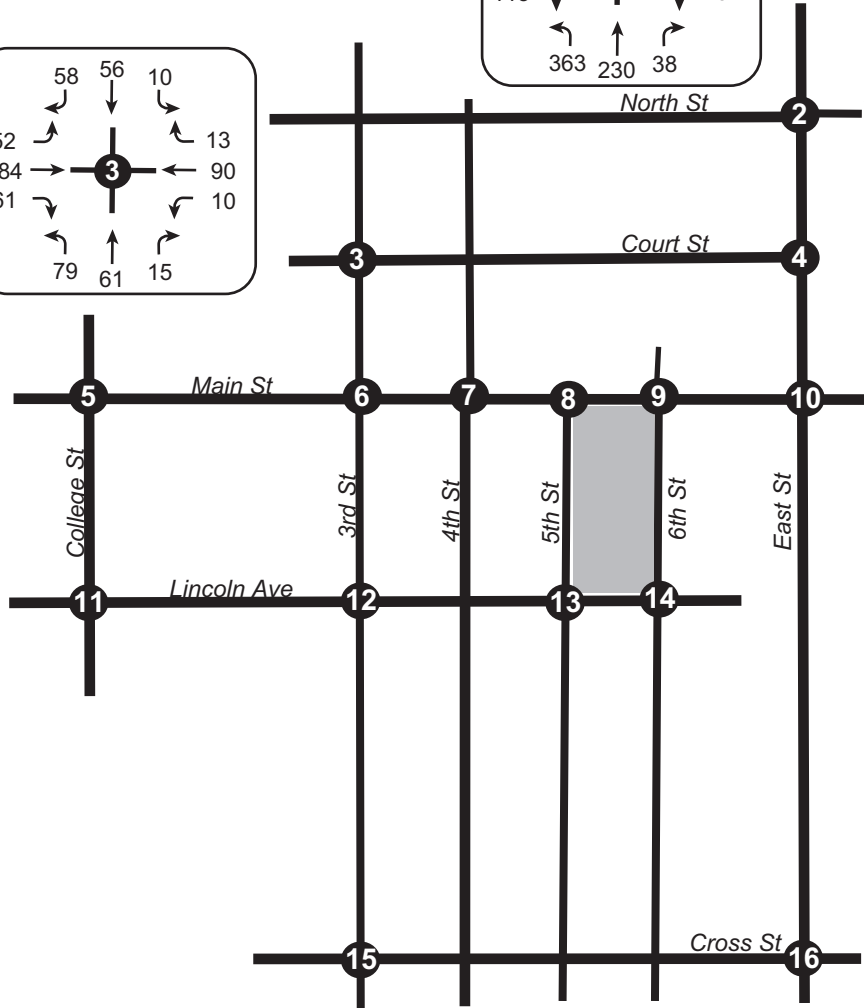
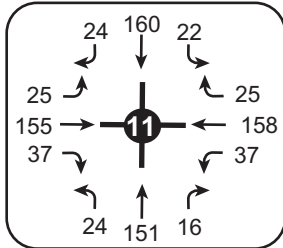
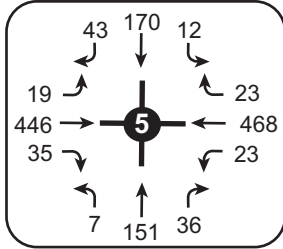
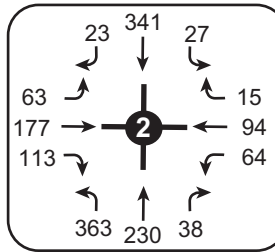
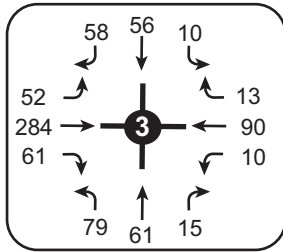
Figure 5

Year 2013 Base Case (Without Project)
AM Peak Hour Volumes



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Not To Scale



= Project Site

New Yolo County Superior Courthouse Traffic Impact Analysis

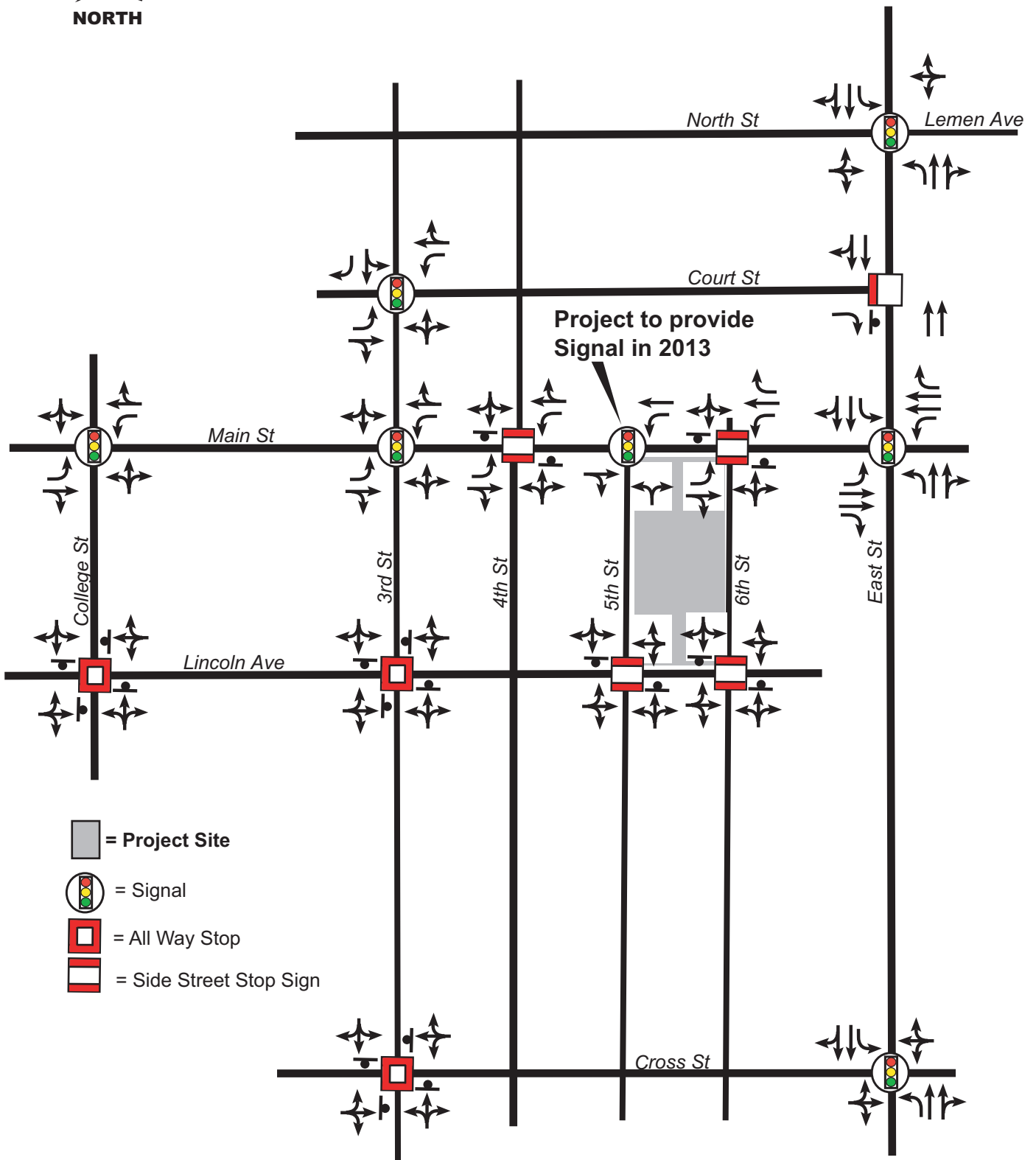
Figure 6

**Year 2013 Base Case (Without Project)
PM Peak Hour Volumes**



CRANE TRANSPORTATION GROUP

Not To Scale



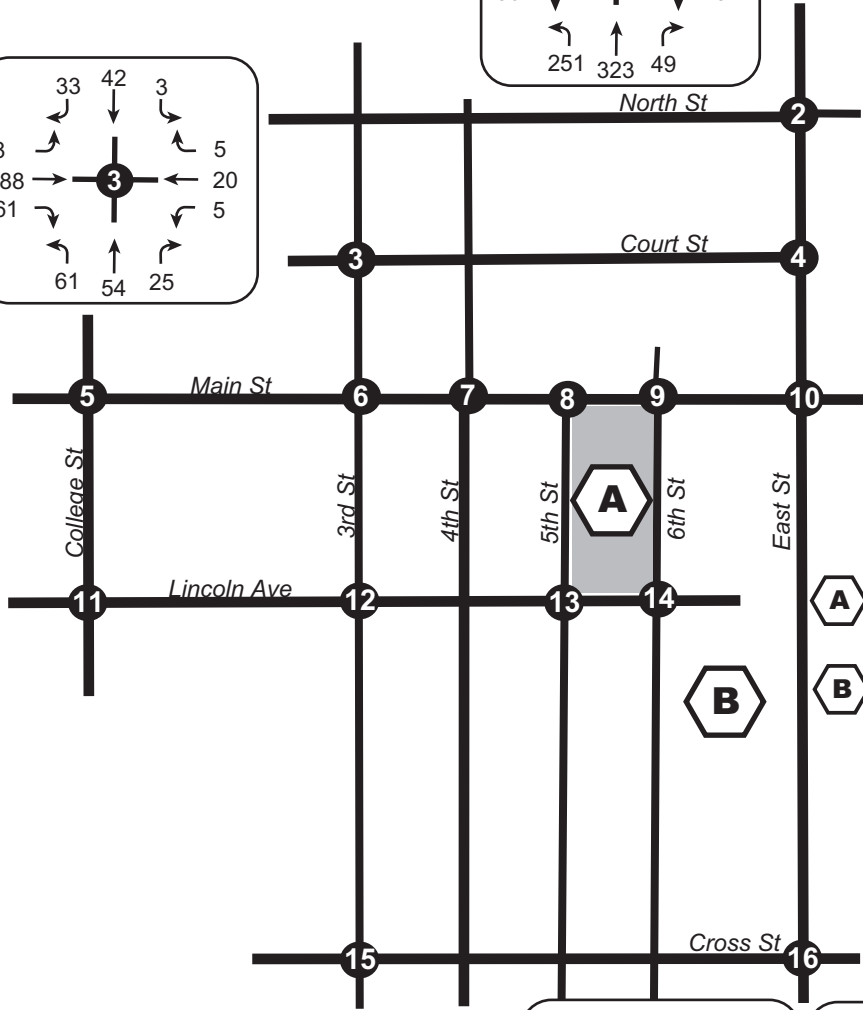
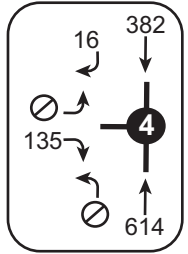
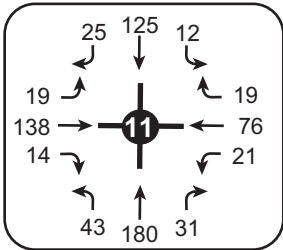
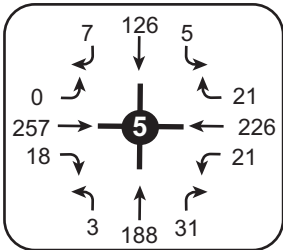
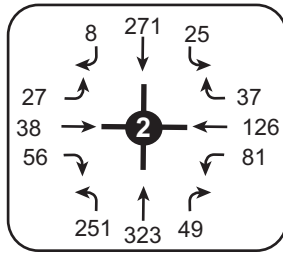
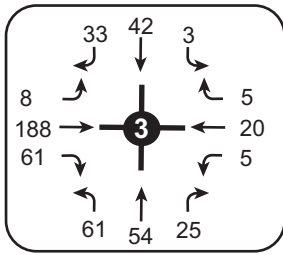
New Yolo County Superior Courthouse Traffic Impact Analysis

Figure 7
Year 2013
Intersection Lane Geometrics
and Control



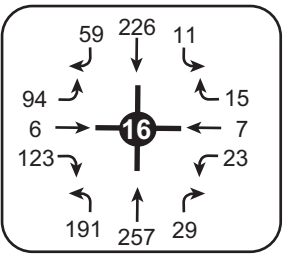
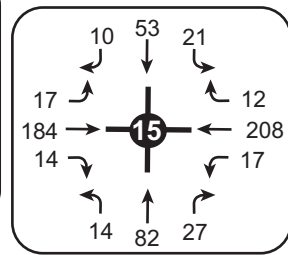
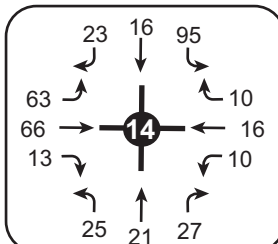
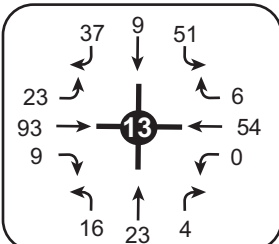
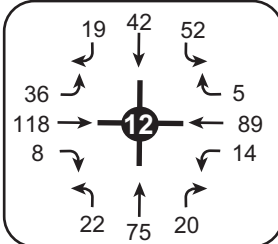
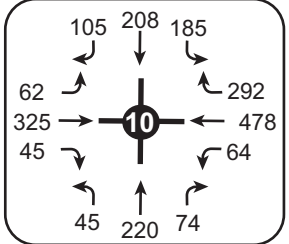
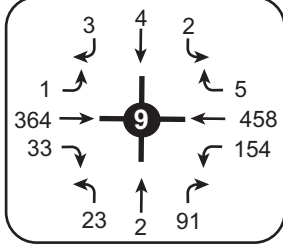
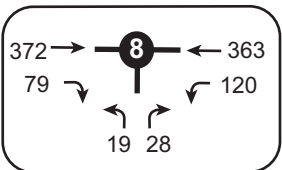
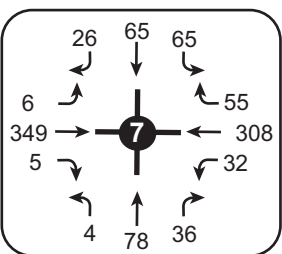
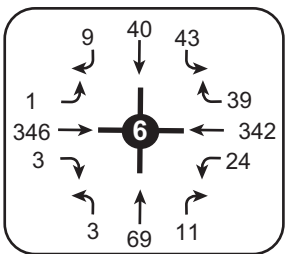
CRANE TRANSPORTATION GROUP

Not To Scale



A = Project Site
198 spaces

B = UP Site
Unlimited spaces



= Project Site

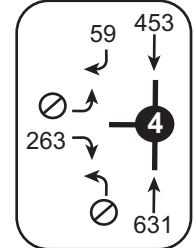
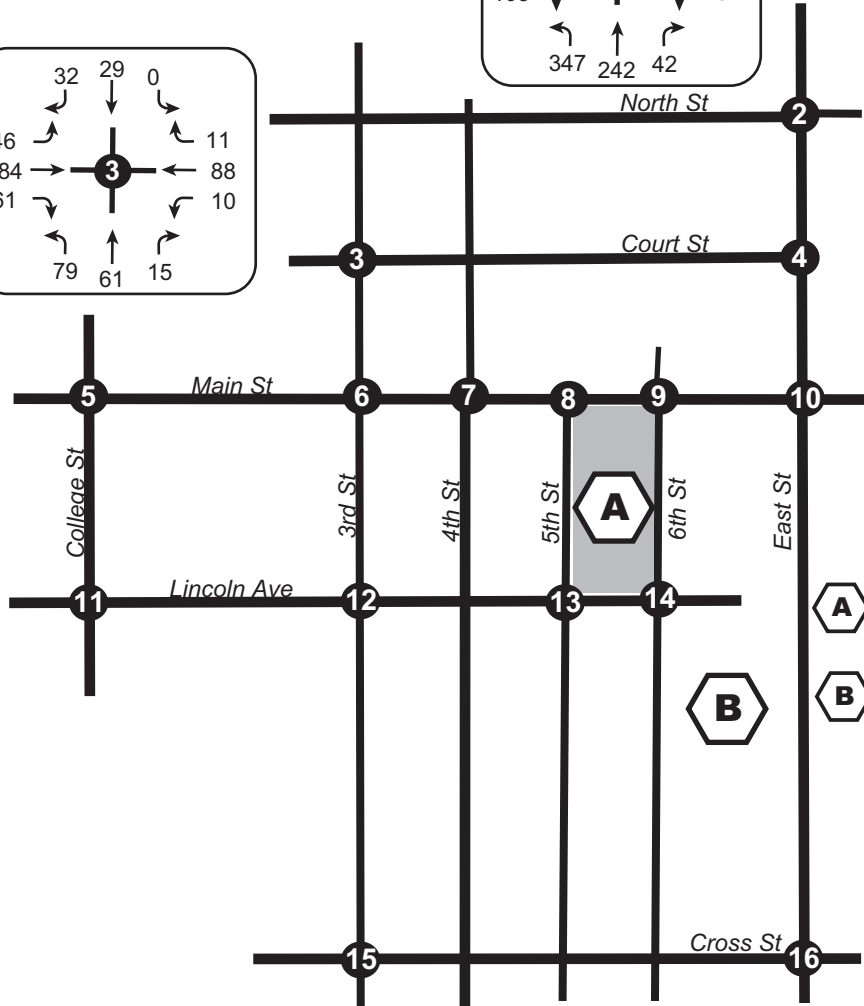
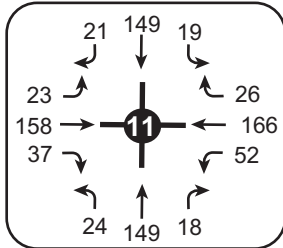
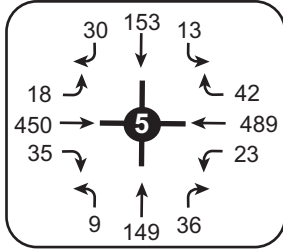
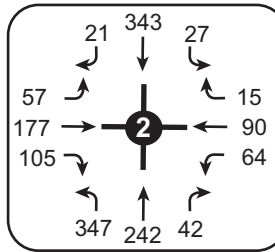
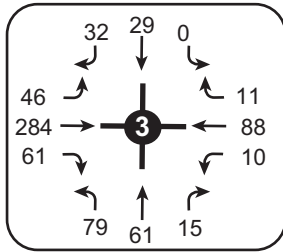
New Yolo County Superior Courthouse Traffic Impact Analysis



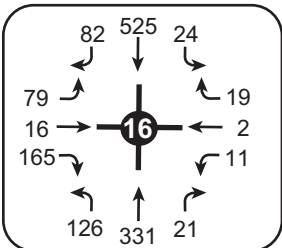
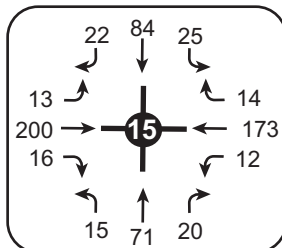
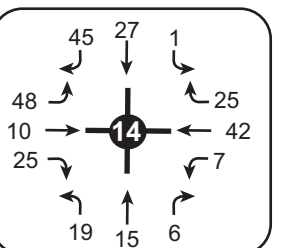
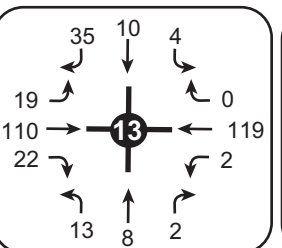
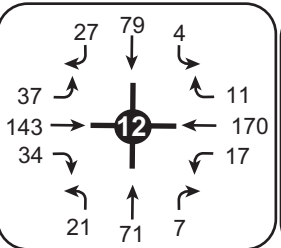
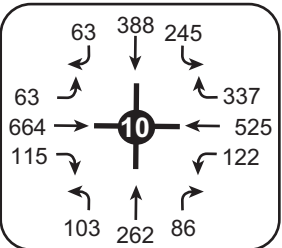
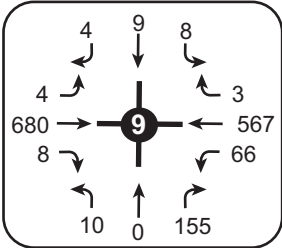
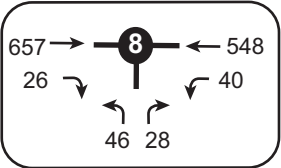
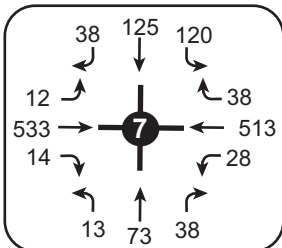
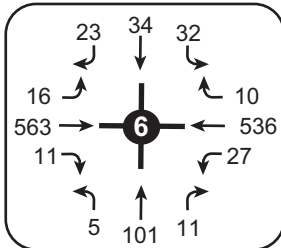
CRANE TRANSPORTATION GROUP

Figure 8
Year 2013 Base Case + Project Alt 1
AM Peak Hour Volumes

Not To Scale



- = Project Site
198 spaces
- = UP Site
Unlimited spaces



= Project Site

New Yolo County Superior Courthouse Traffic Impact Analysis

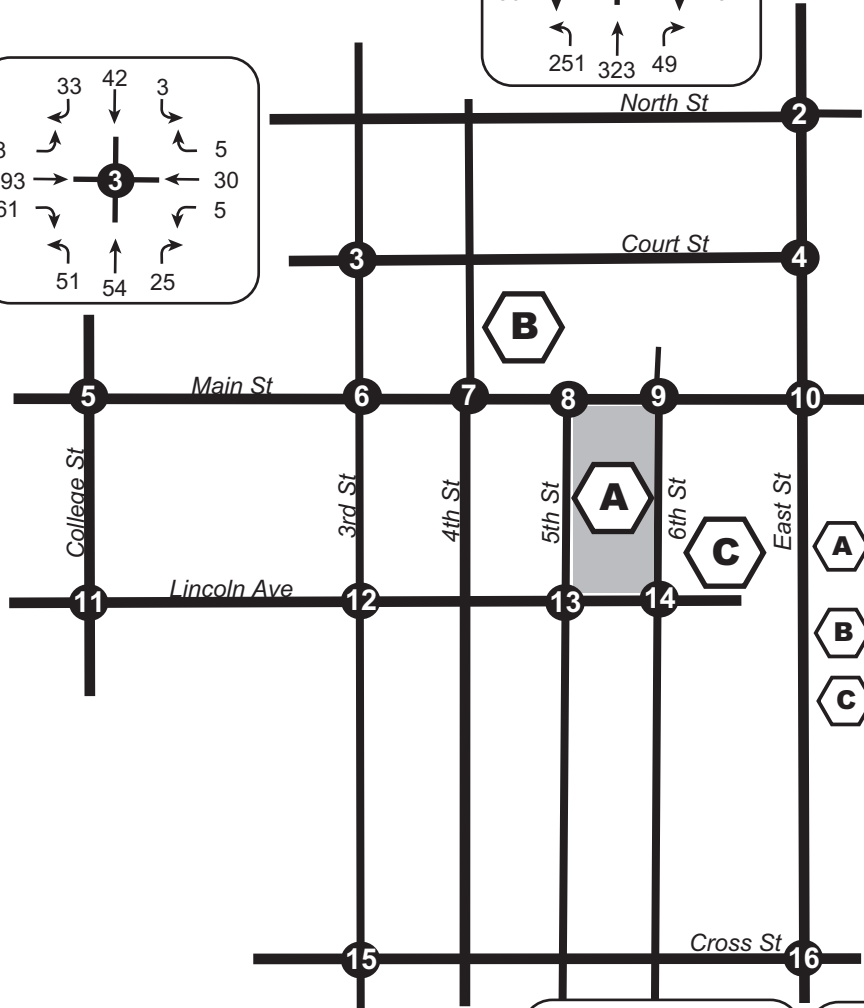
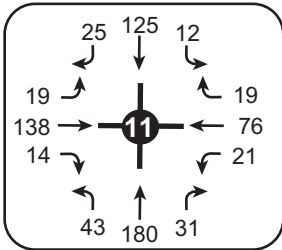
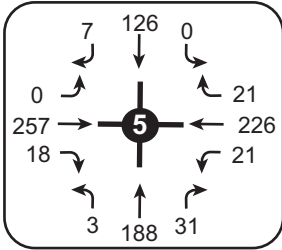
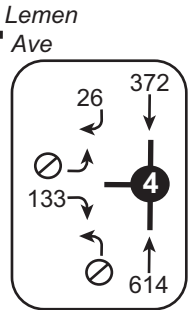
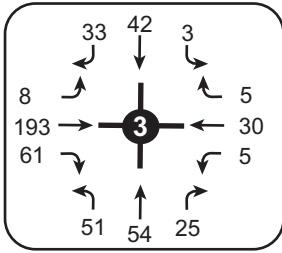
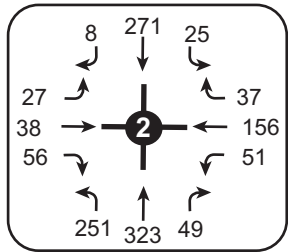
Figure 9

**Year 2013 Base Case + Project Alt 1
PM Peak Hour Volumes**

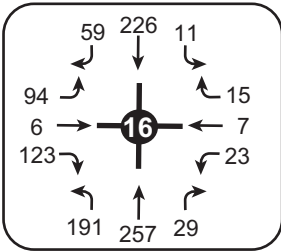
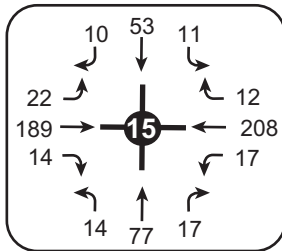
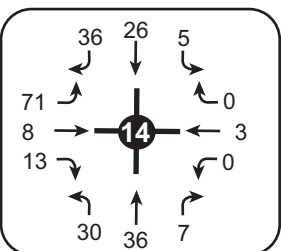
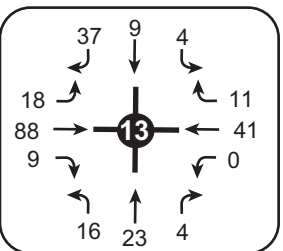
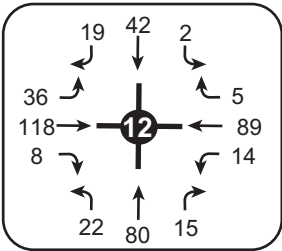
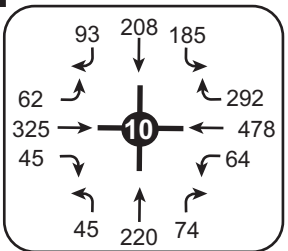
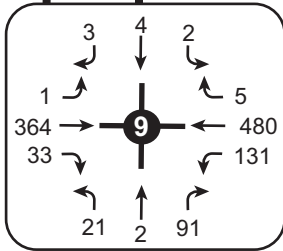
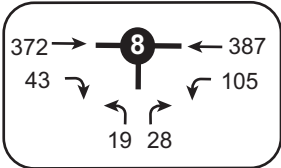
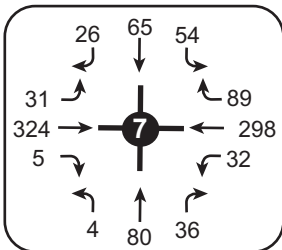
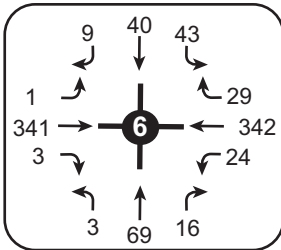


CRANE TRANSPORTATION GROUP

Not To Scale



- A** = Project Site
198 spaces
- B** = 116 spaces
- C** = 81 spaces



= Project Site

New Yolo County Superior Courthouse Traffic Impact Analysis

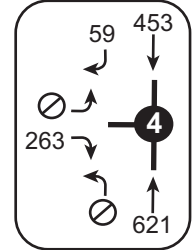
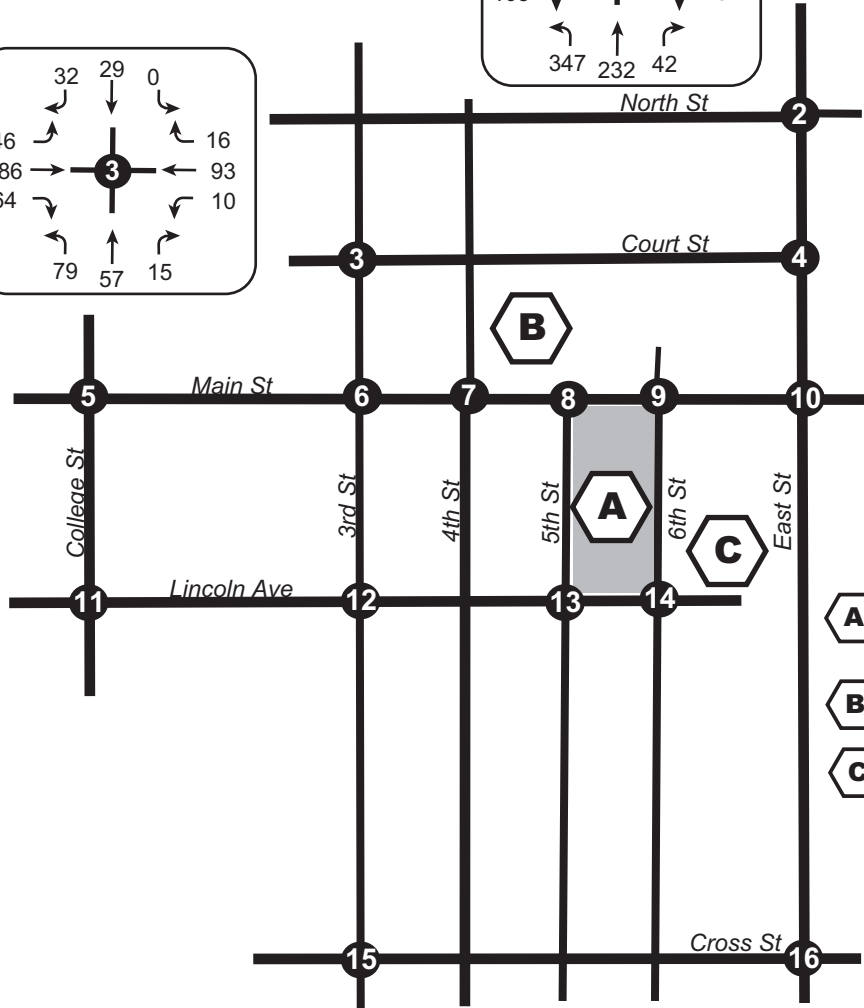
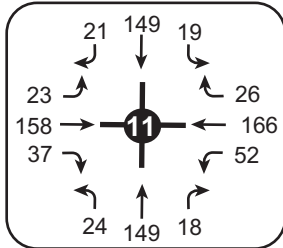
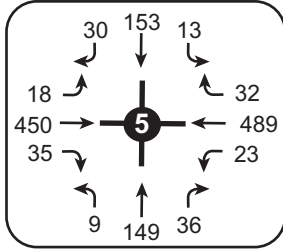
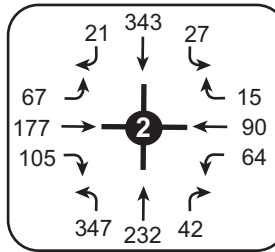
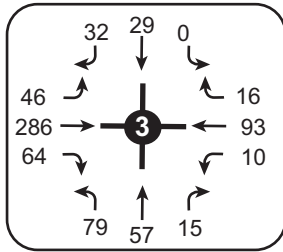
Figure 10

**Year 2013 Base Case + Project Alt 2
AM Peak Hour Volumes**

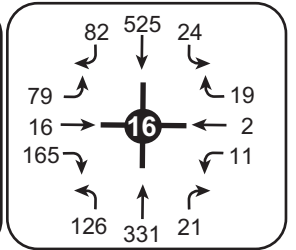
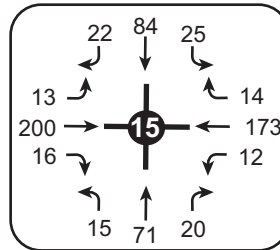
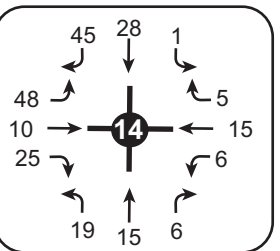
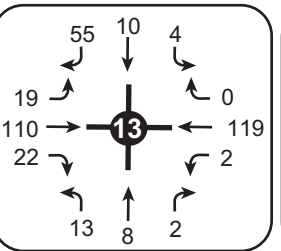
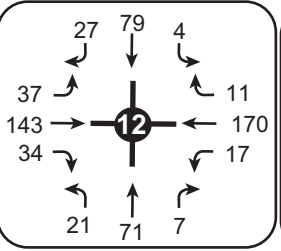
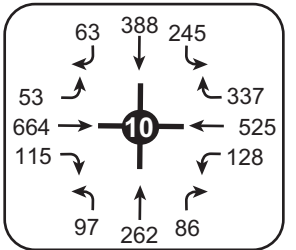
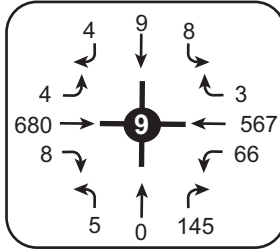
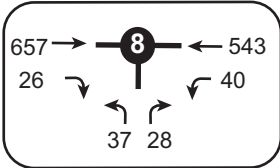
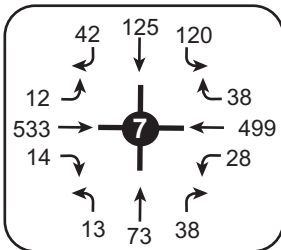
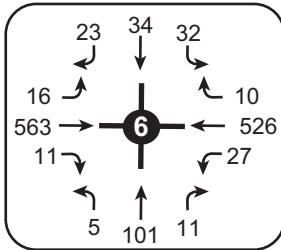


CRANE TRANSPORTATION GROUP

Not To Scale



- A** = Project Site
198 spaces
- B** = 116 spaces
- C** = 81 spaces



= Project Site

New Yolo County Superior Courthouse Traffic Impact Analysis

Figure 11

**Year 2013 Base Case With Project Alt 2
PM Peak Hour Volumes**

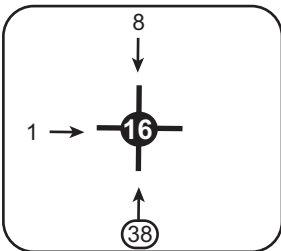
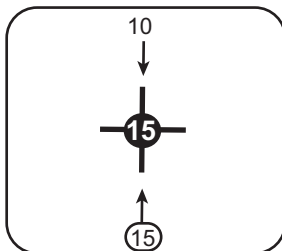
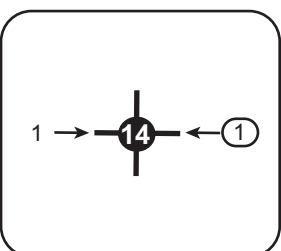
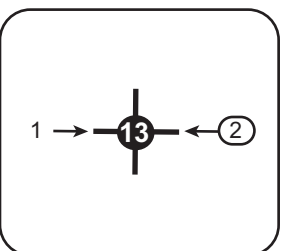
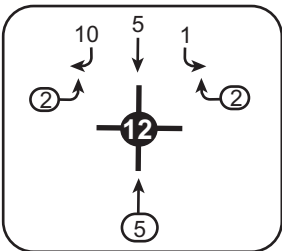
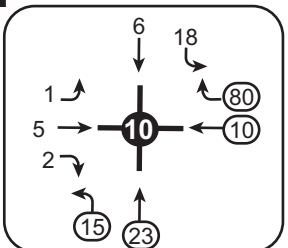
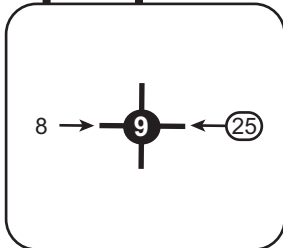
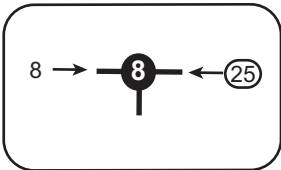
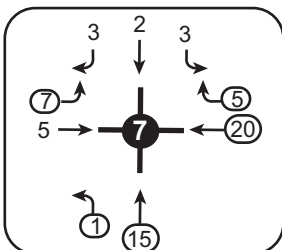
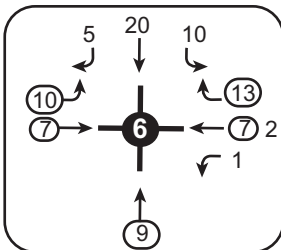
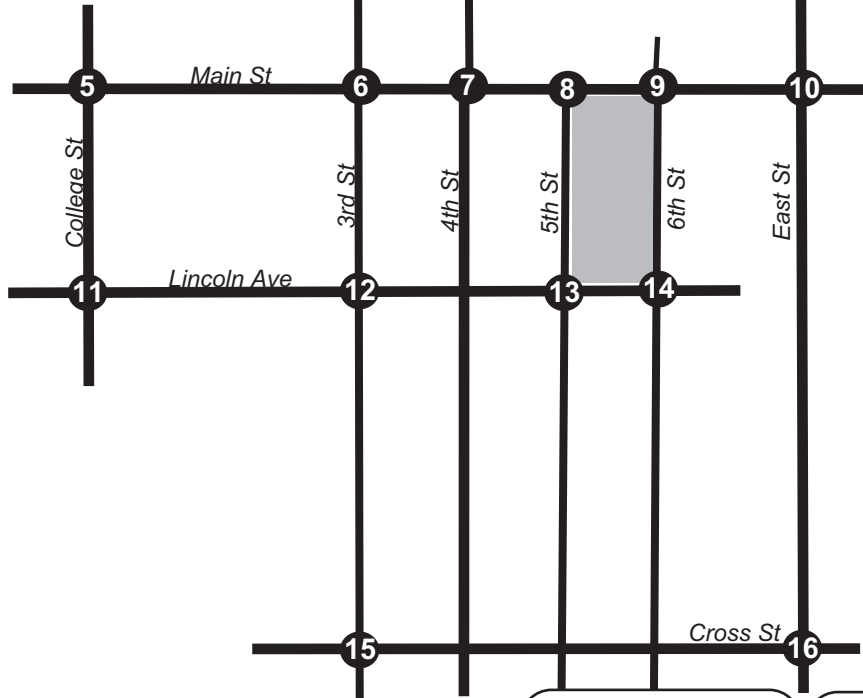
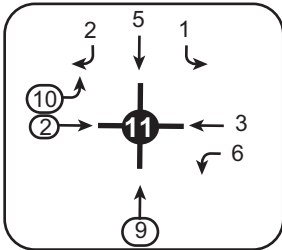
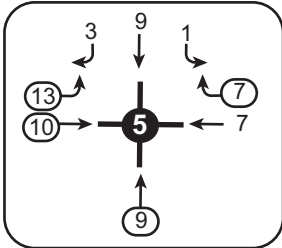
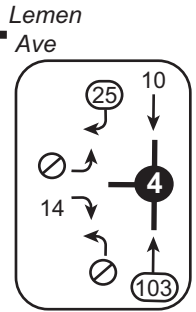
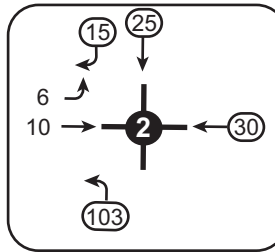
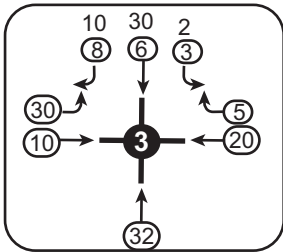


CRANE TRANSPORTATION GROUP

APPENDIX

⑩ = Inbound
 10 = Outbound

Not To Scale



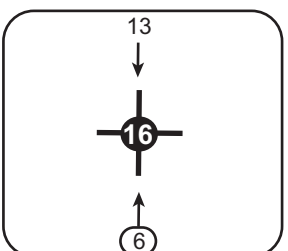
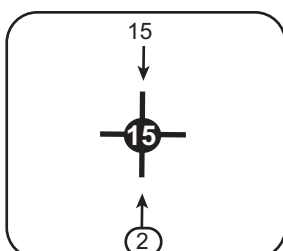
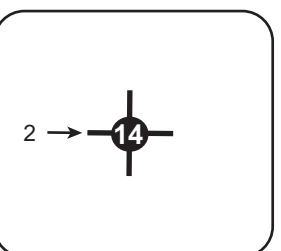
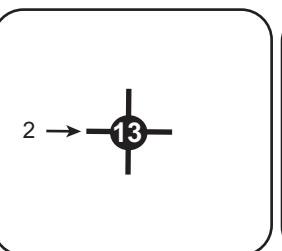
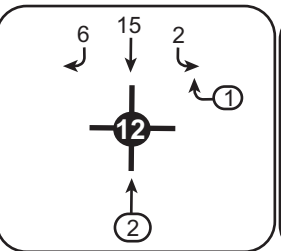
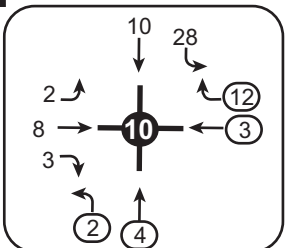
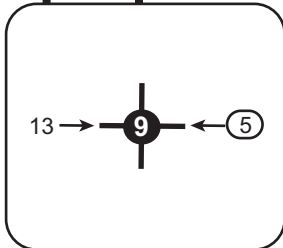
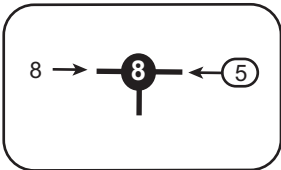
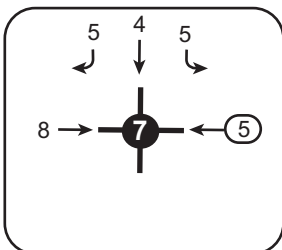
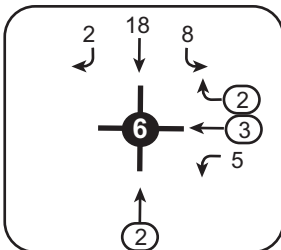
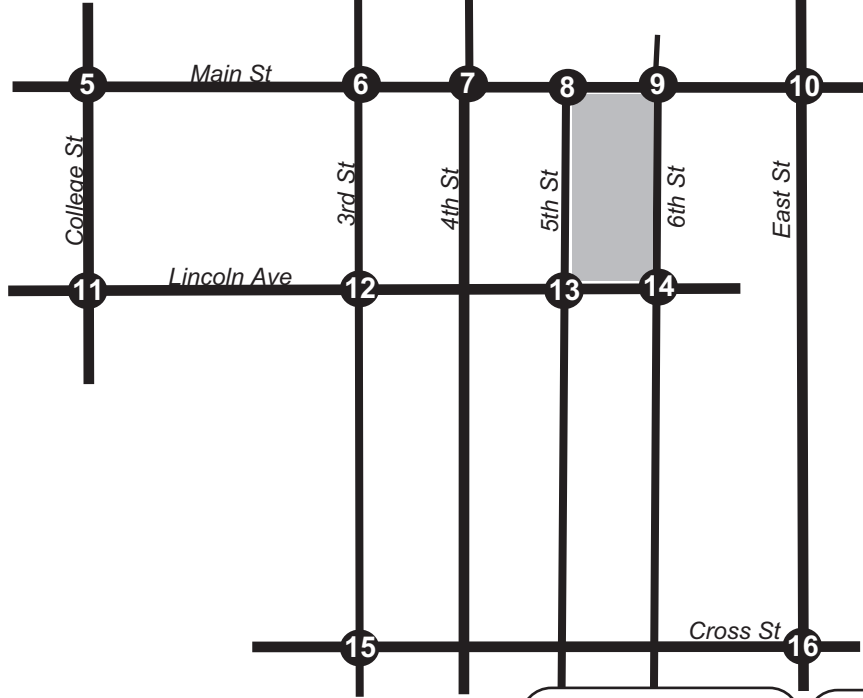
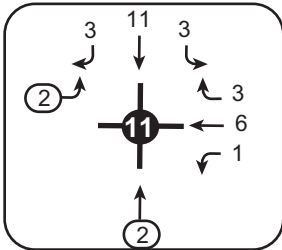
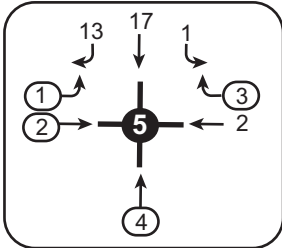
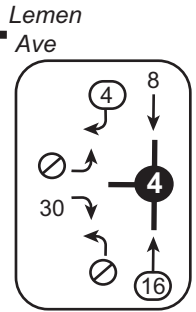
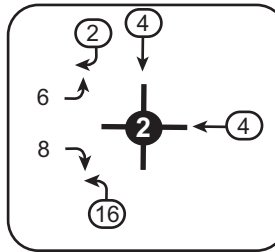
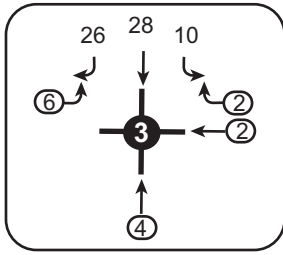
= Project Site

New Yolo County Superior Courthouse Traffic Impact Analysis

Figure A
Existing Court Traffic on 2013 System
(Lemen Ave Realigned)
AM Peak Hour Volumes

⑩ = Inbound
 10 = Outbound

Not To Scale



= Project Site

New Yolo County Superior Courthouse Traffic Impact Analysis

Figure B
Existing Court Traffic on 2013 System
(Lemen Ave Realigned)
PM Peak Hour Volumes

Appendix H
Mitigation Monitoring Plan

INTRODUCTION

Section 15097 of CEQA requires all state and local agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a “mitigated negative declaration” or specified environmental findings related to environmental impact reports.

As stated in Section 2.5 of the Final Initial Study, the AOC will implement the project in compliance with standard conditions and requirements for state or federal regulations or laws that are independent of CEQA compliance. The standard conditions and requirements serve to prevent specific impacts. Typical standard conditions and requirements include compliance with the provisions of the California Building Code, National Pollutant Discharge Elimination System (NPDES) permit system, Public Resources Code Section 5097 for discovery of unexpectedly encountered human remains, and Yolo-Solano Air Quality Management District (YSAQMD) Rules.

The AOC’s plans for the project also include project design features – specific design elements that the AOC has incorporated into the project’s construction and operation to prevent the occurrence of potential environmental effects or reduce the significance of potential environmental effects. The project design features are actions that conform to the California Trial Court Facilities Standards’ specifications. For example, the parties implementing the proposed project will use best management practices and technologies aimed to limit the use of natural resources as well as the project’s operating cost over the life of the building. Because the AOC is incorporating the project design features into the project, the design features do not constitute mitigation measures as defined by CEQA.

The AOC’s proposed courthouse design will conform to the specifications of the California Trial Court Facilities Standards, including the standard that the AOC shall design and construct Court buildings using proven best practices and technology with careful use of natural resources. To implement this standard, the project’s project manager will include specifications that design efforts and construction operations implement best management practices and other measures throughout the construction phase to avoid or minimize potential impacts. These project design features, best management practices, and other measures will include:

- General measures:
 - Designate a contact person for public interaction; and
 - Inform the nearby community through the use of a monthly newsletter that identifies the upcoming work and potential impacts to the surrounding communities.

- Storm water, water quality, and soil erosion management measures:
 - Prior to the start of construction activities, the AOC will ensure that the construction contractor prepares a Storm Water Pollution Prevention Plan and secures the Central Valley Regional Water Quality Control Board's (CVRWQCB's) approval of the plan.
 - The construction contractor will incorporate best management practices consistent with the guidelines provided in the California Storm Water Best Management Practice Handbooks: Construction;
 - For the construction during the rainy season, the construction contractor will implement erosion measures that may include mulching, geotextiles and mats, earth dikes and drainage swales, temporary drains, silt fence, straw bale barriers, sandbag barriers, brush or rock filters, sediment traps, velocity dissipation devices, or other measures; and
 - Wherever possible, the construction contractor will perform grading activities outside the normal rainy season to minimize the potential for increased surface runoff and the associated potential for soil erosion.

- Air quality management measures:
 - Apply water or a stabilizing agent to exposed surfaces in sufficient quantity at least two times a day to prevent generation of dust plumes;
 - Moisten or cover excavated soil piles to avoid fugitive dust emissions;
 - Discontinue construction activities that that generate substantial blowing dust on unpaved surfaces during windy conditions;
 - Install and use a wheel-washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site;

- Cover dump trucks hauling soil, sand, and other loose materials with tarps or other enclosures that will reduce fugitive dust emissions;
 - Ensure that all construction and grading equipment is properly maintained;
 - Construction personnel will turn off equipment when equipment is not in use;
 - All vehicles and compressors will utilize exhaust mufflers and engine enclosure covers (as designed by the manufacturer) at all times;
 - When feasible, construction operations will use electric construction power in lieu of diesel powered generators to provide adequate power for man/material hoisting, crane, and general construction operations; and
 - Suspend heavy-equipment operations during first-stage and second-stage smog alerts.
- Noise and vibration measures:
 - Install sound barriers around the perimeter of the project site;
 - Construction operations will not use impact pile drivers;
 - When feasible, construction operations will use electric construction power in lieu of diesel powered generators to provide adequate power for man/material hoisting, crane, and general construction operations; and
 - Monitor noise levels at the western wall of the Downtown Courthouse when the Superior Court is in session.
- Well abandonment measures, as needed:
 - Abandonment of existing water well(s), which includes plugging the well cavity with impermeable material, will be performed in accordance with local and state agency requirements.
- Hazardous material management measures:
 - The AOC's construction contractor will have a qualified environmental professional conduct an asbestos survey to determine the presence or absence of asbestos. If asbestos materials are present, the construction contractor will perform asbestos removal by a state-certified asbestos containment contractor in

accordance with both the Toxic Substances Control Act, Title 15 of the United States Code, Section 2601 et seq., and Title 2 – Asbestos Hazardous Emergency Response for Handling Asbestos.

- Hazardous waste will be handled by a licensed hauler for disposal at an appropriate facility in compliance with applicable laws and regulations.

The intent of this Mitigation Monitoring Plan is to prescribe and enforce a means for properly and successfully implementing the mitigation measures to reduce or avoid significant environmental impacts. Mitigation measures identified in this Mitigation Monitoring Plan are in the Initial Study prepared for the proposed project. AOC representatives will use this Mitigation Monitoring Plan to ensure compliance with mitigation measures during project implementation.

The following table provides a summary of all mitigation and monitoring that will be conducted for the project. It also identifies the responsible monitoring agency and implementation phase.

Mitigation Measure	Monitoring Action	Monitoring Party	Implementation Phase
<p>AIR QUALITY 1 When weather conditions promote potential generation of fugitive dust, the AOC will control dust emissions by stabilizing all disturbed areas (including spoil piles) that are not being actively utilized for construction purposes. Construction personnel will use water applications, chemical stabilizers or suppressants, tarps, or other suitable covers or vegetative ground covers for dust control.</p>	Incorporate air quality measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Ensure that applicable measures are implemented	AOC construction inspector	During construction
<p>AIR QUALITY 2 If construction operations transport materials off the proposed project site, the AOC shall ensure that all materials are covered or effectively wetted to limit visible dust emissions. The AOC shall also ensure that transport containers have at least 2 feet of freeboard space from the top of the container.</p>	Incorporate air quality measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Ensure that applicable measures are implemented	AOC construction inspector	During construction
<p>AIR QUALITY 3 Construction personnel will install and maintain a track out control device or utilize a carryout and track out prevention procedure that achieves an equivalent or greater level of control. Construction personnel will remove track out material at the end of each workday.</p>	Incorporate air quality measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Ensure that applicable measures are implemented	AOC construction inspector	During construction
<p>AIR QUALITY 4 If construction operations carry visible soil material onto public streets, construction personnel will sweep all paved construction, parking, and staging areas daily with water sweepers.</p>	Incorporate air quality measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Ensure that applicable measures are implemented	AOC construction inspector	During construction

AIR QUALITY 5 Construction personnel will limit idling of all diesel engines to less than 5 minutes unless such idling is necessary to accomplish the work for which the equipment is designed. Ensure equipment is maintained properly.	Incorporate air quality measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Ensure that applicable measures are implemented	AOC construction inspector	During construction
CULTURAL RESOURCES 1 If archaeological resources are encountered during construction of the proposed project, the AOC's contractor will halt construction in that area of the site until a qualified archaeologist performs an evaluation of the find. If the archaeologist determines the find to be significant, the area of discovery shall be protected from disturbance to allow qualified archaeologists and appropriate officials, in consultation with the State Historical Preservation Officer, to determine appropriate measures for conserving the resource.	Incorporate cultural resource measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Document incorporation of cultural resource measures into project's contract specifications to AOC's environmental analyst	AOC project manager	Prior to completion of contract specifications
	Document the identity and professional qualifications of qualified archaeologist monitor(s) to AOC's environmental analyst	AOC project manager	Prior to start of construction
	If an archaeological monitor prepares management recommendations for a discovered resource, the monitor shall document completion of the management recommendations as soon as practical to the AOC's project manager, construction inspector, and environmental analyst	AOC project manager, construction inspector, and environmental analyst	During construction
	Ensure that applicable measures are enforced during construction	AOC construction inspector	During construction

<p>GEOLOGY AND SOILS 1 If paleontological resources are encountered during construction, the AOC's contractor will halt construction in that area of the site, and immediately notify the County. If paleontological resources are determined to be significant, a qualified professional paleontologist shall be retained to evaluate the finds and recommend appropriate mitigation measures.</p>	Incorporate paleontological resource measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Document incorporation of paleontological resource measures into project's contract specifications to AOC's environmental analyst	AOC project manager	Prior to completion of contract specifications
	Document the identity and professional qualifications of qualified paleontological monitor(s) to AOC's environmental analyst	AOC project manager	Prior to start of construction
	Ensure that applicable measures are enforced during construction	AOC construction inspector	During construction
	If a paleontological monitor prepares management recommendations for a discovered resource, the monitor shall document completion of the management recommendations as soon as practical to the AOC's project manager, construction inspector, and environmental analyst	AOC project manager, construction inspector, and environmental analyst	During construction
<p>HAZARDS AND HAZARDOUS MATERIALS 1 Prior to demolition of the structures, a qualified environmental professional shall evaluate paint that is separated from the building material to determine its proper management, and the AOC's construction contractor will dispose of the materials in the manner determined by the environmental professional and in compliance with all applicable laws.</p>	Incorporate hazardous materials measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Document incorporation of hazardous materials measures into project's contract specifications to AOC's environmental analyst	AOC project manager	Prior to completion of contract specifications

	Document the identity and professional qualifications of qualified hazardous materials monitor(s) to AOC's environmental analyst	AOC project manager	Prior to start of construction
	If a hazardous materials specialist prepares management recommendations for discovered suspected lead-based paint, the monitor shall document completion of the management recommendations as soon as practical to the AOC's project manager, construction inspector, and environmental analyst	AOC project manager, construction inspector, and environmental analyst	During construction
	Ensure that applicable measures are enforced during construction	AOC construction inspector	During construction
<p>HAZARDS AND HAZARDOUS MATERIALS 2</p> <p>Prior to demolition activities, the AOC's construction contractor will have a qualified environmental professional conduct an asbestos survey to determine the presence or absence of asbestos. If asbestos materials are present, the construction contractor will perform asbestos removal by a State-certified asbestos containment contractor in accordance with both the Toxic Substances Control Act, Title 15 of the United States Code, Section 2601 et seq., and Title 2 - Asbestos Hazardous Emergency Response for Handling Asbestos.</p>	Incorporate hazardous materials measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Document incorporation of hazardous materials measures into project's contract specifications to AOC's environmental analyst	AOC project manager	Prior to completion of contract specifications
	Document the identity and professional qualifications of qualified hazardous materials monitor(s) to AOC's environmental analyst	AOC project manager	Prior to start of construction

	If a hazardous materials specialist prepares management recommendations for discovered suspected asbestos-containing materials (ACMs), the monitor shall document completion of the management recommendations as soon as practical to the AOC's project manager, construction inspector, and environmental analyst	AOC project manager, construction inspector, and environmental analyst	During construction
	Ensure that applicable measures are enforced during construction	AOC construction inspector	During construction
<p>HAZARDS AND HAZARDOUS MATERIALS 3</p> <p>The AOC's contractor documents will require the construction contractor to ensure that a licensed hauler transports hazardous waste for disposal at an appropriate facility in compliance with applicable laws and regulations.</p>	Incorporate hazardous materials measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Document incorporation of hazardous materials measures into project's contract specifications to AOC's environmental analyst	AOC project manager	Prior to completion of contract specifications
	Document the identity and professional qualifications of qualified hazardous materials monitor(s) to AOC's environmental analyst	AOC project manager	Prior to start of construction
	Ensure that applicable measures are enforced during construction	AOC construction inspector	During construction
<p>HAZARDS AND HAZARDOUS MATERIALS 4</p> <p>The AOC or the current property owners will remove the LUSTs and associated piping in accordance with local and State</p>	Incorporate hazardous materials measures into project's contract specifications	AOC project manager	During preparation of contract specifications

<p>USTs and associated piping in accordance with local and State requirements, prior to or during construction. If subsurface impacts associated with these features are observed, the AOC or the current property owner will take responsibility for cleaning up those impacted materials to the satisfaction of an overseeing regulatory agency, as part of the project approval and construction process.</p> <p>If significant impacts are observed, the AOC's construction contractor will be required to retain a qualified hazardous materials specialist who will (1) educate construction personnel prior to any construction or earth-disturbing activities of the potential to encounter hazardous materials in those areas, and (2) prepare a Soil Management Plan to present the decision framework for properly managing soils associated with future redevelopment of the proposed courthouse parcel (including general protocols and health and safety measures that the AOC and construction personnel will follow if excavation operations encounter contaminated soil or groundwater). If construction operations discover potential contamination during ground-disturbing activities, excavation work shall stop in that area until the qualified hazardous materials specialist can assess the significance of the potential contamination. The qualified hazardous materials specialist will evaluate the discovery, determine its significance, and provide proper management recommendations. The qualified hazardous materials specialist shall summarize related findings in a report prepared to current professional standards.</p>	<p>Document incorporation of hazardous materials measures into project's contract specifications to AOC's environmental analyst</p>	<p>AOC project manager</p>	<p>Prior to completion of contract specifications</p>
	<p>Document the identity and professional qualifications of qualified hazardous materials monitor(s) to AOC's environmental analyst</p>	<p>AOC project manager</p>	<p>Prior to start of construction</p>
	<p>If a hazardous materials specialist prepares management recommendations for discovered suspected contamination, the monitor shall document completion of the management recommendations as soon as practical to the AOC's project manager, construction inspector, and environmental analyst</p>	<p>AOC project manager, construction inspector, and environmental analyst</p>	<p>During construction</p>
	<p>Ensure that applicable measures are enforced during construction</p>	<p>AOC construction inspector</p>	<p>During construction</p>
<p>NOISE 1 Restrict construction activities to the hours between 7:00 a.m. and 6:00 p.m., from Monday through Saturday.</p>	<p>Incorporate noise measures into project's contract specifications</p>	<p>AOC project manager</p>	<p>During preparation of contract specifications</p>

	Ensure that applicable measures are implemented	AOC construction inspector	During construction
NOISE 2 Ensure all construction equipment is properly maintained and operated and equipped with mufflers.	Incorporate noise measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Ensure that applicable measures are implemented	AOC construction inspector	During construction
NOISE 3 The AOC contractor will not utilize pile driving during construction.	Incorporate noise measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Ensure that applicable measures are implemented	AOC construction inspector	During construction
NOISE 4 Incorporate noise mitigation design elements into the proposed building such that the noise levels of interior spaces within the building falls below 45 dB.	Incorporate noise measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Ensure that applicable measures are implemented	AOC construction inspector	During construction
NOISE 5 Incorporate noise mitigation design elements into the building mechanical system such that the noise emitted from the mechanical system does not exceed 50 dB at the property line of nearby noise-sensitive receptors.	Incorporate noise measures into project's contract specifications	AOC project manager	During preparation of contract specifications
	Ensure that applicable measures are implemented	AOC construction inspector	During construction

Appendix I
Public Notice



Judicial Council of California
ADMINISTRATIVE OFFICE OF THE COURTS

OFFICE OF COURT CONSTRUCTION AND MANAGEMENT

2860 Gateway Oaks Drive, Suite 400 • Sacramento, California 95833-4336
Telephone 916-643-8022 • Fax 916-263-2342

RONALD M. GEORGE
Chief Justice of California
Chair of the Judicial Council

WILLIAM C. VICKREY
Administrative Director of the Courts

RONALD G. OVERHOLT
Chief Deputy Director

LEE WILLOUGHBY
Director, Office of Court
Construction and Management

**Notice of Intent to Adopt a Mitigated Negative
Declaration and Notice of Public Comment
Period: February 16 through March 18, 2010**

BACKGROUND

The Administrative Office of the Courts (AOC), the staff agency of the Judicial Council of California, is considering adopting a mitigated negative declaration in compliance with the California Environmental Quality Act for a new California Superior Court for the County of Yolo. The project site is in the City of Woodland approximately 1 mile west of State Route 113 and Interstate 5. Main Street, 5th Street, Lincoln Street, and 6th Street border the proposed project site. The project will be a 141,000 square foot, four-story building with a basement and 14 courtrooms. The environmental issues to be addressed in the mitigated negative declaration include: Air Quality; Cultural Resources; Geology and Soils; Hazardous Materials; and Noise.

WHY THIS NOTICE?

The purpose of this notice is to provide you with the opportunity to learn more about the proposed project and to provide comments to the AOC concerning the proposed project. A copy of the mitigated negative declaration can also be viewed at:

Woodland Public Library
250 First Street
Woodland, CA 95695
Phone: 530-661-5981

City of Woodland (City Hall)
300 First Street
Woodland, CA 95695
Main Phone: 530-661-5850

HOW DO YOU PARTICIPATE?

The AOC encourages your participation. You may submit comments to:

Laura Sainz, Administrative Office of the Courts
2860 Gateway Oaks, Suite 400
Sacramento, CA 95833

In addition, a public meeting for this project will be held on:

Wednesday, February 24, 2010
4:00 - 5:30 p.m.
Woodland Police Department Community Room
1000 Lincoln Avenue
Woodland, CA 95695

The deadline for written comments is March 18, 2010.

For more information on the project and/or to receive a copy of the mitigated negative declaration, please visit http://www.courtinfo.ca.gov/programs/occm/projects_yolo.htm. If you have questions or wish to discuss the project, please contact Laura Sainz at the Administrative Office of the Courts at 916-263-7992 or via email at laura.sainz@jud.ca.gov

PROOF OF PUBLICATION
(2015:5 C.C.P.)

STATE OF CALIFORNIA
County of Yolo

The Daily Democrat


A newspaper of general circulation, printed and published daily in the City of Woodland, County of Yolo, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Yolo, State of California, under the date of June 30, 1952, and in accordance with the provisions of Title 1, Division 7, of the government Code of the State of California; that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil) has been published in each regular and entire issue of said newspaper and to in any supplement thereof on the following dates to-wit:

February 16th 2010

All in the years 2010

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date at: Woodland
California, this 16th day of February 2010


Signature

This space is for the County Clerk's Filing Stamp

Proof of Publication of

ERM

PUBLIC NOTICE

Notice of Intent to Adopt a Mitigated Negative Declaration and Notice of Public Meeting and Public Comment Period: February 16, 2010 through March 18, 2010

The Administrative Office of the Courts (AOC), the staff agency of the Judicial Council of California, is considering adopting a mitigated negative declaration in compliance with the California Environmental Quality Act for a new California Superior Court in the County of Yolo. The project site is in the City of Woodland, approximately 1 mile west of State Route 113 and Interstate 5. Main Street, 5th Street, Lincoln Street, and 6th Street border the proposed project site. The project will be a 141,000 square foot, four-story building with a basement, and 14 courtrooms. The environmental issues to be addressed in the mitigated negative declaration include: Air Quality, Cultural Resources, Geology and Soils,

Hazardous Materials and Noise. For more information on the project and/or to receive a copy of the mitigated negative declaration, please visit http://www.courtinfo.ca.gov/programs/occm/projects_yolo.htm. Any written comments should be sent to Laura Sainz, Administrative Office of the Courts, 2860 Gateway Oaks, Suite 400, Sacramento, CA 95833. The deadline for written comments is March 18, 2010. Project-related questions can be directed to Laura Sainz, at 916-263-7992. Please note that a public meeting for this project will be held on Wednesday, February 24, 2010 from 4:00 -5:30 p.m. at the Woodland Police Department Community Room located at 1000 Lincoln Avenue in Woodland, CA. 95695.

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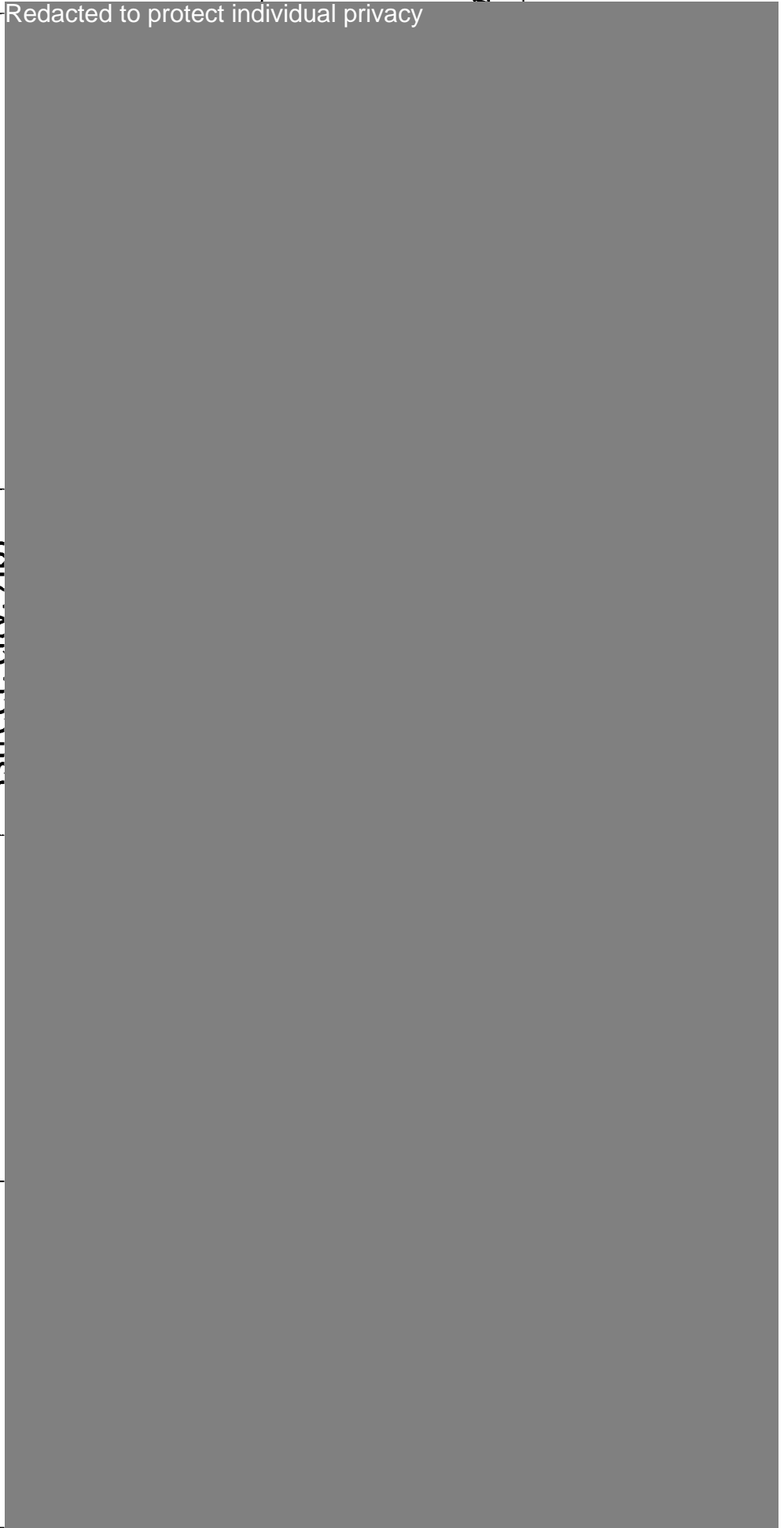
Administrative Office of the Courts
CEQA Public Meeting

for the

Superior Court of Yolo County

Name	Affiliation	Address (street, city, zip)	Email Address
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Redacted to protect individual privacy



19

Name	Affiliation	Address (street, city, zip)	Email Address
Redacted to protect individual privacy			

Appendix J
Public Comments

INTRODUCTION

This appendix presents the comments received on the proposed project during the public review period, as provided either orally during the Public Meeting or in a written submittal to the AOC by e-mail or regular mail (contact information provided on the Public Notice).

PUBLIC MEETING

As indicated in the Public Notice (included in Appendix I), the AOC held a Public Meeting on Wednesday, February 24, 2010 at the Woodland Police Department Community Room at 1000 Lincoln Avenue, Woodland, California. A copy of the sign-in sheet, which attendees were asked to complete, is included in Appendix I. At that meeting, the AOC presented a general description of the proposed project, including the objectives and timeline, and the CEQA process. After the AOC presentation, attendees were given the opportunity to provide comments and/or ask questions regarding the project, either orally at the meeting, in writing by filling out a comment form that would be addressed at the meeting, or in writing by means of a separate submittal, which could be sent to the AOC by e-mail or regular mail. These latter options were also made available to the general public (non-attendees) through the Public Notice, which included all necessary contact information.

The public meeting was attended by interested community members, nearby business and property owners, and representatives from the Superior Court, the city of Woodland and the AOC. Meeting participants asked questions and/or provided comments during the meeting about various topics, including the courthouse design, the construction process, traffic and parking impacts, and other miscellaneous issues. The comments presented at the public meeting and responses to those comments are organized by topic below.

Courthouse Design

- Where will the main entrance to the Courthouse be?
- Does the project involve the entire block?
- Are any details available regarding the design of the courthouse? Will it be LEED certified?
- Is information available regarding the courthouse layout on the parcel - is a map available?

- Is the design firm based in Sacramento/Midwest still doing the design for the new courthouse?

Response to Above Design-Related Comments: *The courthouse design, including the site plan, layout and other design details has not been completed. The project does include the entire block. The AOC plans to pursue a design that is consistent with the downtown community and is pedestrian- and user-friendly. Currently, the idea is for the main entrance to the courthouse to be off of Main Street, but the design and site plan have not yet been finalized. Design will begin after a decision is made on whether or not to certify the CEQA document. State projects are required to be LEED certified, at a minimum level of LEED silver as described in Section 2.5- Project Characteristics. The architectural firms of Fentress Architects and Dreyfuss and Blackford have been retained to develop the design. Interested parties will find more information in the project description included in Section 2 of the IS/MND document.*

Construction

- Will the construction be performed on a parcel-by-parcel basis, or will the entire block be addressed at once?
- The presentation indicated a goal of 2012 as the anticipated schedule for construction to begin – would all buildings and structures currently on the site be removed by that time?
- Some of the Main Street infrastructure is probably antiquated – will it have to be replaced for the project? If so, how far would project-related replacement extend?
- Will any streets be closed off during construction? One of the business owners expressed a concern that street closure would have an adverse impact on business in the area (e.g., deliveries and shipments).

Response to Above Construction-Related Comments: *A detailed construction plan including infrastructure will be prepared after completion of the courthouse design. Construction will be on the entire block. At this point, the AOC anticipates that all of the structures currently on the site would be demolished at the same time, at the beginning of construction. The AOC does not anticipate having to close off any streets for an extended period of time in order to construct the courthouse. While not required for mitigation purposes, the AOC is committed to reducing inconveniences to nearby residents and businesses to the fullest extent possible, and will make every effort to (1) limit street closures during construction; and (2) maintain communication with the City staff, neighboring residents and businesses regarding construction and street closures.*

Traffic/Transportation

- For the parking analysis – was a specific radius assumed?
- Is the off-site parking for the project envisioned as being surface parking, or multi-story parking structures?
- With reference to the 198 projected on-site parking spaces, a concern was raised that this would not be sufficient in light of the 150 court-related employees.
- Re: the planned traffic light at 5th and Main Streets – one attendee noted that the 4th and Main Street intersection “has been a mess” for many years.

Response to Above Traffic/Transportation-Related Comments:

The parking analysis included an assumed acceptable walking distance of 1,200 feet, or a walking radius of 3 to 3 1/2 blocks from the courthouse site. The off-street parking being proposed will be surface parking. The parking analysis was based on surveys done at the court, and includes court staff, jurors, and court visitors. The 198-spaces provided on-site will be complemented by the 223 spaces provided off-site.

As discussed in the IS/MND (Section 4.16- Transportation/Traffic and Appendix G), future traffic directed to the project area due to court-related activities is expected to be comparable to the current traffic volume traveling to and from the courts, involving most of the same streets. The proposed traffic signal at the Main Street/5th Street intersection is included in the project in an effort to facilitate both vehicle and pedestrian traffic to the courthouse. The Main/5th Street intersection was deemed the most effective intersection for foot traffic and vehicle traffic accessing the new courthouse, particularly in relation to Freeman Park. Per the traffic analysis, a traffic signal at 5th Street will address traffic issues at both 5th and 4th Streets. Please see the Traffic Impact Analysis presented in Appendix G for additional details regarding the scope and findings of the evaluation performed for the project.

Miscellaneous

- How does the City plan to use the old courthouse?

Response to Above Miscellaneous Comments: *Once the court vacates the old courthouse, it will become the property of the county. Future plans for that building are unknown at this time and are beyond the scope of this project.*

WRITTEN COMMENTS

The following individuals/agencies submitted comments regarding the proposed project in writing to the AOC:

- Daniel Kevin, Regulatory Analyst with the Consumer Protection and Safety Division of the California Public Utilities Commission, submitted comments in a letter dated 23 February 2010;
- David Wilkinson, a resident of Woodland, submitted comments in a letter dated 14 March 2010;
- Wayne Taniguchi, Supervising Environmental Health Specialist with the Consumer Protection Unit of the County of Yolo Health Department, Environmental Health, submitted comments in a letter dated 16 March 2010;
- George Elfrink, a local business owner, submitted comments via e-mail on 17 March 2010; and
- Mark Christison, a local business owner, submitted comments via e-mail on 18 March 2010.

The AOC appreciates the effort these agencies and individuals undertook to be involved in the public review process, and has given these submittals serious consideration to determine whether the comments raise any issues regarding the project that 1) warrant refinement or modification of mitigation measures presented in the IS/MND; 2) warrant implementation of further mitigation measures beyond those presented in the IS/MND; or 3) indicate potential environmental impacts that cannot be mitigated. Based on evaluation of the public comments, the AOC has determined that the evaluation of potential impacts performed for the IS/MND is adequate and that the mitigation measures presented in this report should effectively mitigate potential environmental impacts due to courthouse construction and operation.

Copies of the comment letters/submittals are provided in the following pages, with AOC responses inserted to the right.

23 February 2010 letter from California Public Utilities Commission (CPUC)

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



February 23, 2010

Laura Sainz
Administrative Office of the Courts
2860 Gateway Oaks
Sacramento, CA 95833

Re: Mitigated Negative Declaration
Yolo County Superior Court - New Superior Court Courthouse
SCH# 2010022049

Dear Ms. Sainz:

As the state agency responsible for rail safety within California, the California Public Utilities Commission (CPUC) recommends that development projects proposed near rail corridors be planned with the safety of these corridors in mind. New developments and improvements to existing facilities may increase vehicular traffic volumes, not only on streets and at intersections, but also at at-grade highway-rail crossings. In addition, projects may increase pedestrian traffic at crossings, and elsewhere along rail corridor rights-of-way. Working with CPUC staff early in project planning will help project proponents, agency staff, and other reviewers to identify potential project impacts and appropriate mitigation measures, and thereby improve the safety of motorists, pedestrians, railroad personnel, and railroad passengers.

CPUC has the following comment on the Initial Study/Mitigated Negative Declaration:

1a

The location of the proposed project is a little over one block from a railroad crossing on Main Street, near the intersection of Main and East Streets. Appendix G (Traffic Study) does not discuss whether the current signal preemption at this crossing would be sufficient to handle the increases in traffic along Main Street that would be generated by the proposed project. Please address this concern.

Thank you for your consideration of this comment. If you have any questions in this matter, please contact David Stewart, CPUC Rail Crossings Engineering Section, at (916) 324-7134.

Sincerely,

Daniel Kevin
Regulatory Analyst
Consumer Protection and Safety Division

1a Response

As noted in the comment, the traffic analysis did not discuss the specifics of the current signal preemption at the rail crossing near the intersection of Main and East Streets. However, subsequent discussions with Daniel Kevin, PUC Regulatory Analyst, and John Mollart, Signal Manager for the California Northern Railroad, lease-holder on the subject rail line, revealed the following:

- This is a relatively new crossing (about 10 years old);
- Railroad activity is at a low level, with train activity occurring no more than four to six times per day, between 6:00 AM and 8:00 PM. Disturbance to traffic flow for a 100-car train (maximum size) lasts for a maximum of two minutes;
- The signal preemption cycle for railroad activity has been set according to the city's signal cycle times, and preemptive "clear-out" timing relates to existing traffic volumes;

The re-routed traffic volumes due to the project are not expected to require changes to the railroad's signal preemption cycle at the Main Street/East Street intersection, and therefore will not be a significant impact.

March 14, 2010

Laura Sainz
Administrative Office of the Courts
2860 Gateway Oaks, Suite 400
Sacramento, CA. 95833

RE: Notice of intent to Adopt a Negative Declaration – Yolo County Courthouse Project

Dear Ms. Sainz,

On pages 49-50 in the Administrative Office of the Court's draft CEQA document for the above-referenced project it is stated that there would be a less-than-significant impact on historic resources, including the building located at 1021 Lincoln, and therefore no mitigation measures are required.

On the contrary, I believe the property at 1021 Lincoln Ave. is historic and, if the building is to be demolished, mitigations should be required. This building is historically known as the Sanitary Dairy building and was constructed in 1940. Sanitary Dairy began in Woodland in 1917 at 604 Main Street as A.W. Morris & Sons Pasteurized Milk Company. It was the first local dairy to offer pasteurized milk. In 1919 the name of the company was changed to Sanitary Dairy; in 1940 Sanitary moved into their new, modern facility at 1021 Lincoln Ave. Architecturally, Sanitary Dairy was designed in the Ranch Style, which was introduced to Woodland at about this time mostly through residential construction. The builder was E.L. Younger, a top-notch Woodland contractor who also constructed the iconic Porter Office Building in downtown.

In January 1997 Donald S. Napoli, Ph.D. prepared a "Woodland Redevelopment Area Historic Resources Inventory", which included Sanitary Dairy. Its historic significance was recorded by Mr. Napoli on December 20, 1996.

For your reference I have included the following documents to substantiate the historical significance of Sanitary Dairy:

1. Woodland Redevelopment Area Historic Resources Inventory excerpt, including documentation for Sanitary Dairy --**Attachment 1**
2. Sanitary Dairy historic photos taken by Paul W. Hollingshead on April 21, 1941(courtesy William and Edward Hollingshead) --**Attachment 2**
3. Historical information about Sanitary Dairy from *Explore Historic Woodland* guidebook (2008)--**Attachment 3**
4. Example of Ranch Style residential architecture of house in Woodland located at 920 Elm St. constructed in same year as Sanitary Dairy (*Explore Historic Woodland* guidebook, pg. 49)--**Attachment 4**

2a Response

The AOC acknowledges the author's opinion that the 1021 Lincoln Avenue property (the former Sanitary Dairy building) is historic.

The commenter refers to the Woodland Redevelopment Area Historic Resources Inventory that was prepared in 1997. As seen in the list of inventoried sites, the subject property was not noted as contributing to the historic character of the area and was not noted as being eligible for the National Register. The 1021 Lincoln Avenue address was listed as being potentially worthy of Woodland's local list. Subsequent to this inventory, the Woodland City Council passed a resolution approving recommendations of the Historical Preservation Commission to revise this survey (Resolution 4030, dated 6 January 1998). The building that is the subject of the above comment was expressly omitted from the list that was adopted by that resolution, along with six other properties. Since the building is not considered historic, the project will not have an impact on historic resources.

2a

14 March 2010 letter from Mr. Wilkinson

2b If the Sanitary Dairy is going to be demolished in the name of progress for the new courthouse, I believe cash mitigations are warranted.

There is a precedent for this. When the City Center Lofts project in downtown Woodland was approved by the Woodland Planning Commission in 2008, a cash mitigation of \$75,000 was required of the developer in the event the project moves forward resulting in the demolition of historic car dealership buildings on the property. In this case there was recognition by the Planning Commission that outstanding and necessary new projects must proceed, but, if historic resources must be sacrificed in the process, value must be placed on those resources in the form of a cash mitigation that will help the city meet other historic preservation goals.

Woodland is a historically rich community and values its historic resources. Recognition of the historic value of Sanitary Dairy should be included in the final CEQA document with appropriate mitigations that will further the goal of historic preservation in Woodland, but also allow the courthouse project to proceed.

Sincerely,



David Wilkinson

745 First Street

Woodland, CA. 95695

davwilk@pacbell.net

Author, *Crafting a Valley Jewel: Architects and Builders of Woodland* (Yolo Co. Historical Society, 2003)

c: Jimmy Stillman, Secretary to Woodland Historical Preservation Commission
Woodland Planning Commission

2b Response

Please see Response 2a. Mitigation is not required because there is no significant impact.



Joseph P. Iser, M.D., Director/Health Officer
J. Bruce Sarazin, Director of Environmental Health

County of Yolo

HEALTH DEPARTMENT

Environmental Health
137 North Cottonwood Street, Suite 2400
Woodland, CA 95695
PHONE: (530) 666-8646; (916) 375-6475
FAX: (530) 669-1448

March 16, 2010

Judicial Council of California
Administrative Office of the Courts
2860 Gateway Oaks Drive, Suite 400
Sacramento, CA 95833

Attention: Ms. Laura Sainz
Office of Court Construction and Management

RE: Draft Initial Study and Mitigated Negative Declaration

Yolo County Superior Courts
New Superior Courthouse
Woodland, California

Ms. Sainz:

This office has reviewed this study and would like to comment as follows:


Comments from the Hazard Materials Unit:

3a Please be aware that a former tenant of the 1021 Lincoln Avenue parcel (Parcel 6) was found to be illegally disposing Methylene Chloride, a chlorinated solvent used as a stripping agent, into the sewer. A limited investigation was undertaken, but failed to find any indication of subsurface contamination.

This Unit agrees with all other statements in the Hazards and Hazardous Materials section beginning on page 58.

Comments from the Consumer Protection Unit:

3b As stated on p.17 (2.5.4) of this Study, existing water well and any potential newly discovered un-abandoned wells must either be modified following all local and state laws and regulations or abandoned through a permit issued by this office.

Sincerely,

Wayne Y. Taniguchi, R.E.H.S.
Supervising Environmental Health Specialist
Consumer Protection Unit

3a Response

As noted in Section 4.8 of the IS.MND, the AOC will be completing a Phase II investigation at the project site to evaluate potential environmental impacts associated with historical underground fuel storage tanks. In the event the Phase II investigation finds any hazardous material issues (pertaining to either the fuel tanks or chlorinated solvent occurrence), the site will be remediated in accordance with all local, state and federal regulations related to the specific environmental hazards observed. Mitigation Measure HAZARDS AND HAZARDOUS MATERIALS 4 identifies the process that would be followed in such a case.

3b Response

The AOC acknowledges the Consumer Protection Unit's input regarding existing and any newly discovered un-abandoned wells at the project site. As noted in Section 4.9(f) in the IS/MND, inactive wells will be abandoned following all local and state requirements; this would be accomplished through coordination and permits issued by the Yolo County Environmental Health Department.

FROM: GEORGE ELFRINK
 AFFILIATION: ELFRINK'S, INC.
 ADDRESS: 446 5TH STREET
 WOODLAND CA 95695
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COMMENT: I HAVE SOME QUESTIONS AND CONCERNS REGARDING THE NEW COURT HOUSE IN WOODLAND CA.

4a FIRST, AS THIS IS IS A COUNTY COURT HOUSE, WHY DID THE PEOPLE OF YOLO COUNTY NOT GET A VOICE AS TO WHERE THE COURT HOUSE IS TO BE BUILT?

4b SECOND, WHERE IT IS INTENDED TO BE BUILT SEEMS TO BE WAY TOO SMALL AND NOT ENOUGH ROOM FOR THE SIZE OF COURT HOUSE THAT IS TO BE BUILT.

4c FACT: YOU HAVE STATED YOU ARE GOING TO HAVE 14 COURT ROOMS. THAT IS TWICE THE SIZE YOU HAVE NOW (WHICH YOU NOW HAVE 149 EMPLOYEES) SO, WHEN YOU DOUBLE THE SIZE YOU WILL HAVE 300 EMPLOYEES, GIVE OR TAKE, AND ONLY 198 PARKING SPACES ON THE BLOCK.

4d FACT: THE STREETS AROUND THE INTENDED NEW COURT HOUSE ARE TOO NARROW FOR ALL THE TRAFFIC.

4e FACT: THERE IS ALSO A CITY #1 WATER WELL IN THE INTENDED PLACE.

4f WE ARE A FOURTH GENERATION BUSINESS IN WOODLAND AND WE ARE VERY CONCERNED AS TO HOW THIS WILL EFFECT OUR BUSINESS!!

4a Response

The courthouse location, construction, and operation is the responsibility of the State of California, Administrative Office of the Courts. Therefore, the CEQA process conducted by the AOC (the Lead Agency) provides the opportunity for the public to learn about the project and provide comments to the state during the public comment period. The City, Redevelopment Agency and the Superior Court have all communicated to the AOC their desire to locate the new courthouse in a downtown location close to existing court facilities. In addition, the AOC has had discussions with the county regarding the new courthouse and they have voiced support for the new location.

4b Response

The AOC completed a Feasibility Report for the courthouse and has determined that the space available on the proposed project site is adequate for the construction of a 14-courtroom courthouse. The size of the proposed project is based on the AOC's "California Trial Court Facilities Standards" which sets forth details regarding the state's requirements for courtroom size, administrative space needs, parking, and other specifications for new courthouses. The proposed project is consistent with those standards.

4c Response

To clarify, the proposed courthouse represents the consolidation of several court facilities with a total of 13 courtrooms currently located in downtown Woodland into a single location. Please see Table 2.1-1 on page 6 of the IS/MND for more details on the existing facilities. There will be one additional courtroom added, for a total of 14 courtrooms. The project will provide 198 parking spaces on-site and 223 spaces off site, for a total of 421 dedicated parking spaces. It should be noted that public transit to the project site is also currently available.

4d Response

According to the City of Woodland Engineering Design Standards (Standard Specifications and Details 2007), the City's roadway standard for non-collector streets, which would apply to 5th Street, 6th Street, and Lincoln Avenue, requires a 40-foot right of way. Existing conditions on 5th Street and 6th Street are slightly narrower than this standard, by 2 feet and 1 foot, respectively. However, the Design Standards note that in areas of reconstruction of existing streets, less than twelve foot (12'), reduced widths may be used when approved by the City Engineer. Because the project involves existing streets, the AOC will be conferring routinely with

the City during the design process for the proposed courthouse to ensure that an adequate level of service is provided by the streets in question. The city is aware of the proposed project and will review final design documents to ensure adequate lane widths and/or will remove on-street parking on 5th and/or 6th Streets adjacent to the court site to ensure adequate lane widths.

4e Response

As discussed on page 5, Section 2.0, the AOC is aware of the existing well (Well #1) and has discussed relocation options with the City of Woodland, including a proposed site in Freeman Park. The city suggested the potential well location in the park. The potential relocation site for the well is in a paved area in the northeastern part of Freeman Park (see attached Figure J-1). Given the location is already paved, the improvements related to the well will not result in impacts to the park's aesthetics. In addition, since the current location is already paved it is not expected to interfere with park users.

The City of Woodland Public Works Department will be responsible for the relocation of the well, if needed. Prior to the abandonment of this well the city would apply for a well abandonment permit from Yolo County and would complete the abandonment activities in accordance with county and state requirements. Abandonment of the well would require sealing of the well shaft with a cement grout.

Approximately 10,000 square feet of the existing paved area would be disturbed to accommodate the well and associated features. The replacement well would be constructed in accordance with best management practices to control noise, air emissions, and disruption to local activity. Construction of the replacement well would be expected to last approximately 12 to 18 months, and would include:

- Drilling of a well shaft and installation of piping connecting the well to the nearby water mains;*
- Construction of a well head noise reduction enclosure to house the well pump and reduce off-site noise levels generated by the pump; and*
- Installation of a power pump, variable frequency drive, and other equipment at the project site.*

In addition to the well installation, trenches would be dug in the park to accommodate water pipes that would distribute extracted groundwater from the well to water mains.

A temporary sound attenuation structure and other standard construction BMPs would be employed to minimize the off-site noise levels generated during drilling of the well, control soil erosion and stormwater, and protect water quality. The new well would be housed in a noise reduction

structure designed with sound attenuation features to control any off-site operational noise levels. If a backup generator were to be installed, natural gas would be used to operate the generator.

The city recently performed CEQA evaluations for two water well replacement projects in Campbell Park (Well #15) and Klenhard Park (Well #22). During those evaluations, the City determined that the well replacement activities did not result in significant impacts, and thus were categorically exempt from CEQA. The activities associated with installing a well in Freeman Park would be similar to those associated with these other two locations. Finally, on January 20, 2009, the City of Woodland adopted Ordinance 1504 to amend Section 15-26(m) of the City of Woodland Municipal Code as follows:

“A backup generator used for the emergency operation of a City of Woodland water well or other City facility and the drilling of a City of Woodland water well shall not be considered loud, disturbing, or unnecessary noises.”

Thus, potential noise generated by construction of water wells in the City of Woodland is not considered to be a significant impact.

Given the proximity to the existing well (approximately 500 feet away), the new replacement well would have a pumping capacity comparable to that of the existing well and hydrologic impacts are not anticipated.

4f Response

As noted previously, the AOC is committed to reducing inconveniences to nearby residents and businesses to the fullest extent possible, and will make every effort to (1) limit street closures during construction; and (2) maintain communication with neighboring residents and businesses regarding construction activities. While this is not necessary to mitigate to a level of insignificance, the AOC is willing to reach out in an effort to keep the community involved with the project.

18 March 2010 letter from Mr. Christison

Comments on Yolo County Superior Court House Draft Initial Study / Mitigated Negative Declaration		
5a	<p>Pg. 5, Section 2.0 If relocating the water well to a location in Freeman Park is an option for this project then the impact to the Park and mitigation for the impacts should be discussed in this Study in section XV on page 30. Figures 2 and 3 only show the Study boundary as the property bounded by 5th Street, 6th Street, Main Street, and Lincoln Avenue, why are the water well relocation and off site parking location options not shown in the figures.</p>	<p>5a Response</p> <p>See Response 4e above for a discussion regarding Well #1, and Response 5b below for a discussion regarding the parking location.</p>
5b	<p>Pg. 7, Section 2.1 The last paragraph of this section refers to 223 off-street parking spaces that AOC is currently negotiating for acquisition. Why are these off-site properties not included in this study and shown in the figures. The mitigation of the environmental effects off street parking lot construction is not addressed in this study. There is a need for clarity in regard to the off street parking lots, the study leads the reader to conclude that the off street parking is provided by the properties fronting Lincoln Ave., but the traffic study in Appendix G refers to two offsite parking options that are not shown or referred to in the study. Is AOC negotiating on its own behalf or is the City of Woodland Redevelopment Agency acting on AOC's behalf?</p>	<p>5b Response</p> <p>The AOC is currently in discussions with Union Pacific (UP) for the acquisition of a vacant lot that will be used for additional, off-site, court-designated parking. The lot is located at the southeast corner of Lincoln and 5th Streets, as shown on Figures 8 and 9 of the Traffic Study report in Appendix G.</p> <p>The existing lot is vacant with some asphalt. Construction associated with off-site parking would include minor surface grading and paving where needed. Standard construction BMPs described in Section 2.5.3 would be employed to (1) minimize noise levels generated during construction, (2) control air pollution, soil erosion and stormwater run-off, and (3) protect water quality.</p>
5c	<p>Pg. 12, Section 2.5.1 The off site parking properties are not clearly shown in the study. The environmental effects of off site parking lots should be address.</p>	<p>Localized traffic impacts for the additional off-site parking at the UP site were incorporated into the AOC's traffic analysis, including ingress and egress into the proposed off-site parking lot. Given the current state of the parcel (vacant with some asphalt), the limited construction associated with the surface parking, and the findings of the traffic study, the AOC concludes there will be no significant impacts related to this off-site parking.</p>
5d	<p>Pg. 19, Section 3.1 item 9 The description of the projects surroundings is not consistent between section 3.1 item 9 and the descriptions shown on pg. 33, pg. 68, and pg. 71. North: Include Remax office, Rainbow Auto Glass, Brennda's Tack, T&D Computer East: Include Woodland School District offices, Ice Company Building, UPRR property. West: Natamura Bros Furniture, T.V. Christison and Sons, Residence on Lincoln</p>	<p>5c Response</p>
5e	<p>The AOC may not be subject to local government authorities, however AOC should consider direct notification by mail of adjacent property owners within a 1,000ft radius of the proposed development boundary. This type of notification is standard practice in Woodland. We received a mail notice of the public meeting held on March 18th 2010 that was post marked the day after the meeting.</p>	<p>See above response to 5b.</p>
5f	<p>Pg. 27, Item d The court house development proposes to build a 4 story 141,000 square foot building with a paved parking lot on a largely undeveloped unpaved site. The project will increase the sites impervious area and increase the amount of runoff from the site. The study sites design features that will be incorporated to mitigate for the increase this should be listed as a potentially significant Impact unless mitigated.</p>	<p>5d Response</p>
5g	<p>Pg. 27, Item e The increased of runoff water will have a potentially significant Impact unless mitigated.</p>	<p>The description of surrounding properties identified in the IS/MND are those immediately adjacent to the project site, and is not intended to be an exhaustive list of properties in the general vicinity of the project area. With respect to residential properties, the text has been updated to include a consistent description of the residential properties to the southwest of the project site (see Appendix K- Revisions to Draft Report).</p>
5h	<p>Pg. 29, Item b The study refers to modified contractor practices to avoid closing surrounding streets. It is not unreasonable to believe that a project of this size and this close to the only police station in Woodland could have a potentially significant Impact unless mitigated on police traffic on 5th and 6th streets. The contractor should be restricted form closing the streets without notifying the City and Police 48hr in advance.</p>	<p>The noise analysis (Section 4.12 (a), page 71 of the IS/MND) considered the nearest residential property to the project site (978 Lincoln Avenue), assuming that potential noise impacts on residences would be greatest at the closest residential property, and that noise impacts would diminish with distance. As stated on page 73 in Section 4.12, the AOC will adopt</p>

5i

Pg. 30, Section XV.
 If the water well is relocated to Freeman Park I believe at this work will have a potentially significant Impact unless mitigated on the use of the park. I also believe that opening a public use facility like the proposed Court House will increase the use of Freeman Park and accelerate the deterioration of the facilities. The current economic problems and resulting parks department budget cut backs have already accelerated the deterioration of parks facilities in Woodland these problems have the potential to worsen and have a potentially significant Impact unless mitigated when the Court House opens.

5j

Pg. 71, Table 4.12.1
 I believe that Natamura Bros. Furniture has delivery access on 5th Street.
 I believe the old Ice Company building on the NE corner of 6th and Lincoln has tenants.

three mitigation measures to minimize construction impacts to residential properties; thus noise impacts on residential properties in the project vicinity are considered to be less-than-significant.

5e Response

To encourage public participation, the AOC issued a Notice of Intent (NOI) related to the availability of the IS/MND (Appendix I). Public Resources Code 21092, subd. (b) (3); CEQA Guidelines 15072, subd. (b) provides any one of three options to notify the public regarding an IS/MND for a proposed project, including:

1. *Posting of a notice on- and off-site in the area where the project will be located; or*
2. *Publication at least one time in a newspaper of general circulation in the area affected by the proposed project; or*
3. *Direct mailing to owners and occupants of contiguous property as shown on the latest equalized assessment roll.*

The AOC posted a notice around the perimeter of the site on February 16, 2010 (Appendix I). In addition, a notice was published in the Daily Democrat on February 16, 2010 (Appendix I). The AOC sent a notice to adjacent property owners (Appendix I) within a 300 foot radius of the project site on February 17, 2010 and a secondary mailing on February 24, 2010, to include property owners within 600 feet of the southern portion of the block. Recipients of both mailings had a sufficient amount of time to submit comments on the project during the public comment period. Finally, a public meeting regarding the project was held on February 24, 2010. This public meeting was not required per CEQA Guidelines, but was held as an additional means of informing the public and receiving comments about the proposed project.

5f Response

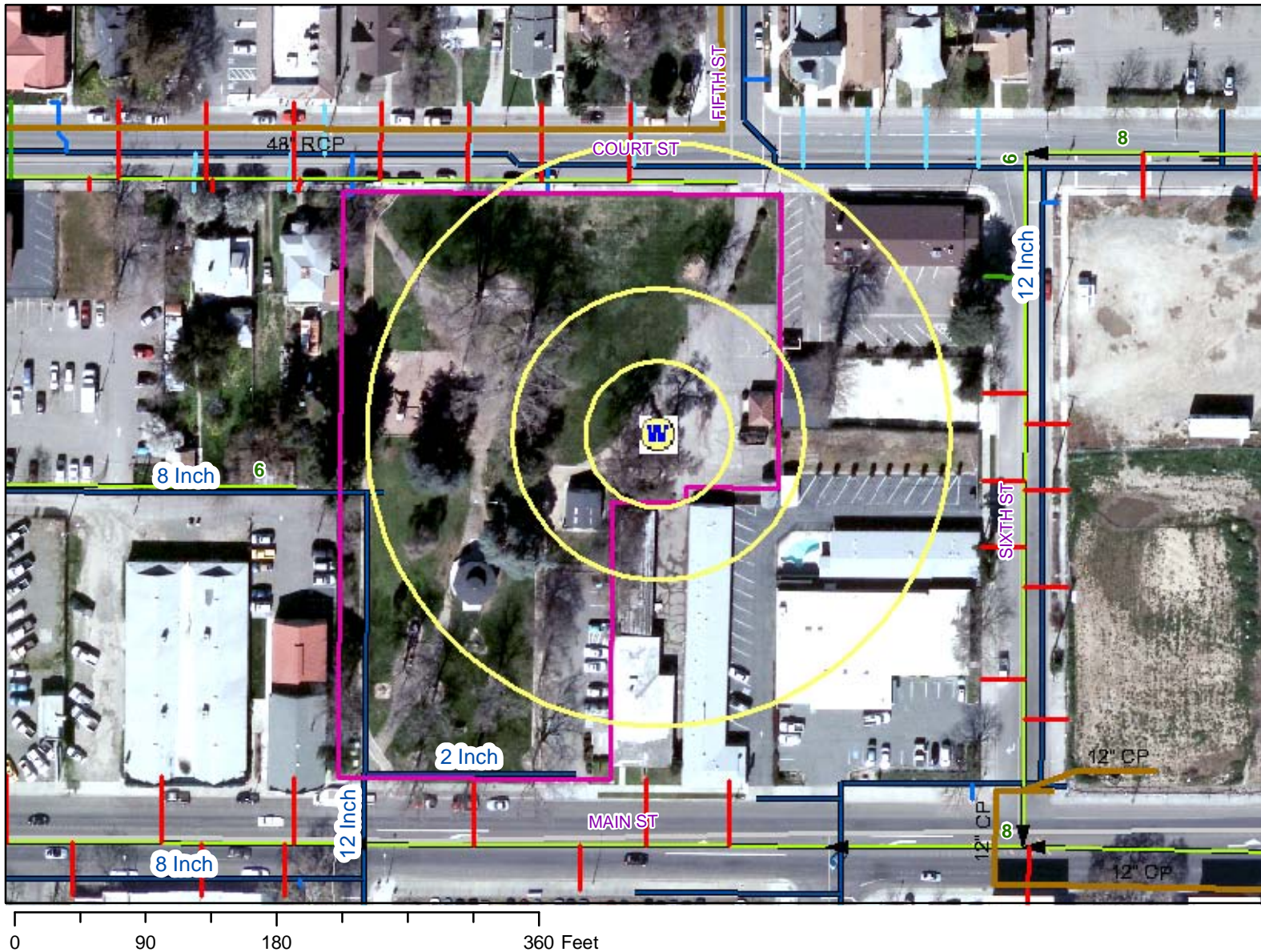
Measures to avoid or reduce impacts from runoff are described in Section 2.5.2 and applied in Section 4.9. The project site is in an area that is currently served by the Court Street/Beamer Street Trunk System. As discussed in Section 4.9 of the IS/MND, runoff from the site will be directed to the city's storm drain system. As noted in the Downtown Specific Plan, loss of impervious surface in the Master Plan area will not be at a level that would significantly impact the existing storm drain system. The city has reviewed the proposed project and has determined that the capacity of the city's storm drain system is sufficient to accommodate the new courthouse.

As noted in Sections 2.5.2 and 4.9 (a) and (e) of the IS/MND, the project will be subject to the new State Water Resources Control Board (SWRCB)

18 March 2010 letter from Mr. Christison

	<p><i>General Permit Order Number 2009-0009-DWQ (effective 1 July, 2010). The General Permit (Draft) includes additional post-construction requirements requiring that sites match pre-project hydrology by employing Low Impact Development Design features as described in the draft IS/MND. This is achieved by maintaining drainage concentrations and implementing non structural best management practices (BMPs) (e.g. site design) and structural BMPs (e.g. bioretention facilities, rain gardens, vegetative swales, rain barrels, and cisterns). The BMPs and related stormwater requirements are integral to the project as proposed, and avoid or reduce impacts. Additional mitigations are not required.</i></p>
	<p>5g Response</p>
	<p><i>As stated in Response 5f above, the project will be subject to the new SWRCB General Permit, which includes additional post-construction requirements, requiring that sites match pre-project hydrology. In addition, the City is in the process of implementing drainage improvement plans for the East and Main Streets. The City approved a contract bid package for the East and Main Streets drainage improvements on November 17, 2009. The staff report to the Redevelopment Agency Board for the contract bid package (dated November 17, 2009) specifically states that the East and Main Street storm drain improvement plans would accommodate the proposed Yolo Superior Courthouse project. Therefore the project would not result in potentially significant impacts on the local storm drainage.</i></p>
	<p>5h Response</p>
	<p><i>Section 4.16(d) addresses emergency access and concludes that there is no significant impact (Page 88). The proposed project will follow the City of Woodland Municipal Code Chapter 20, (in particular Sec. 20-2-49) which requires that the AOC provide at least 48 hours written notice to all police and fire departments with jurisdiction over the project area.</i></p>
	<p>5i Response</p>
	<p><i>See Response 4e, with respect to potential Well #1 relocation impacts. Section 4.15 of the Draft IS/MND addresses the proposed courthouse's potential impact on Freeman Park and concludes that increase in use of the park attributed to the proposed courthouse will not result in substantial physical deterioration of Freeman Park.</i></p>
	<p>5j Response</p>
	<p><i>The purpose of Table 4.12.1 is to identify the closest sensitive receptors to the project site (i.e. adjacent properties to the project site) and is not intended to be an exhaustive list of properties in the general vicinity of the project area.</i></p>

Overview of Possible Well 1 Relocation Sites



Legend

- Proposed Well
- 50'
- 100'
- 200'
- Sewer**
 - Gravity Main
 - Lateral - Unknown
 - Lateral - Known
- Storm**
 - Gravity Main
 - Lateral
- Water**
 - Pressurized Main
 - Lateral - Domestic
 - Lateral - Hydrant

- NOTES:
1. 50' RADIUS PRIMARY DRINKING WATER SOURCE PROTECTION ZONE: NO SEWER, STORMWATER, OR INDUSTRIAL LINES; NO LATERAL LINES; NO HOUSE FOUNDATIONS
 2. 100' RADIUS SECONDARY DRINKING WATER PROTECTION SOURCE ZONE: NO SEWER OR STORMWATER MAINS; NO DRAINAGE CHANNELS
 3. 200' SETBACK REQUIRED FROM FORCE MAINS (SEWER, STORMWATER, INDUSTRIAL), UNDERGROUND FUEL TANKS, SEPTIC TANKS, LEACH LINES, AND STABLES

Figure J-1

Appendix K
Revisions to Draft Report

This appendix presents a summary of the clarifications and minor edits made to the *Draft Initial Study and Mitigated Negative Declaration for the Yolo County Superior Courts New Superior Court Courthouse, Main Street, Woodland, California* (dated February 2010), as presented in this Final report.

As presented in Appendix J, the comments received during the public comment period did not trigger a “substantial revision” to the Draft Initial Study/MND report. Edits to the Draft IS/MND are identified for the reader by underlined, red text. The Final IS/MND includes the following:

- Updating the date of the document to reflect the finalization date (April 2010);
- Updating the title of the document on the cover page to reflect the finalized status;
- Adding Appendix H - *Final Mitigation Monitoring Plan*;
- Adding Appendix I - *Public Notice*, which includes a copy of the *Notice of Intent to Adopt a Mitigated Negative Declaration and Notice of Public Comment Period, Proof of Publication, and a copy of the attendee sign-in sheet for the public meeting*;
- Adding Appendix J - *Public Comments*, which includes copies of comments received in writing during the public comment period, summaries of comments provided at the public meeting, and responses to all written comments received.
- Adding Appendix K - *Edits to Draft Report*, this Appendix;
- Clarifying references to residential properties located to the southwest of the project site. These edits were incorporated in Section 2.4.2 *Surrounding Land Uses* (page 9), Section 4.1 *Aesthetics* (page 33), and Section 4.10 *Land Use and Planning* (page 68); and
- Correcting an editing error by deleting duplicate wording on page 101 of the Draft IS/MND under Noise Mitigation Measure 5, and replacing it with the appropriate text as discussed on page 76 of the Draft IS/MND. This edit was incorporated in Section 7.5 *Inventory of Mitigation Measures* (page 101).