

**CITY OF WOODLAND
300 FIRST STREET
WOODLAND, CALIFORNIA**

**WOODLAND CITY COUNCIL /
WOODLAND FINANCE AUTHORITY**

REGULAR MEETING AGENDA

FEBRUARY 5, 2013

6:30 PM

A. CALL TO ORDER

B. COMMUNICATIONS-PUBLIC COMMENT

This an opportunity for the public to speak to the Council on any item other than those listed for public hearing on this agenda. Speakers are requested to use the microphone in front of the Council and to begin by stating their name, whether they reside in Woodland and the name of the organization they represent if any. The Mayor may impose a time limit on any speaker depending on the number of people wanting to speak and time available for the rest of the agenda. In the event comments are related to an item scheduled on the agenda, speakers may be required to wait to make their comments until that item is considered.

C. COMMUNICATIONS–COUNCIL/STAFF STATEMENTS AND REQUESTS

This is an opportunity for the Council Members and Staff to make comments and announcements, to express concerns, or to request Council's consideration of any items a Council Member would like to have discussed at a future Council meeting.

D. PRESENTATIONS

1. Adopt Proclamation Honoring Langston C. "Jack" Jackson

E. CONSENT CALENDAR

2. Kentucky Avenue Widening and Complete Streets Improvement Project CIP #04-07; Approve Consultant Agreement
Recommendation: that the City Council approve a consultant services agreement for design services for the Kentucky Avenue Widening and Complete Streets Improvement Project (CIP #04-07) with PSOMAS in an amount not to exceed \$1,550,000 and authorize the City Manager to execute the agreement
3. Water meter pavement Rehabilitation Project, CIP #12-10; Approve Plans and Specifications and Authorize Bid Advertisement
Recommendation: that the City Council approve the project design and bid package for the Water Meter Pavement Rehabilitation Project, CIP #12-10 and authorize bid advertisement
4. Approval of \$910,000 Loan for Mutual Housing California's Multi-Family Project
Recommendation: that the City Council 1) Adopt Resolution No. _____, approving a 57-year term residual receipts loan with Mutual Housing California (Mutual) in the amount of \$910,000 with three percent (3%) simple interest for Mutual's 101-unit apartment project at the southeast corner of Pioneer Avenue and Farmers Central Road and funding of the loan through the Spring Lake Affordable Housing Fund; and 2) Authorize the City Manager to execute any and all documents needed for the City to implement the loan and amend the budget as needed.
5. Agreement for Adult Softball Officiating Services
Recommendation: that the City Council (1) approve a professional service agreement with the Greater Sacramento Softball Association (GSSA) in the amount of \$55,000 each year for providing officiating services for a three-year agreement, with the option to extend the agreement for an additional two years; and (2) authorize the City Manager to execute the agreement on behalf of the City
6. Use of City Property for Fire Department Training Exercise
Recommendation: that the City Council authorize a live fire and burn exercise by the Fire Department of a house owned by the City located on City property (40208 County Road 24C)

7. Council Long Range Calendar
Recommendation: Informational Item

F. REPORTS OF THE CITY MANAGER

8. Consideration of the Velocity Island Park Project: Approve Mitigated Negative Declaration, and Grant the Conditional Use Permitted Recommended by the Planning Commission; and Authorize the City Manager to Sign the Lease Agreement in Substantially the Format Attached

Recommendation: that the City Council consider the following for the Velocity Island Park Project: 1) Approve Mitigated Negative Declaration; 2) Grant the Conditional Use Permit Recommended by the Planning Commission; and 3) Approve the Lease Agreement and Authorize the City Manager to Sign the Lease Agreement in Substantially the Format Attached.

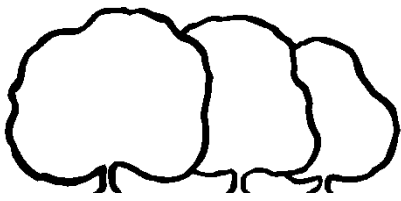
G. ADJOURN

I declare under penalty of perjury that the foregoing Agenda for the Regular City Council/Woodland Finance Authority of the City of Woodland scheduled for Tuesday, February 5, 2013 was posted on February 1, 2013 in the outside display case at City Hall, 300 First Street, Woodland, CA, and was available to the public during normal business hours.

Ana B. Gonzalez, City Clerk

Upon request, agendas and documents in the agenda packet will be made available in appropriate alternative formats to persons with a disability, as required by law. Any such request must be made in writing to the Office of the City Clerk of the City of Woodland. Requests will be valid for the calendar year in which the request is received, and must be renewed prior to January 1st.

Persons needing disability-related modifications or accommodations in order to participate in public meetings, including persons requiring auxiliary aids or services, may request such modifications or accommodations by calling the Office of the City Clerk (530-661-5806) at least 48 hours prior to the meeting.



City of Woodland

REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: February 5, 2013

SUBJECT: Proclamation Honoring Langston C. "Jack" Jackson

Recommendation for Action

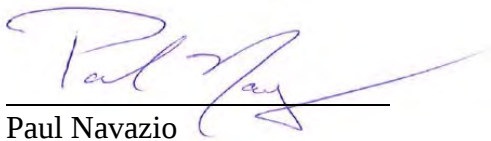
Staff recommends that the City Council accept and sign the proclamation honoring the life of and community service rendered by Jack Jackson.

Background

Jack Jackson was a very active member of the City of Woodland and Yolo County and loved giving back to the community. He helped organize the Food Pantry at the Yolo Second Baptist Church. He helped organize the Yolo County Black History Association. For two decades, he organized and ran "Nite Hoops", a weekend recreation program for youth. Jack was also the treasurer for the African American Association.

Jack passed away on December 29, 2012. He will be missed by those who knew him and the community in general.

Prepared by: Jennifer Robinson
Secretary to the City Manager


Paul Navazio

Attachment

City of Woodland

PROCLAMATION

HONORING THE LIFE OF LANGTON C. "JACK" JACKSON AND HIS SERVICE TO CITY OF WOODLAND COMMUNITY

WHEREAS, Jack served our county in the United States Air Force for 20 years; and,

WHEREAS, Jack volunteered as a Big Brother from 1994 through 1999 and continued to mentor the young men in his community until his passing; and,

WHEREAS, Jack was a member and organizer of the Yolo County African American Association and was passionate about advancing African American culture and history through education and employment opportunities; and,

WHEREAS, Jack volunteered as a Court Appointed Special Advocate continuing to serve and mentor youth in the community; and,

WHEREAS, Jack dedicated his Saturday nights to ensure that youth had a safe place to play basketball through the "Nite Hoops" basketball program; and,

WHEREAS, Jack was honored by the City of Woodland in 2007 with a Community Service Award for the countless hours he dedicated to serve as a role model, mentor and friend to young men and women.

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Woodland does hereby honor Langston C. "Jack" Jackson as a man of character that benefitted the lives of so many in the Woodland community.

Resolved this day, February 5, 2013

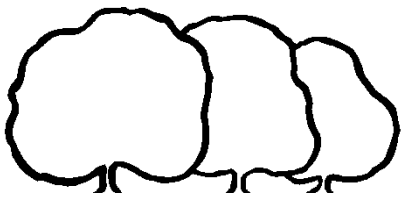
Marlin H. Davies, Mayor

Tom Stallard, Vice-Mayor

Bill Marble, Council Member

Jim Hilliard, Council Member

Sean Denny, Council Member



REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: February 5, 2013

SUBJECT: Kentucky Avenue Widening and Complete Streets Improvement
Project CIP #04-07; Approve Consultant Agreement

Recommendation for Action

Staff recommends that the City Council approve a consultant services agreement for design services for the Kentucky Avenue Widening and Complete Streets Improvement Project (CIP #04-07) with PSOMAS in an amount not to exceed \$1,550,000 and authorize the City Manager to execute the agreement.

Fiscal Impact

On October 16, 2012, the City Council approved an increase in the Kentucky Avenue Project by appropriating an additional \$2 million of federal funding to the FY2013 Capital Budget. The project design phase is budgeted in the amount of \$2 million, consisting entirely of federal funding. The request for right of way funding will be included in the FY2014 Capital Budget and construction of the project is anticipated to begin in 2017.

The anticipated cost for future phases of the project include right-of-way cost of approximately \$1 million and construction cost estimated at \$10 million. These costs are anticipated to be funded through future appropriations of Measure E and additional transportation grant funding. This is consistent with the Measure E spending plan and the Yolo County Transportation District Board Action supporting this project and our request for future funding for construction.

Background

The Kentucky Avenue project will reconstruct the pavement and widen Kentucky Avenue to 4-lanes from East to College streets. The project will also reconstruct the roadway and make operational improvements from College to West streets. The project will transform this section of Kentucky Ave into a complete street providing access to all modes of travel.

Once the additional budget appropriation for the project was approved by Council in October, staff proceeded with a qualification based selection process, as required by the grant, to select a firm to provide design services for the project.

Staff issued a request for qualifications on October 24 and received submittals on November 14. A four member team of staff reviewed, scored and ranked the 12 statements of qualification received. The two top ranked firms, Mark Thomas & Company and PSOMAS, were interviewed on December 18. The review team evaluated the interviews and the top rated firm was PSOMAS.

Discussion

The staff review team determined that while both firms that were interviewed were highly qualified to perform the design services requested, PSOMAS had the best understanding of the City's needs and approach to the project. Staff anticipates being substantially complete with the preliminary engineering and environmental phases by fall 2013 so that staff has a strong application to SACOG for construction funding.

Conclusion

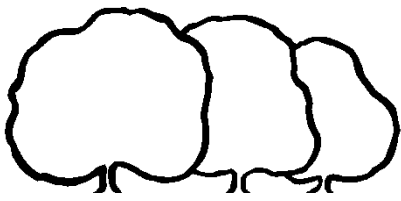
Staff recommends that the City Council approve a consultant services agreement for design services for the Kentucky Avenue Widening and Complete Streets Improvement Project (CIP #04-07) with PSOMAS in an amount not to exceed \$1,550,000 and authorize the City Manager to execute the agreement.

Prepared by: Katie Wurzel, PE
Transportation Engineer

Reviewed by: Brent Meyer, PE
Principal Civil Engineer/City Engineer

Reviewed by: Nicholas J. Ponticello
Community Development Director

Paul Navazio
City Manager



REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: February 5, 2013

SUBJECT: Water Meter Pavement Rehabilitation Project, CIP #12-10; Approve Plans and Specifications, and Authorize Bid Advertisement

Recommendation for Action

Staff recommends that the City Council approve the project design and bid package for the Water Meter Pavement Rehabilitation Project, CIP #12-10 and authorize bid advertisement.

Fiscal Impact

The project is funded in the Capital Budget. The total budget is \$600,000, which consists of \$600,000 from fund 210 (water enterprise). The engineer's estimate of construction cost is \$525,000.

The difference between the total project budget and the engineer's estimate is the amount budgeted for design, construction management and construction contingency. There is no impact to the General Fund.

Background

The water meter pavement rehabilitation project is a follow up project to perform surface restoration on the streets that required moderate to extensive trench cuts in the pavement for water service installations during Phase 2 of the Water Meter Retrofit Project. The Phase 2 project set aside funds specifically to provide the necessary street restoration work.

A full set of Plans and Specifications are available for review at the Community Development counter. For inquiries regarding project details, please contact CDD engineering staff at 661-5820.

Upon Council authorization, the project bids will be solicited by February 7th with an approximate bid opening date of Early March. Staff anticipates a bid award date for the March 19th Council meeting with construction beginning around Mid May.

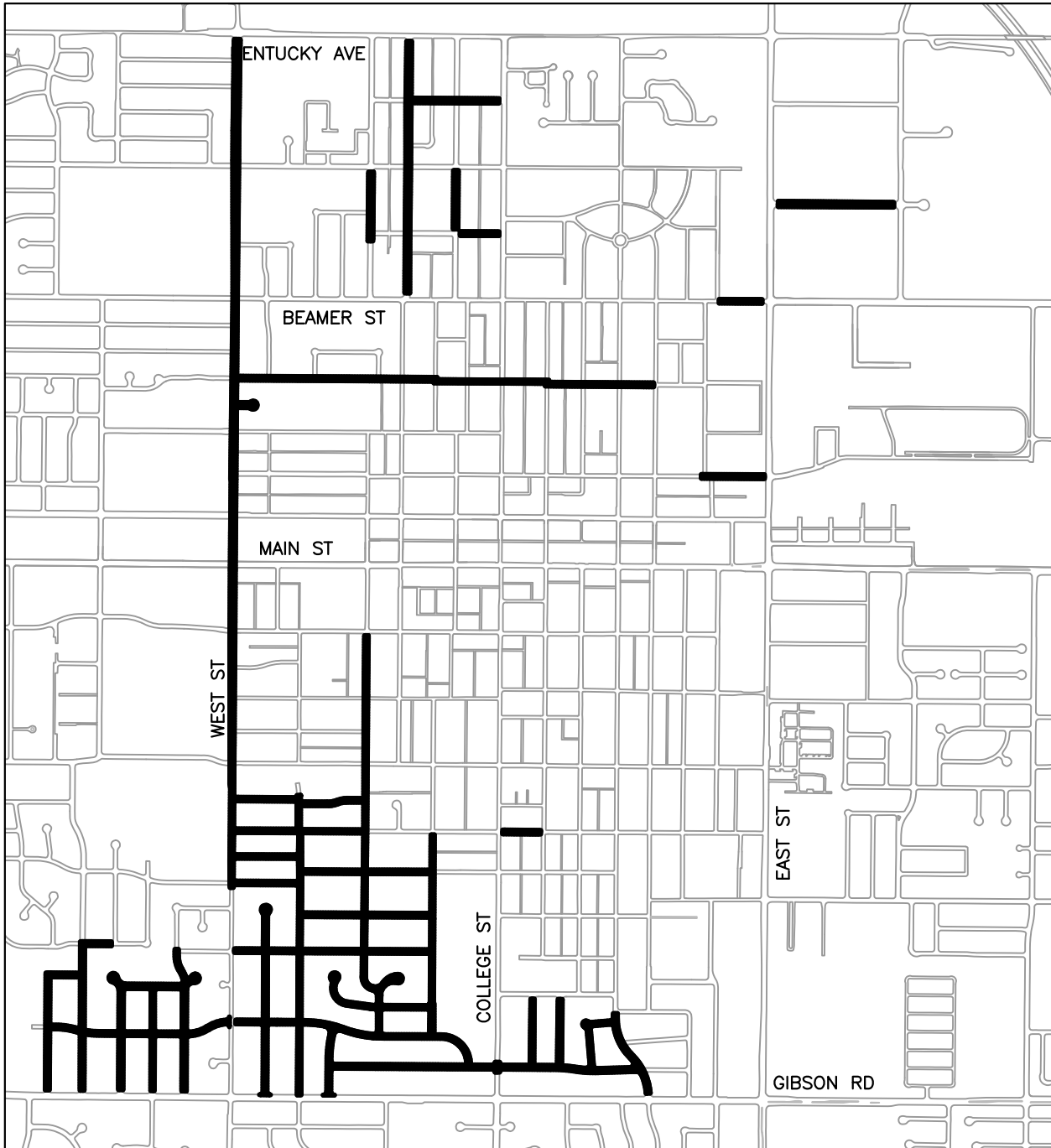
Conclusion

Staff recommends that the City Council approve the project design and bid package for the Water Meter Pavement Rehabilitation Project, CIP #12-10 and authorize bid advertisement.

Prepared by: Tamera Burnham
Assistant Engineer

Reviewed by: Nicholas J. Ponticello
Community Development Director

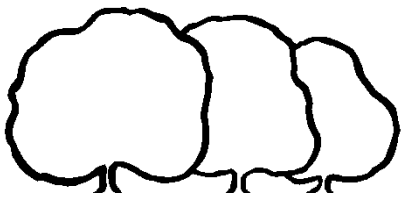
Paul Navazio
City Manager



City of Woodland
**WATER METER PAVEMENT REHAB
PROJECT NO. 12-10**

 Streets identified for surface treatment





REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR AND
CITY COUNCIL

DATE: February 5, 2013

SUBJECT: Approval of \$910,000 Loan for Mutual Housing California's Multi-Family Project

Recommendation for Action

Staff recommends that the City Council take the following actions.

1. Adopt Resolution No.____, approving a 57-year term residual receipts loan with Mutual Housing California (Mutual) in the amount of \$910,000 with three percent (3%) simple interest for Mutual's 101-unit apartment project at the southeast corner of Pioneer Avenue and Farmers Central Road and funding of the loan through the Spring Lake Affordable Housing Fund; and
2. Authorize the City Manager to execute any and all documents needed for the City to implement the loan and amend the budget as needed.

Fiscal Impact

The proposed loan would be funded through the City's Spring Lake Affordable Housing Fund. The City collects a fee of \$1,100 for each market-rate single-family unit constructed in Spring Lake in order to provide 74 additional affordable units in Spring Lake. The fees collected are deposited into the fund. The fund balance was approximately \$1,000,000 in July 2010. Since that time the City has encumbered the fund with a predevelopment loan of \$350,000 to Mutual and a funding commitment of up to \$20,000 help fund bus service to Spring Lake in order to improve the scoring of Mutual's upcoming tax credit funding application. The \$350,000 predevelopment loan will be repaid once Mutual has closed on its construction loan.

Background

On July 20, 2010, the City Council approved up to \$910,000 in funding assistance for Mutual's project and a \$350,000 predevelopment loan. The predevelopment loan will be paid off when Mutual closes on its construction financing. Mutual received site plan and design review approvals

from the Planning Commission on July 21, 2011. In March 2012, Mutual applied for tax credit financing through the California Tax Credit Allocation Committee (TCAC). Mutual's application fell three points short of the 148-point minimum threshold for TCAC to fully consider the application. On May 15, 2012, the City Council approved funding of up to \$20,000 from the City's Spring Lake Offsite Affordable Housing Fund to provide bus service to the Spring Area for a period of two years. Pioneer Investors LLC, a Spring Lake developer, will fund up to \$40,000 of the bus service cost. The Yolo County Transportation District estimates a cost of no more than \$60,000 to provide bus service to Spring Lake for two years. The bus service will allow Mutual to satisfy the minimum points threshold for full consideration of its upcoming TCAC application. Mutual plans to apply to TCAC in March of this year.

Discussion

Mutual has submitted a request for a residual receipts loan in the amount of \$910,000 for a 57-year term with three percent (3%) simple interest. With the residual receipts component, loan repayment could start prior to the 57-year period if the project's operational cash flows are sufficient. The loan would be secured by the property and improvements located at the site. A loan agreement, promissory note, and deed of trust would be executed for the loan. No loan disbursements would occur until Mutual has (1) secured its tax credit financing, (2) obtained any other financing necessary for the project, and (3) repaid the City's \$350,000 predevelopment loan.

Public Contact

Posting of the City Council agenda.

Conclusion

Staff recommends that the City Council take the following actions.

1. Adopt a Resolution No.____, approving a 57-year term residual receipts loan with Mutual Housing California in the amount of \$910,000 with three percent (3%) simple interest for Mutual's 101-unit apartment project at the southeast corner of Pioneer Avenue and Farmers Central Road and funding of the loan through the Spring Lake Affordable Housing Fund; and
2. Authorize the City Manager to execute any and all documents needed for the City to implement the loan and amend the budget as needed.

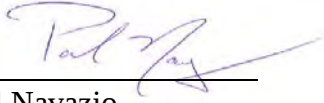
Prepared by: Dan Sokolow
Senior Planner

Reviewed by: Nick Ponticello
CDD Director

SUBJECT: Approval of \$910,000 Loan for Mutual Housing
California's Multi-Family Project

PAGE: 3

ITEM:



Paul Navazio
City Manager

Attachments:

1. Resolution No.____
2. Mutual Housing California loan request, dated January 22, 2013
3. Resolution No. 5132 for Mutual predevelopment loan, dated July 20, 2010
4. City Council Staff Report on Mutual funding assistance, dated July 20, 2010

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WOODLAND APPROVING
A LOAN IN THE AMOUNT OF \$910,000 FROM THE SPRING LAKE OFFSITE
AFFORDABLE HOUSING FUND TO ASSIST MUTUAL HOUSING CALIFORNIA IN THE
CONSTRUCTION OF A MULTI-FAMILY RESIDENTIAL PROJECT AT THE
SOUTHEAST CORNER OF PIONEER AVENUE AND FARMERS CENTRAL ROAD IN
THE SPRING LAKE SPECIFIC PLAN AREA**

WHEREAS, the City Council on July 20, 2010, approved up to \$910,000 in financial assistance for Mutual Housing California (Mutual) to construct a 101-unit apartment complex at the southeast corner of Pioneer Avenue and Farmers Central Road in the Heidrick Ranch I Subdivision and agreed to provide a predevelopment loan in the amount of \$350,000.

WHEREAS, Mutual plans to submit an application to the California Tax Credit Allocation Committee in March 2013 to obtain tax credits to assist with construction of its project and a successful application will allow Mutual to start construction of the first phase, 62 units, this year;

WHEREAS, Mutual has requested that the City provide a \$910,000 57-year term residual receipts loan with a simple interest rate of three (3) percent;

NOW THEREFORE BE IT RESOLVED, that the City of Woodland approves a 57-year term residual receipts loan with Mutual Housing California in the amount of \$910,000 with three (3) percent simple interest for Mutual's 101-unit apartment project at the southeast corner of Pioneer Avenue and Farmers Central Road and funding of the loan through the Spring Lake Offsite Affordable Housing Fund subject to the conditions that no loan disbursements will occur until Mutual has (1) secured its tax credit financing, (2) obtained any other financing necessary for the project, and (3) repaid the City's \$350,000 predevelopment loan;

BE IT FURTHER RESOLVED, the City of Woodland authorizes the City Manager to execute any and all documents needed to implement the loan and amend the budget as needed.

PASSED AND ADOPTED this 5th day of February, 2013, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Marlin H. Davies, Mayor

ATTEST:

Ana B. Gonzalez, City Clerk

APPROVED AS TO FORM:

Andrew Morris, City Attorney



January 22, 2013

Mayor Davies and Councilmembers
City of Woodland
300 First Street
Woodland, CA 95695

RE: Mutual Housing at Spring Lake

Dear Mayor Davies and Councilmembers,

Mutual Housing California (formerly known as Sacramento | Yolo Mutual Housing Association) is requesting the City of Woodland proceed with formalizing the terms for the funding assistance that it has committed to the Mutual Housing at Spring Lake affordable housing development.

The City Council approved funding assistance of up to \$910,000 in July 2010. In addition, the Council approved a \$350,000 predevelopment loan that we have used to pay for critical predevelopment activities. The interest rate on this loan is 3% simple and the loan is payable at the time that we close our construction loan for the project.

In preparation for submitting an application for federal low income housing credits in March, we are asking the City Council to approve a \$910,000 loan as a residual receipts loan with 3% simple interest and a 57-year term. This loan will refinance the \$350,000 predevelopment loan and make an additional \$560,000 available up to the full \$910,000 as already approved by the City. The proposed terms are consistent with the requirements of our other funding sources which require an extended term to match the term of the tax credit regulatory agreement and which do not allow required debt service payments on subordinate loans.

Since first embarking on this project, Mutual Housing California has diligently submitted several funding applications for this project but not yet received full funding due to the extreme competitiveness of governmental funding programs in a time of diminishing resources. We do, however, fully expect the U.S. Department of Agriculture to approve our pending supplemental application for \$2.5 million, and with that we will be able to submit a very competitive application for federal low income housing tax credits in March. Proceeding with this tax credit application for a first phase of development that includes 62 of the planned 101 units is our best opportunity to use the City and other resources already committed to this project in support of the Spring Lake Affordable Housing Plan.

Mutual Housing California greatly appreciates the support that the City of Woodland is providing to our development efforts in Spring Lake and we look forward to the successful completion of our new Mutual Housing community in Woodland.

Sincerely,

Rachel Iskow
Executive Director

RESOLUTION 5132

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WOODLAND
HEREBY COMMITS \$910,000 OF ASSISTANCE FROM THE SPRING LAKE
OFFSITE AFFORDABLE HOUSING FUND TO AID SMHA IN THE
CONSTRUCTION OF A 101 UNIT APARTMENT ON THE HEIDRICK
RANCH I SITE.**

WHEREAS, the Heidrick Ranch I site in Spring Lake is currently zoned for a multifamily project; and

WHEREAS the owner intended to rezone the site for single family units; and

WHEREAS, the rezone would require the City to amend the Spring Lake Specific Plan and the Housing Element; and

WHEREAS, the Sacramento Mutual Housing Association has agreed to purchase the site and build a project that is more in line with the current zoning; and

WHEREAS, to build this project, the City is being requested to provide up to \$910,000 of subsidy, including a \$350,000 predevelopment loan:

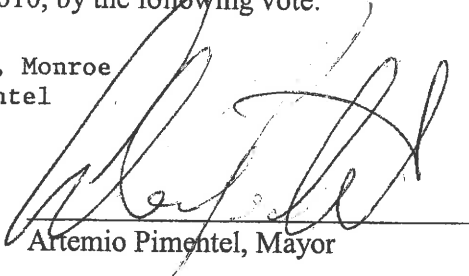
NOW THEREFORE BE IT RESOLVED, that the City of Woodland shall commit to providing up to \$910,000 of subsidy for this project from the Spring Lake Offsite Affordable Housing Fund, contingent on all other funding being committed as well;

BE IT FURTHER RESOLVED, that the City agrees that this subsidy amount will include a temporary pre-development loan, not to exceed \$350,000

BE IT FURTHER RESOLVED, the City of Woodland authorizes the City Manager to execute in the name of the City of Woodland, any documents needed and to amend the budget as needed to make the loan and subsidy payments.

PASSED AND ADOPTED this 20th day of July, 2010, by the following vote:

AYES:	Council Members Dote, Marble, Monroe
NOES:	Council Members Davies, Pimentel
ABSENT:	None
ABSTAIN:	None

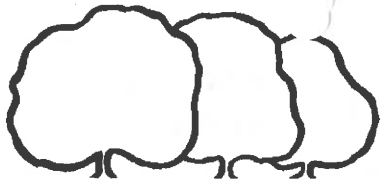

Artemio Pimentel, Mayor

ATTEST:


Sue Vannucci, City Clerk

APPROVED AS TO FORM:


Andrew J. Morris, City Attorney



City of Woodland

REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: July 20, 2010

SUBJECT: Sacramento Mutual Housing Association (SMHA) City Assistance
Request

Report in Brief

The Sacramento Mutual Housing Association (SMHA), an affordable housing developer, has made an offer to purchase the Heidrick Ranch I site in the Spring Lake Specific Plan Area. The five-acre site is currently zoned for 125 multifamily units. SMHA intends to build a 101-unit apartment complex on the site. As part of the project, they are requesting assistance from the City financial assistance in the amount of \$910,000 from Spring Lake Affordable Housing fees or other appropriate source in order to make the project financially feasible.

Staff recommends that the City Council approve Resolution No. ____ that commits up to \$910,000, including a \$350,000 pre-development loan, from Spring Lake Offsite Affordable Housing Fee to aid SMHA in the construction of a 101-unit affordable apartment complex on the Heidrick Ranch I site.

Background

Heidrick Ranch Phase I is a five-acre site located on the corner of Pioneer and Farmer Central Road. The site is currently zoned R-25 and was expected to produce 125 units under the Spring Lake Specific Plan. These 125 units are required to balance the development with the appropriate mix of single family and multi-family units and to generate sufficient fees for the Spring Lake Financing Plan. Approximately \$24,000 is generated per unit. Recently, the owner of the site requested a rezone to a single-family designation, with only 37 units. The issue with the rezone was that it did not comply with the Spring Lake Specific Plan, the Housing Element, or the Spring Lake Financing Plan. As the rezone application was considered, SMHA stepped forward and offered to purchase the site and build something closer to the intention of the original zoning.

Working closely with Redevelopment Agency staff, SMHA has developed a project that fits the zoning and that can be financed with a combination of tax credits, HOME funds, and the USDA 514 program. After discussions with the City Manager, the Planning and Engineering Divisions and the current property owner, it was determined that this was the best project for this site.

Discussion

The financing of an affordable housing development often involves several public and private funding sources. For at least two of the funding sources it is necessary to have a City financial commitment in order to be competitive. These applications, particularly for HOME grant funds and USDA loan funds, are due in August so there is a tight schedule in getting the commitment from the City. If this commitment is not made now, the project will not be able to move forward and the City would miss an opportunity to develop a viable project that is consistent with the Specific Plan and that will help generate \$3.5 million in development fees.

After examining different scenarios with various funding sources, the City assistance needed to facilitate the project is a payment of up to \$910,000. This subsidy can be provided in a number of ways. Currently, the City has \$1,000,000 in the Spring Lake Offsite Affordable Housing Fund to provide 74 additional affordable units in Spring Lake. This requirement was negotiated as part of the Spring Lake Specific Plan and is funded by a \$1,100 per single-family unit fee. This project would meet the majority of this requirement with a relatively low City investment. The subsidy could also be provided through a HUD 108 loan or Redevelopment Tax Increment funds.

The Council may have concerns regarding the use of the Spring Lake Offsite Affordable Housing Fund and/or the potential level of commitment. It is possible the contribution from the Spring Lake Offsite Affordable Housing Fund will be less if staff can identify other sources of funds to support the project. It is anticipated that the City subsidy would be used to help pay for the MPFP and SLIF fees on the project. If the City aids in the fee payment, the subsidy will not be needed until the project is completed in 24-30 months, thereby allowing staff and SMHA time to develop other funding alternatives.

It should also be noted that the Spring Lake Offsite Affordable Housing Fund will continue to generate fees as new homes in Spring Lake are constructed. At build out, an additional approximate amount of \$3 million should be contributed to the Fund from the \$1,100 single-family unit fee.

As mentioned above, the site needs to provide 125 units to meet the Spring Lake Financing Plan. In addition to the \$910,000, the City will also allow that 24 units needed for the financing plan be met in the Cal-West Seeds Map, a 45 acre piece of the Specific Plan that is located northwest of the Heidrick Ranch I site. The specific plan for this site identified a school that was originally anticipated to meet the Spring Lake Plan requirements. Since the time of the Plan inception, the School District has reevaluated the need for this school and decided that the facility is no longer needed. The 10-acre school site is in the process of being rezoned for residential in the Cal West map application that is currently submitted. By counting units on this site, the Spring Lake Financing Plan will be made whole and SMHA will not need to provide additional payments.

SMHA also is requesting that the City provide a portion of the subsidy up front in the form of a pre-development loan of \$350,000 which is part of the \$910,000 commitment. Staff believes that this loan can be made from the Spring Lake Offsite Affordable Housing Fee as well. This would be a

short-term loan that would be repaid in about 12 months when the project receives its construction financing.

Any City subsidy for this project will be contingent on SMHA receiving all funding, including tax credits, a HOME grant, and approval from USDA for the 514 loan. If for any reason SMHA is not able to secure all needed funding, the City's commitment will be void.

Fiscal Impact

It is not anticipated that this project would require any General Fund assistance. Housing staff time is covered from redevelopment agency affordable housing set-aside funds, as is allowed under redevelopment law.

As stated above, the subsidy could come from other sources. There will be a positive impact when the project pays its SLIF and MPFP fees, which are anticipated to be well over \$3,500,000. In addition, if staff can work with SMHA to develop other financing alternatives, the project subsidy would be significantly lower than the requested \$910,000.

Public Contact

Posting of the City Council agenda.

Alternative Courses of Action

1. Approve Resolution No. ____ that commits up to \$910,000, including a \$350,000 pre-development loan, from Spring Lake Offsite Affordable Housing Fee to aid SMHA in the construction of a 101-unit affordable apartment complex on the Heidrick Ranch I site.
2. Do not authorize the actions in the attached Resolution.

SUBJECT: Sacramento Mutual Housing Association (SMHA) City
Assistance Request

PAGE: 4

ITEM:

Recommendation for Action

Staff recommends that the City Council approve Alternative No. 1.

Prepared by: Jamie McLeod
Redevelopment/Housing
Analyst II

Reviewed by: Cynthia Shallit
Redevelopment Manager

Mark G. Deven
City Manager

Attachment A: Resolution

RESOLUTION _____

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WOODLAND
HEREBY COMMITS \$910,000 OF ASSISTANCE FROM THE SPRING LAKE
OFFSITE AFFORDABLE HOUSING FUND TO AID SMHA IN THE
CONSTRUCTION OF A 101 UNIT APARTMENT ON THE HEIDRICK
RANCH I SITE.**

WHEREAS, the Heidrick Ranch I site in Spring Lake is currently zoned for a multifamily project; and

WHEREAS the owner intended to rezone the site for single family units; and

WHEREAS, the rezone would require the City to amend the Spring Lake Specific Plan and the Housing Element; and

WHEREAS, the Sacramento Mutual Housing Association has agreed to purchase the site and build a project that is more in line with the current zoning; and

WHEREAS, to build this project, the City is being requested to provide up to \$910,000 of subsidy, including a \$350,000 predevelopment loan:

NOW THEREFORE BE IT RESOLVED, that the City of Woodland shall commit to providing up to \$910,000 of subsidy for this project from the Spring Lake Offsite Affordable Housing Fund, contingent on all other funding being committed as well;

BE IT FURTHER RESOLVED, that the City agrees that this subsidy amount will include a temporary pre-development loan, not to exceed \$350,000

BE IT FURTHER RESOLVED, the City of Woodland authorizes the City Manager to execute in the name of the City of Woodland, any documents needed and to amend the budget as needed to make the loan and subsidy payments.

PASSED AND ADOPTED this 20th day of July, 2010, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

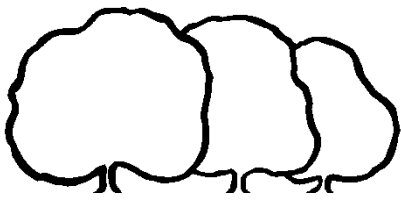
Artemio Pimentel, Mayor

ATTEST:

APPROVED AS TO FORM:

Sue Vannucci, City Clerk

Andrew J. Morris, City Attorney



City of Woodland

REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: February 5, 2013

SUBJECT: Agreement for Adult Softball Officiating Services

Recommendation for Action

Staff recommends that the City Council (1) approve a professional service agreement with the Greater Sacramento Softball Association (GSSA) in the amount of \$55,000 each year for providing officiating services for a three-year agreement, with the option to extend the agreement for an additional two years; and (2) authorize the City Manager to execute the agreement on behalf of the City.

Fiscal Impact

GSSA can provide professional softball officiating services for the City's softball leagues for \$55,000. The City collects approximately \$100,000 in softball registration fees. The registration fees help offset program costs including officiating costs.

Appropriations approved by Council in the FY 2012/13 budget are sufficient to cover the contract costs.

Background

The City's Parks & Recreation Department offers three adult softball leagues during the year for the community. Each season is eight to ten weeks long. Approximately 75 teams participate in each season (or approximately 1,000 people.) The program necessitates the use of professional officiating services for the umpires.

GSSA has been providing officiating services for over seven years with the City. The last contract for these services has expired. GSSA has been in operation since 1955 as a non-profit organization. As a well established business, they have over 150 officiators available to assign to softball games. All officials are independent contractors and not employees of GSSA.

Discussion

In September, staff polled local agencies who offered similar sports programs to determine which officiating services they used. RFP's were sent to the seven organizations that are used by the other municipal agencies the City contacted. One proposal was received for adult softball. GSSA was selected based on performance, qualifications and cost.

GSSA provides highly trained and experienced officials. All officials are required to be current with their training and softball officiating rules.

Conclusion

Staff recommends that the City Council (1) approve a professional service agreement with the Greater Sacramento Softball Association (GSSA) in the amount of \$55,000 each year for providing officiating services for a three-year agreement, with the option to extend the agreement for an additional two years; and (2) authorize the City Manager to execute the agreement on behalf of the City.

Prepared by: Kris Bain
Recreation Supervisor

Reviewed by: Christine Engel
Recreation Superintendent

Paul Navazio
City Manager

CITY OF WOODLAND
PROFESSIONAL SERVICES AGREEMENT
FOR
SPORTS OFFICIATING

1. PARTIES AND DATE.

This Agreement is made and entered into this _____ day of February, 2013, by and between the City of Woodland, a municipal organization organized under the laws of the State of California with its principal place of business at 300 First Street, Woodland, California 95695 ("City") and Greater Sacramento Softball Association, a California corporation, with its principal place of business at 6380 Tupelo Drive #3, Citrus Heights, California 95621 ("Consultant"). City and Consultant are sometimes individually referred to herein as "Party" and collectively as "Parties."

2. RECITALS.

2.1 Consultant.

Consultant desires to perform and assume responsibility for the provision of professional adult sports officiating services required by the City on the terms and conditions set forth in this Agreement. Consultant represents that it is experienced in providing adult sports officiating services to public clients and is familiar with the plans of City.

2.2 Program.

City desires to engage Consultant to render such services for the Adult Sports Program ("Program") as set forth in this Agreement.

3. TERMS.

3.1 Scope of Services and Term.

3.1.1 General Scope of Services. Consultant promises and agrees to furnish to the City all labor, materials, tools, equipment, services and incidental and customary work necessary to fully and adequately supply the professional sports officiating services necessary for the Program ("Services"). The Services are more particularly described in Exhibit "A" attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

3.1.2 Term. The term of this Agreement shall be from February 1, 2013 to January 30, 2016, unless earlier terminated as provided herein.

3.2 Responsibilities of Consultant.

3.2.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. City retains Consultant on an independent contractor basis and not as an employee. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of City and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance and workers' compensation insurance.

3.2.2 Schedule of Fees & Services. City shall pay Consultant for Services as follows:

For each regular co-ed game, Contractor will supply City with one umpire. City shall pay Contractor \$23 per co-ed game. For co-ed games with no time limit (i.e. games designated as such in the game schedule), City shall pay Contractor \$30 per game.

For each regular men's game, Contractor will supply City with two umpires. City shall pay Contractor \$40 per men's game. For men's games with no time limit (i.e. games designated as such in the game schedule), City shall pay Contractor \$50 per game.

Contractor shall charge City an administration charge of 8% to be added to each month's billing.

3.2.3 City's Representative. The City hereby designates the Parks, Recreation and Community Services Manager, or his or her designee, to act as its representative for the performance of this Agreement ("City's Representative"). City's Representative shall have the power to act on behalf of the City for all purposes under this Contract. Consultant shall not accept direction or orders from any person other than the City's Representative or his or her designee.

3.2.4 Consultant's Representative. Consultant hereby designates Bill Gubel Sacramento ASA Umpire Chief, or his or her designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

3.2.5 Coordination of Services. Consultant agrees to work closely with City staff in the performance of Services and shall be available to City's staff, consultants and other staff at all reasonable times.

3.2.6 Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant warrants that all employees and subconsultants shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subconsultants have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, including a City Business License, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from the City, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein. Any employee of the Consultant or its sub-consultants who is determined by the City to be uncooperative, incompetent, a threat to the adequate or timely completion of the Program, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the City, shall be promptly removed from the Program by the Consultant and shall not be re-employed to perform any of the Services or to work on the Program.

3.2.7 Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Program or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the City, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold City, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.2.8 Insurance.

3.2.8.1 Time for Compliance. Consultant shall not commence Services under this Agreement until it has provided evidence satisfactory to the City that it has secured all insurance required under this section. In addition, Consultant shall not allow any subconsultant to commence work on any subcontract until it has provided evidence satisfactory to the City that the subconsultant has secured all insurance required under this section.

3.2.8.2 Types of Required Coverages. As a condition precedent to the effectiveness of this Agreement for work to be performed hereunder and without limiting the indemnity provisions of the Agreement, the Consultant in partial performance of its obligations

under such Agreement, shall procure and maintain in full force and effect during the term of the Agreement, the following policies of insurance.

- (a) Commercial General Liability: Commercial General Liability Insurance which affords coverage at least as broad as Insurance Services Office “occurrence” form CG 0001, with minimum limits of at least \$1,000,000 per occurrence. Defense costs shall be paid in addition to the limits.

The policy shall contain no endorsements or provisions limiting coverage for (1) products and completed operations; (2) contractual liability; (3) third party action over claims; or (4) cross liability exclusion for claims or suits by one insured against another.

- (b) Workers’ Compensation: Workers’ Compensation Insurance, as required by the State of California and Employer’s Liability Insurance with a limit of not less than \$1,000,000 per accident for bodily injury and disease. Consultant shall not be required to provide this coverage as long as all personnel providing services under this Agreement are independent contractors provided by Consultant and not employees of Consultant.

3.2.8.3 Endorsements.

The policy or policies of insurance required by Section 3.2.8.2(a) Commercial General Liability shall be endorsed to provide the following:

- (1) Additional Insured: The indemnified parties shall be additional insureds with regard to liability and defense of suits or claims arising out of the performance of the Agreement. Additional Insured Endorsements shall not (1) be restricted to “ongoing operations”; (2) exclude “contractual liability”; (3) restrict coverage to “sole” liability of Consultant; or (4) contain any other exclusions contrary to the Agreement.
- (2) Primary Insurance and Non-Contributing Insurance: This insurance shall be primary and any other insurance, deductible, or self-insurance maintained by the indemnified parties shall not contribute with this primary insurance.
- (3) Severability: In the event of one insured, whether named or additional, incurs liability to any other of the insureds, whether named or additional, the policy shall cover the insured against whom claim is or may be made in the same manner as if separate policies had been issued to each insured, except that the limits of insurance shall not be increased thereby.

- (4) Cancellation: The policy shall not be canceled or the coverage suspended, voided, reduced or allowed to expire until a thirty (30) day prior written notice of cancellation has been served upon the City except ten (10) days prior written notice shall be allowed for non-payment of premium.
- (5) Duties: Any failure by the named insured to comply with reporting provisions of the policy or breaches or violations of warranties shall not affect coverage provided to the indemnified parties.
- (6) Applicability: That the coverage provided therein shall apply to the obligations assumed by the Consultant under the indemnity provisions of the Agreement, unless the policy or policies contain a blanket form of contractual liability coverage.

(B) The policy or policies of insurance required by Section 3.2.8.2(b) Workers' Compensation (if such a policy is required) shall be endorsed, as follows:

- (1) Waiver of Subrogation: A waiver of subrogation stating that the insurer waives all rights of subrogation against the indemnified parties.
- (2) Cancellation: The policy shall not be canceled or the coverage suspended, voided, reduced or allowed to expire until a thirty (30) day prior written notice of cancellation has been served upon the City except ten (10) days prior written notice shall be allowed for non-payment of premium.

3.2.8.4 Deductible. Any deductible or self-insured retention must be approved in writing by the City and shall protect the indemnified parties in the same manner and to the same extent as they would have been protected had the policy or policies not contained a deductible or self-insured retention.

3.2.8.5 Evidence of Insurance. The Consultant, concurrently with the execution of the Agreement, and as a condition precedent to the effectiveness thereof, shall deliver either certified copies of the required policies, or original certificates and endorsements on forms approved by the City. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. At least fifteen (15) days prior to the expiration of any such policy, evidence of insurance showing that such insurance coverage has been renewed or extended shall be filed with the City. If such coverage is cancelled or reduced, Consultant shall, within ten (10) days after receipt of written notice of such cancellation or reduction of coverage, file with the City evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies.

3.2.8.6 Failure to Maintain Coverage. Consultant agrees to suspend and cease all operations hereunder during such period of time if the required insurance coverage is not in effect and evidence of insurance has not been furnished to the City. The City shall have the right to withhold any payment due Consultant until Consultant has fully complied with the insurance provisions of this Agreement.

3.2.8.7 Acceptability of Insurers. Each such policy shall be from a company or companies with a current A.M. Best's rating of no less than A:VII and authorized to do business in the State of California, or otherwise allowed to place insurance through surplus line brokers under applicable provisions of the California Insurance Code or any federal law.

3.2.8.8 Insurance for Subconsultants. All Subconsultants shall be included as additional insureds under the Consultant's policies, or the Consultant shall be responsible for causing Subconsultants to purchase the appropriate insurance in compliance with the terms of this Agreement, including adding the City as an Additional Insured to the Subconsultant's policies.

3.2.9 Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed.

3.3 Fees and Payments.

3.3.1 Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in section 3.2.2 of this agreement.

3.3.2 Payment of Compensation. Consultant shall submit to City a monthly itemized statement which indicates actual Services rendered by Consultant. The statement shall describe the amount of Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. City shall, within thirty (30) days of receiving such statement, review the statement and pay all approved charges thereon.

3.3.3 Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized in writing by City.

3.4 Accounting Records.

3.4.1 Maintenance and Inspection. Consultant shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all

work, data, documents, proceedings and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

3.5 General Provisions.

3.5.1 Termination of Agreement.

3.5.1.1 Grounds for Termination. City may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least thirty (30) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those services which have been adequately rendered to City, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause.

3.5.1.2 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, City may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.5.2 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

Consultant:

Greater Sacramento Softball Association
6380 Tupelo Drive #3
Citrus Heights, CA 95621
Attn: Bill Gubel

City:

City of Woodland
300 First Street
Woodland, California 95695
Attn: Christine Engel
Parks and Recreation Department

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.5.3 Confidentiality. Consultant shall not use City's name or insignia, photographs of the Program, or any publicity pertaining to the Services or the Program in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of City.

3.5.4 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

3.5.5 Attorneys' Fees. If either party commences an action against the other party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorneys' fees and all other costs of such action.

3.5.6 Indemnification. Consultant shall defend, indemnify and hold the City, its officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, negligence or willful misconduct of Consultant, its officials, officers, employees, agents, subcontractors and subconsultants arising out of or in connection with the performance of the Services, the Program or this Agreement, including without limitation the payment of all consequential damages and attorneys fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against City, its directors, officials, officers, employees, agents or volunteers. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against City or its directors, officials, officers, employees, agents or volunteers, in any such suit, action or other legal proceeding. Consultant shall reimburse City and its directors, officials, officers, employees, agents and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the City, its directors, officials, officers, employees, agents or volunteers.

3.5.7 Entire Agreement. This Agreement contains the entire Agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both Parties.

3.5.8 Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Yolo County.

3.5.9 Time of Essence. Time is of the essence for each and every provision of this Agreement.

3.5.10 City's Right to Employ Other Consultants. City reserves right to employ other consultants in connection with this Program.

3.5.11 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the Parties.

3.5.12 Assignment or Transfer. Consultant shall not assign, hypothecate or transfer, either directly or by operation of law, this Agreement or any interest herein without the

prior written consent of the City, provided that Consultant may arrange for the services provided under this Agreement to be provided by subconsultants rather than by employees of Consultant. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

3.5.13 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents and subconsultants of Consultant, except as otherwise specified in this Agreement. All references to City include its elected officials, officers, employees, agents and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment or describe the scope, content or intent of this Agreement.

3.5.14 Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

3.5.15 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

3.5.16 No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.5.17 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5.18 Prohibited Interests. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, City shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

3.5.19 Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff

or termination. Consultant shall also comply with all relevant provisions of City's Minority Business Enterprise program, Affirmative Action Plan or other related programs or guidelines currently in effect or hereinafter enacted.

3.5.20 Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

3.5.21 Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right and authority to make this Agreement and bind each respective Party.

3.5.22 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.6 Subcontracting.

3.6.1 Prior Approval Required. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of City. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

CITY OF WOODLAND

GREATER SACRAMENTO SOFTBALL
ASSOCIATION

By: _____
Paul Navazio
City Manager

By: _____
Jeff Dubchansky
GSSA Commissioner

Attest:

By: _____
Ana Gonzalez, City Clerk

Approved as to Form:

By: _____
Andrew Morris, City Attorney

EXHIBIT "A"
SCOPE OF SERVICES

PROGRAM INFORMATION

Activity: Provide Sports Officiating Services.

Facility Location/Description: Woodland Community Center & Sports Park, 2001 East Street, Woodland, CA, 95776

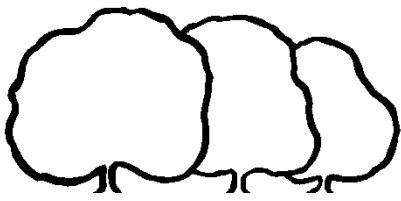
Dates, Days, Times of Activity: To be arranged, general schedule is, as follows:

Adult Softball 3 seasons per year, 10-12 weeks per season
Spring (March-May, approximately 350 games), summer (May-August, approximately 500 games), and fall (September-November, approximately 275 games)

Consultant agrees to the following obligations:

- A. Provide, supply and furnish all necessary work, labor, materials and supplies to carry out the terms of this Agreement and to properly and fully provide adult sports officiating services to the public;
- B. Provide all necessary fully trained personnel with the necessary qualifications to provide adult sports officiating services to the public;
- C. Consultant shall determine the method, details and means of providing the adult sports officiating services required by this Agreement.
- D. Provide completed Incident or Ejection Report within 24 hours of incident.
- E. All Sports Park Rules must be enforced by Contractor and Subcontractors. All Sports Park Rules must be adhered to by Contractor and Subcontractors.
- F. The CONTRACTOR shall only furnish workers who are competent and skilled for work under this contract. CONTRACTOR shall provide trained officials with the knowledge of playing rules for the sport. If, in the opinion of CITY staff, an employee of the CONTRACTOR is incompetent or disorderly, refuses to perform in accordance with the contract specifications, threatens or uses abusive language when working on this contract, they shall be removed from all work under this contract.
- G. CONTRACTOR shall provide the CITY with daily access to the scheduled official via the Arbiter, an internet official scheduling program, utilized by the Contactor. If CONTRACTOR does not utilize the Arbiter, a daily official schedule must be provided to the program supervisor a minimum of one week in advance.

- H. CONTRACTOR shall provide the CITY with a method of field contact (i.e. cell phone) for use during normal business hours. The CONTRACTOR will be responsible for coordinating the requirements of the CITY. Contractor shall check with CITY staff to confirm schedule and/or ensure no changes have been made.
- I. Special Conditions: CONTRACTOR's employees will often be working near or around children. In the interest of ensuring the protection of children who use CITY facilities, the CONTRACTOR shall not use any employee or worker to perform any work under the contract who has a conviction for any offense listed in the California Public Resources Code section 5164(a)(2). The CONTRACTOR shall be responsible for conducting background checks of its employees and workers and shall do so in accordance with California Penal Code section 11105.3. CONTRACTOR shall not perform any work under the contract until it has provided to the CITY a certification stating under penalty of perjury that none of the CONTRACTOR's employees and workers who are performing under the contract scope of work, has any convictions for the offenses listed in California Public Resources Code section 5164(a)(2). CONTRACTOR shall provide a certification of compliance with this requirement by March 1 of each year.



City of Woodland

REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: February 5, 2013

SUBJECT: Use of City Property for Fire Department Training Exercise

Recommendation for Action

Staff recommends that the City Council authorize a live fire and burn exercise by the Fire Department of a house owned by the City located on City property (40208 County Road 24C).

Fiscal Impact

Conducting a live fire training exercise as a means to remove a house located on City property will result in minimal expenses that will be covered with existing Department budgets (approximately \$1000 to purchase materials to prepare the house for training and \$700 for a temporary fence).

Background

The property acquired by the City for the Community & Senior Center and Sport's Park Complex includes a single family house located at 40208 County Road 24C. This house was used initially by the construction management firm as an office during the development of the property for the City. In 2011 the house was used by the Parks & Recreation Department to store items for recreation programs. The house eventually became an attractive nuisance resulting in numerous calls to the Public Safety Department for assistance. The house has been the target of vandalism and arson. In March 2012, a fire was started inside the house by a trespasser. The house was continually broken into throughout the year. Recreation program materials are no longer stored in the house. Because of the remote location of the house and its degraded condition, it is not possible to secure it to the necessary level to stop the public from entering it. Additionally, because of the damage to the floor from the fire (there is a large hole in the living room that leads directly to the basement), smoke damage, rodents, and stray cats, the house is not in any condition to be used by staff for any purpose.

Discussion

To eliminate potential liability for the City as well as the attraction of illegal activity, the house needs to be removed from the property. Staff explored removal options including the Fire Department using the house for a training exercise (live fire training and burn down) or the house being relocated by the family that previously owned the property. While the family had initially

approached the City to discuss possibly relocating the house, they later informed the City they were no longer interested in doing so. Staff continued to explore the benefits and regulatory requirements of using the house for a live fire training exercise.

Use of the house for a live fire training exercise would result in approximately 300 hours of training for staff over three days and would likely occur at the end of April 2013. The opportunity to conduct live fire training is rare and provides hands on training experiences that are difficult to obtain otherwise. The last live fire training exercise conducted by the Fire Department was in 2009. Live fire training allows for teaching opportunities in the following areas: search techniques; communications; ventilation; water supply and engineering; truck company operations; nozzle control and hose management; fire behavior; and crew communications.

The benefits of the fire training exercise to the Fire Department, City, and community include firefighters continuing to practice aggressive, yet safe fire attacks; increased property conservation with reduced property loss due to increased efficiency; reduced firefighter accidents and injuries resulting in workers compensation claims; and positive department image through training and promotion of the Woodland Fire Department mission.

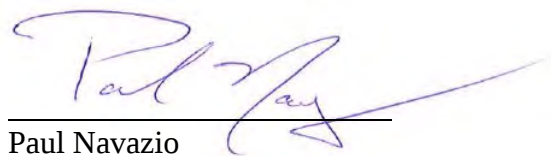
To prepare to remove the house, whether for a live fire or demolition, materials containing asbestos needed to be removed. The removal of asbestos containing material was done at the end of January 2013. Staff also has been coordinating with the Yolo-Solano Air Quality Management District to ensure the proper procedures are followed to meet air quality requirements. Prior to the training, a temporary fence would be installed to prohibit public access from the soccer fields at the Sports Complex to the house. After the burn is complete, fill dirt will be placed in the basement of the structure.

Conclusion

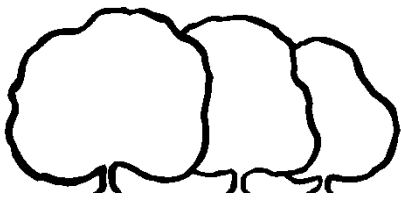
Staff recommends that the City Council authorize a live fire and burn exercise by the Fire Department of a house owned by the City located on City property (40208 County Road 24C).

Prepared by: Eric Zane
Fire Captain

Prepared by: Christine Engel
Recreation Manager



Paul Navazio
City Manager



City of Woodland

REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: February 5, 2013

SUBJECT: Long Range Calendar

Recommendation for Action

Staff recommends that the City Council receive the Long Range Calendar for informational purposes only.

Background

This calendar is being provided for planning purposes only and is intended to keep the Council apprised of upcoming agenda items and better plan for upcoming Council meetings.

Prepared by: Ana Gonzalez
City Clerk

Reviewed by: Paul Navazio
City Manager

Paul Navazio
City Manager

Attachment

COUNCIL LONG RANGE CALENDAR

Items subject to removal and/or rescheduling

Tuesday, February 19, 2013

Reports due 2/5

Regular Meeting

Consent

Conflict of Interest Code

Public Safety Quarterly Report

Funding Contribution for Regional Wastewater

Approve Final Map and Subdivision Improvement Agreement for Map No. 5019 Meikle 4C and A

Authorize Execution of Funding Agreement w/CA Dept of Health Services for Construction of Well 28

Accept Construction Contract, Pioneer Widening, CIP 09-24

Floodsafe Yolo/Cache Creek Feasibility Study, CIP 09-15; Approve Amendment #1 to Contract #000156

Approve Homeless Coordination Contract with Yolo County

Approve Project Design and Bid Package for the 2012/2013 ADA Improvement Project, CIP 13-02;

Authorize Bid Advertisement; Authorize City Manager Award

Approve Resolution for Household Hazardous Waste Grant Fund

Authorize Lease Agreement for Fire Apparatus

Animal Services Contract

Long Range Calendar - Consent

Public Hearing

SB2 Compliance, 1st reading

Reports of the City Manager

Mid-year Budget Update

Spring Lake BUA Ordinance Amendment (1st reading – regular)

JPA Amendment

Tuesday, February 26, 2013

Study Session

Tuesday, March 5, 2013

Reports due 1/19

Regular Meeting

Resolution in Support of Next Economy Initiative

Spring Lake BUA Ordinance – 2nd reading – Consent

General Plan Map Updates – CD

Parkview – SL Plan Amendment

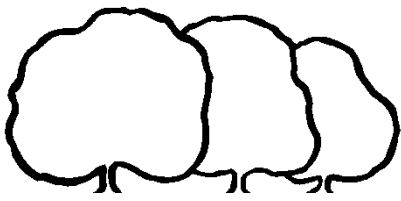
Long Range Calendar - Consent

FUTURE AGENDA ITEMS – DATE TO BE DETERMINED:

Award Construction Contract for the Water Meter Pavement Maintenance Project, CIP 12-10 (Consent) – **3/19/13**
Annual Housing Element Progress Report (**Apr**)
Annual General Plan Progress Report (**Apr**)
WDCWA Joint Intake Schedule - Consider and Approve Construction – (**Apr**)
WDCWA DBO Procurement Schedule – Authorization to Proceed w/Proj Final Eng and Const – **Aug/Sep 2013**
Water Meter Project Phase 3: Approve Plans & Specs; Authorize Bid Advertisement – Okupe – **TBD**
Solaria Project Status Update – **TBD**
Purchase and Sale Agreement for Old Wastewater Treatment Plant – **TBD**
Regional Parksite Analysis Status Report – **TBD**
Weed Abatement Ordinance
Verizon Cell Tower Communication License Agreement

FUTURE STUDY SESSIONS (TBD):

Budget Workshop (**March**)
City Council Goals/Progress Report
Street/Sidewalk Annual Status Report
Climate Action Plan
Update Economic Development Strategic Plan
Redevelopment Bond Proceeds



REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: February 5, 2013

SUBJECT: Consideration of the Velocity Island Park Project: Approve Mitigated Negative Declaration, and Grant the Conditional Use Permitted Recommended by the Planning Commission; and Authorize the City Manager to Sign the Lease Agreement in Substantially the Format Attached

Recommendation for Action

Staff recommends that the City Council consider the following for the Velocity Island Park Project: 1) Approve Mitigated Negative Declaration; 2) Grant the Conditional Use Permit Recommended by the Planning Commission; and 3) Approve the Lease Agreement and Authorize the City Manager to Sign the Lease Agreement in Substantially the Format Attached.

Council Goal

Velocity Island Park is a project that has the potential to be a Cable Park “destination location” attracting wakeboard athletes from the immediate area extending to the entire west coast. This project falls in line with the City Council’s Economic Development Goal to collaborate with local and regional agencies to market and promote targeted business opportunities in Woodland, Yolo County and the Sacramento region. Per the Council Goals, this “special project” is a great catalyst project to enhance collaboration efforts with the Yolo County Visitors Bureau (YCVB) to promote Woodland as a destination tourism site.

Fiscal Impact

The project’s lease agreement will stipulate a monthly rent payment to the City along with the on-going maintenance of the City’s Dubach Detention Basin, which is estimated at \$8,000 savings to the City each year for a period of 20 years commencing on the effective date of the Lease Agreement. The tenant shall have two (2) five (5) year options to renew for a total of up to a 30 year term. Rents will range from \$200 per month for the first 24 months up to \$400 per month (adjusted annually for CPI, capped at 8%) for the period of 61 months through the end of term. An additional \$300 (adjusted annually for CPI, not to exceed 8%) will be collected for each event deemed to be a

SUBJECT:

Consideration of the Velocity Island Park Project: Approve Mitigated Negative Declaration, and Grant the Conditional Use Permitted Recommended by the Planning Commission; and Authorize the City Manager to Sign the Lease Agreement in Substantially the Format Attached

PAGE: 2**ITEM:**

“Special Event” or tournaments as defined by City Code after 60 months of the term has transpired. Collateral Economic Impacts for a major competition have the potential to generate revenues as significant at \$185,000 per event for the community (including local spending, travel expense, and transient occupancy tax (TOT)).

Report in Brief

The applicant, Love Ride, Inc., is proposing to construct and operate a cable wakeboard park, known as “Velocity Island Park” within the City’s Dubach Detention Basin (formerly Dubach Park), located at 755 North East Street, west of North East Street and north of Interstate 5 in the City of Woodland. The applicant is requesting the approval of a Mitigated Negative Declaration (MND) and a Conditional Use Permit (CUP) to allow the construction and operation of a privately operated recreational facility, a cable wakeboard park on the City’s 15-acre Dubach Detention Basin. The project, if approved by City Council and subject to permits, will be used for the development and operation of a cable tow recreational water park facility, which is proposed to be an approximately 9-acre lake within the Dubach Detention Basin site. The Planning Commission held a public hearing and reviewed the proposed project for its associated land use impacts and on a 5 to 0 vote, recommended that the City Council consider the project for approval (See Enclosure 1 - Planning Commission Staff Report dated September 20, 2012).

Ultimately, with the presented fiscal impact and potential economic benefit to the community, Council is being asked to consider whether a shared use of the Dubach Detention Basin, primarily as a stormwater detention basin, and the secondary, everyday use as a privately-operated recreational facility, is the highest and best use of this City public facility and whether the risks associated with such a use are worth the benefit to the City.

Background

Prior to 2008, the property was a dual-use facility for youth / adult softball (Dubach Park) and winter stormwater detention. Dubach Park contained three (3) softball fields, batting cages, bleachers, equipment shed, snack bar, lights for evening play, play structure for children and a 76-space parking lot. Dubach Park was booked every weekend, when the fields were not flooded, for adult and youth softball tournaments and weeknights with adult softball leagues. Dubach Park was operated by the City, but for a period of two to three years (2000 - 2003), it was leased to Quantum Sports to operate as a sports park. On February 15, 2000, the City Council authorized the City Manager to execute a lease agreement with Quantum Sports for the lease of Dubach Park to be operated as a sports park.

Once Dubach Park was vacated and relocated to the Community Center Sports Park 3 miles south on East Street, it was locked up. In 2009-2010, the Public Works Department removed the parking lot and restroom facilities and eventually turned off the PG&E utility services to the site.

SUBJECT:

Consideration of the Velocity Island Park Project: Approve Mitigated Negative Declaration, and Grant the Conditional Use Permitted Recommended by the Planning Commission; and Authorize the City Manager to Sign the Lease Agreement in Substantially the Format Attached

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Since the vacancy of Dubach Park as a softball complex in 2008, city staff have been approached by various interested users including Bicycle Motorcross (BMX) and Motorcross/Supercross (MX) but for many reasons neither use was suitable for the detention facility

Over the past three years, the site has been the home to squatters and significant infrastructure damage due to vandalism.

Over the past two years, the applicant has made presentations to City Council members, Woodland fraternal groups including all Woodland Rotary groups, the Yolo County Visitors Bureau (YCVB) Board of Directors, several Yolo County Supervisors, the Woodland Chamber of Commerce Board of Directors, the CA State Governor's Office of Economic Development, several status reports from staff to Council, and finally the project was presented to the Woodland Planning Commission on September 20, 2012. In response, several organizations have expressed support for the project with the attached letters of support.

Discussion

Based on the terms of the attached Ground Lease Agreement, Mitigated Negative Declaration (CEQA document), Planning Commission recommended Conditional Use Permit (CUP) and proposed benefits included in the Business Plan for Love Ride, Inc., the following is a list of significant benefits to the site and community of Woodland as a result of the proposed cable water park:

- Long-term lease of 20 years, plus two (2) five (5) year renewals at a minimum of \$38,400 for the first 10 years of rental payments received
- Savings of approximately \$8,000 annual maintenance of the facility during the rental period
- Potential to produce significant fiscal benefits to the City of Woodland through rental lease agreement, TOT hotel, sales tax and other visitor benefits (as highlighted above and in the fiscal impact)
- Removal of a public eye sore and preventing possible vandalism, fire hazard and a place for transients to stay
- Environmentally "Green" clean and beautifully landscape site
- Potential to provide opportunities to build relations and partner with local schools and water sport classes, including the possibility of college credits
- Ideal venue for events and competitions, thereby increasing tourism in the area and exposure to the local market
- Potential to be the first and largest full system cable park in the western US
- Environmental benefits for the cable park system-no boats and therefore no fuel emissions, conveniently located on SR113 and just off I-5

If the City Council chooses to not approve the proposed Cable Park use, then the Dubach Detention Facility will continue to be the financial responsibility of the Public Works Department, Storm Drain

SUBJECT:

Consideration of the Velocity Island Park Project: Approve Mitigated Negative Declaration, and Grant the Conditional Use Permitted Recommended by the Planning Commission; and Authorize the City Manager to Sign the Lease Agreement in Substantially the Format Attached

PAGE: 4**ITEM:**

Enterprise Fund. The Fund will be responsible for the regular maintenance of the site and will need to replace the Well pump (which has been vandalized and currently not operational).

The project has the potential for the City to incur liability from the use of public property for a potential dangerous activity. City staff has worked with the Yolo County Public Agency Risk Management Insurance Authority (YCPARMIA) and the City's attorney to limit the City's exposure to this liability and YCPARMIA has recommended that the operator of the Cable Park secure a \$5 million insurance policy.

The tenant will be responsible to remove its personal property and any equipment from the leased land and City Property, as well as all structures, footings and building pads, cable and pylon towers, installed by the tenant with the exception of any such equipment installed as part of operation or maintenance of the Well. Tenant shall leave in place any restroom facilities as long as such facilities are flood proofed to the satisfaction of the City. The tenant will be responsible to pay possessory interest taxes and personal property taxes and the tenant may be subject to property taxes levied on the leased land.

The tenant will be required to provide a cash security deposit, letter of credit or bond in the amount of one hundred twenty-five percent (125%) of the reasonable estimated cost to dismantle and remove from the leased land tenant's improvements.

Public safety is the City's primary concern with the proposed park. For both participants and spectators in and around a body of water 7 to 8 feet deep there is potential for bodily injury or drowning from cable wakeboarding on a 9-acre lake. Another concern is accessing the park during special events or tournaments with limited on-site parking (76 spaces) and the potential for attendees parking off-site in the immediate area. There are no pedestrian facilities (sidewalks) to access the park, and which includes the lack of crosswalks to cross East Street.

The applicant is addressing safety concerns by designing the lake with an approximately 1 to 5 slope (1 foot vertical to 5 feet of horizontal) to the shoreline, allowing persons in the water to walk safely out of the water and constructing a 9-foot chain-link fence around the entire lake to discourage unauthorized or afterhours use of the lake.

The applicant has indicated that lifeguards are not necessary for this type of activity. Similar to other cable wakeboard parks they are relying on the implementation of other safety measures, such as:

- Coast-guard approved life jackets and safety helmets must be worn by all participants
- Staff certified in CPR
- Every participant required to watch a mandatory instructional video
- All beginners must take a beginner course
- Security cameras installed and staff certified in crowd control
- For special events private security will be hired
- Park rules posted upon entrance to the park

SUBJECT:

Consideration of the Velocity Island Park Project: Approve Mitigated Negative Declaration, and Grant the Conditional Use Permitted Recommended by the Planning Commission; and Authorize the City Manager to Sign the Lease Agreement in Substantially the Format Attached

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The Planning Commission recommended a condition of approval that for special events or tournaments, the applicant shall obtain a Special Event Permit. The Special Event Permit must address special event parking, shuttle service, traffic control, noise control, sale of alcohol, security measures and advance notification to adjacent residences. If on-site parking is not adequate, especially for special events or tournaments, the applicant would be required to provide additional off-site parking approved by the City and provide a shuttle service to and from the Park.

Commission/Committee Recommendation

On September 20, 2012, the Planning Commission recommended that the City Council approved the Velocity Island Project, which includes approvals for the Mitigated Negative Declaration, Mitigated Monitoring and Report Plan and Conditional Use Permit.

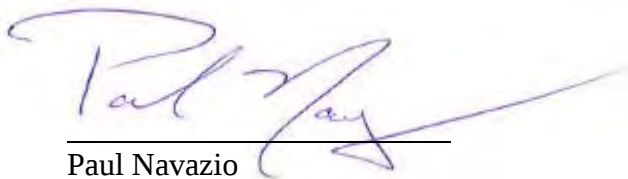
Conclusion

Staff recommends the City Council consider the following for the Velocity Island Park Project: 1) Approve Mitigated Negative Declaration, and 2) Grant the Conditional Use Permit Recommended by the Planning Commission; and 3) Approve the Lease Agreement and Authorize the City Manager to Sign the Lease Agreement in Substantially the Format Attached.

Prepared by: Paul L. Hanson, AICP
Senior Planner

Wendy Ross
Economic Development Manager

Reviewed by: Nicholas J. Ponticello
Community Development Director



Paul Navazio
City Manager

Attachments:

- 1) City of Woodland Ground Lease Agreement for Velocity Island Park (inc. Conditional Use Permit and Conditions of Approval)
- 2) Mitigated Negative Declaration (hard copy available in the City Clerk's Office or can be viewed on-line at: <http://web.cityofwoodland.org/gov/meetings.asp>)
- 3) Mitigation, Monitoring and Reporting Program
- 4) Letters of Support

**CITY OF WOODLAND
GROUND LEASE AGREEMENT
(Velocity Island Park)**

This Ground Lease Agreement ("**Lease**") is made as of _____, _____ 2013 by and between the CITY OF WOODLAND, a California municipal corporation ("**City**") and LOVE RIDE INC., a Delaware corporation d/b/a Velocity Island Park ("**Tenant**"). City and Tenant are sometimes collectively referred to herein as the "**Parties**."

RECITALS

- A. City is the record owner of a piece of property generally located at 755 North East Street in the City of Woodland, County of Yolo, Assessor's Parcel Numbers [027-340-002 and 027-270-078], legally described in Exhibit "A" (the "**City Property**").
- B. City desires to lease to Tenant and Tenant desires to lease from City a portion of the City Property, as further depicted in Exhibit "A" (the "**Leased Land**").

AGREEMENT

NOW THEREFORE, in consideration of the above Recitals and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, City and Tenant hereby agree as follows:

1. **Leased Land.** City hereby leases to Tenant the Leased Land on the terms and conditions contained in this Lease. The grant of this Lease shall not relieve Tenant from the requirement to obtain, at its expense, any land use permits or other approvals for Tenant's use of the Leased Land.
2. **Use.** Subject to the provisions of this Lease and the requirements of any approvals obtained in connection therewith, the Leased Land may be used to develop and operate a cable tow recreational water park facility ("**Facility**"). Tenant may also conduct preliminary site investigations to determine whether or not the Leased Land and/or City Property is suitable for the Facility. Tenant's use of the Leased Land shall comply with all applicable laws, ordinances and regulations. Tenant shall only use the Leased Land during the Term for the uses set forth in this Section 2 and for no other use without the express written consent of City, which may be granted in City's sole and absolute discretion. City, in its capacity as landlord, grants to Tenant the unencumbered right, without restrictions or conditions, at all times during the Term, or any extension thereof, to apply for any and all license, approvals and, or permits required to use the Leased Land and Facility.

2.1 Continuous Operation. Tenant shall use and operate the Facility on the Leased Land on any calendar day with sufficient personnel and equipment to safely operate the Facility. Tenant shall have the right, but not the obligation, to close the Facility to customers each year from a period of thirty (30) days if desired. Tenant shall maintain fencing and security measures adequate to keep trespassers off of the Leased Land during all times when the Facility is not open. Tenant shall be permitted to use any period that Tenant elects to close the Facility to

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open. Tenant shall be permitted to use any period that Tenant elects to close the Facility to customers in order to carry out maintenance and repairs to equipment and improvements located on the Leased Land.

2.2 Revenue Generation. Tenant shall, in all reports to the California State Board of Equalization related to the use, purchase or sale of tangible personal property from or related to the Leased Land, designate the City or cause the City to be designated as the “point of sale” regarding such purchase, sale or use, all in accordance with applicable state law. Tenant shall, for the entire Term, at Tenant’s sole cost and expense, and to the extent consistent with applicable laws, cause all franchises, permits, contractual arrangements, licenses and registrations necessary for Tenant’s continuous operation of the Facility on the Leased Land to be issued and maintained, provided that nothing herein shall obligate the City to issue or maintain any such approvals. Nothing in this Lease shall obligate Tenant to operate the Facility for the benefit of Tenant’s customers in the absence of all lawfully required permits, licenses and approvals required by law.

2.3 Compliance with Conditional Use Permit and CEQA Conditions. Tenant shall at all times and at Tenant’s sole expense comply with: (i) all mitigation measures included within the mitigated negative declaration approved for the Facility and Tenant’s operations and the mitigation monitoring program adopted by the City in connection therewith; and (ii) all conditions of approval included within the conditional use permit approved by the City for the Facility and Tenant’s operations, which are set forth in Exhibit B, attached hereto and incorporated herein by reference. Tenant acknowledges that the City’s termination rights hereunder shall not be contingent upon the revocation of the conditional use permit for the Facility and Tenant’s operations.

2.4 Abandonment. Tenant shall not abandon, vacate without the payment of rents or surrender the Leased Land or any portion of the Facility during the Term.

2.5 Noise.

2.5.1 *Standards*. Tenant shall not use or permit the use of the Leased Land in any manner that creates or maintains any noise or sound that, when measured at any place along the boundary line of the Leased Land, exceeds the lowest sound level standard applicable to the Leased Land that is established by any governmental agency.

2.5.2 *Exceptions*. The noise standards established in Section 2.5.1 shall not be applicable to any construction of the Facility; however, Tenant shall use reasonable efforts to mitigate or cause to be mitigated all noise related to any such construction that exceeds these standards and, in all events, shall comply with all laws and required governmental approvals applicable to any such construction.

2.6 Nuisance. Tenant shall not itself and shall not allow any other person to use all or any portion of the Leased Land for any unlawful purpose and shall not itself and shall not allow any other person to perform, permit or suffer any act or omission upon or about all or any portion of the Leased Land that would result in a nuisance or a violation of any applicable law.

2.7 Hazardous Substances. Tenant shall not use, create, generate, store, deposit, dispose of or allow any hazardous substances on, under, about or within the City Property or the Leased Land in violation of any federal, state, or local law, rule, regulation, order, decree or other requirement.

3. **Term.**

3.1 Term. The term of this Lease shall be for twenty (20) years commencing on the Effective Date ("**Term**").

3.2 Lease Renewal and Holding Over. Tenant shall have two (2) five (5) year options to renew this Lease, with the second option period terminating on the last day of the second renewal period one week prior to the thirtieth (30th) anniversary of the Lease commencement date (collectively the "**Renewal Term**"). Tenant shall exercise the renewal options by providing City with written notice of such exercise, which delivery of such notice to renew shall be binding upon the parties. The Rent for any renewal period shall be as set forth in Section 4 below. If Tenant shall remain in possession of the Leased Land after the expiration of this Lease or any Renewal Term without a written agreement, such tenancy shall be deemed a month-to-month tenancy under the same terms and conditions of this Lease and subject to the terms and conditions of Section 5.5 below.

4. **Consideration and Expenses.**

4.1 Rent. City agrees to lease to Tenant the Leased Land in consideration of Tenant's agreement to pay rent as described below ("**Rent**"). Tenant shall pay all Rent, without deduction or setoff of any type or form. For purposes of this Lease, a "**Special Event**" shall be deemed to occur on any day or days for which a Special Event permit was required to be obtained pursuant to the Woodland Municipal Code or the conditional use permit for the Facility (whether or not the permit was actually obtained), and the reference in the table below to Rent paid in connection with such Special Event shall be payable at any time Tenant applies to City for a permit to hold such Special Event in accordance with the terms of payment for such permit.

Period	Amount in US Dollars
Months 1 – 24	\$ 200.00 per month
Months 25 – 48	\$ 250.00 per month
Months 49 – 60	\$ 300.00 per month
Months 61-120	\$ 400.00 per month
Months 121 – end of Term	Base Rent adjusted upward annually by the greater of CPI capped at 8% maximum, or 5%.

Special Events	\$ 300.00 per special event permit required for Tenant's operations, regardless of whether Tenant applies for the permit.
Special Events - after month 60 of the Term	\$ 300.00 adjusted upward annually by the greater of CPI capped at 8% maximum, or 5%.

4.2 Accord and Satisfaction; Partial Payments. No payment by Tenant or receipt by City of a lesser amount than the Rent owed under this Lease shall be deemed to be other than a partial payment by Tenant. Any endorsement or statement on any check or letter accompanying any check or payment shall not be deemed an accord or satisfaction. City may accept any such check or payment without prejudice to City's right to recover the balance of the Rent due to City or pursue any other remedy.

4.3 Tenant's Late Payments; Administrative Charges. If Tenant fails to make any payment to City required under this Lease within ten (10) days after such payment is first due and payable, then in addition to any other remedies of City, and without reducing or adversely affecting any of City's other rights or remedies, Tenant shall pay interest at an annual rate equal to the lesser of: (a) twelve percent (12%) per annum; or (b) the highest rate of interest, if any, that law allows under the circumstances, to City on such late payment, beginning on the date such payment was first due and payable and continuing until the date when Tenant actually makes such payment in full. Nothing in this paragraph is intended to affect or change City's rights or remedies regarding an Event of Default, as defined in Section 5.2.2, by Tenant under this Lease.

4.4 Possessory Interest Tax. Tenant hereby recognizes and understands that this Lease may create a possessory interest subject to property taxation, and that Tenant may be subject to the payment of property taxes levied on such interest. Any such imposition of a possessory interest tax shall be a tax liability of Tenant solely, and shall be paid for by Tenant; and any such tax payment shall not reduce any rent due City hereunder. In addition, Tenant shall pay any personal property taxes that may become due for equipment, fixtures, inventory, or other personal property installed, maintained, or present in or on the Leased Land. Tenant shall also pay all interest and penalties any government entity assesses for late payment of any possessory interest taxes that this Lease requires Tenant to pay. Tenant shall within a reasonable time after written notice from City give City reasonable proof that Tenant has paid any possessory interest taxes that this Lease requires Tenant to pay. Nothing herein shall prohibit Tenant from the right to challenge any assessment of possessory interest tax in accordance with the procedures set forth by the taxing authority and where applicable withhold any overcharge by such taxing authority until the disputed matter is resolved.

4.5 Personal Property Taxes. Tenant shall pay and discharge all personal property taxes payable or accruing for all period(s) within the Term relating to any personal property stored at, used in the operation of or otherwise relating to the Leased Land, before delinquency. Tenant shall also pay all interest and penalties any governmental agency assesses for late payment of any such personal property tax.

4.6 Utilities. Tenant shall arrange and pay for all fuel, gas, light, power, water, sewage, garbage disposal, telephone, television, internet, satellite and other similar charges or services, and the expenses of installation, maintenance, use, and service in connection with any and all of the foregoing, for the Leased Land during the Term. City shall have no responsibility for providing or paying for any utilities or services for the Leased Land during the Term, except to the extent such utilities or services are provided to City in connection with City's operations on the Leased Land. City shall not be liable for any interference with or disruption of any utilities or services for the Leased Land.

4.7 Additional Expenses. Tenant shall be solely responsible for and shall discharge before delinquency each and every item of expense, of every kind and nature whatsoever, related to or arising from the Leased Land, or by reason of or in any manner connected with or arising from the leasing, operation, management, maintenance, repair, use, or occupancy of, or construction affecting, the Leased Land, except as otherwise expressly set forth in this Lease.

5. **Option to Terminate; Termination.**

5.1 Early Termination by Tenant. At any time prior to the end of the twenty fourth (24th) month of the Term, Tenant shall have the right upon written notice to City to immediately terminate this Lease as of the date of delivery of such notice in circumstances where Tenant cannot commence or complete the improvements due to lack of development funding as determined by Tenant in its sole discretion, or if water cannot be pumped from City's water pumping station located on the Leased Land, or if water cannot be retained to a depth at the Leased Land in order for Tenant to operate the water park facility as permitted by City. The delivery of such notice to terminate the Lease shall be binding upon the City and Tenant.

5.2 Termination by City.

5.2.1 Remedies. Upon the occurrence of an Event of Default, as defined in Section 5.2.2, City may, at City's option in City's sole and absolute discretion, terminate Tenant's right to possess the Leased Land, in which case this Lease and the Term shall terminate and Tenant shall immediately surrender possession of the Leased Land to City pursuant to Section 5.3. City's right to terminate this Lease shall be in addition to, and not in lieu of, such other remedies as may be available at law, or in equity or under any other terms of this Lease.

5.2.2 An "**Event of Default**" means the occurrence of any one or more of the following:

5.2.2.1 *Monetary Default*. Any failure by Tenant to, within fifteen (15) calendar days after written notice from City, specifying in reasonable detail the amount of money not paid and the nature and calculation of each such payment: (a) pay, when and as this Lease requires, any Rent; or (b) make any payments required pursuant to Sections 4.4, 4.5, or 4.6 prior to the applicable due date.

5.2.2.2 *Use Default*. Tenant's failure to comply with the provisions of Section 2.

5.2.2.3 *Prohibited Liens.* Any failure of Tenant to comply with any obligation regarding Prohibited Liens set forth in Section 8.1, if Tenant does not remedy such failure within fifteen (15) days after written notice by City of such failure to comply with Section 8.1.

5.2.2.4 *Bankruptcy or Insolvency.* Tenant ceases to pay its debts as they become due or admits in writing that it is unable to pay its debts as they become due, or becomes subject to any bankruptcy proceeding (except an involuntary bankruptcy proceeding dismissed within one hundred eighty (180) days after commencement), or a custodian or trustee is appointed to take possession of, or an attachment, execution or other judicial seizure is made with respect to, substantially all of Tenant's assets or Tenant's interest in this Lease (unless such appointment, attachment, execution, or other seizure was involuntary and is contested with diligence and continuity and vacated and discharged within one hundred eighty (180) days).

5.2.2.5 *Insurance Maintenance Default.* Tenant fails at any time to maintain in effect all policies of insurance required hereunder, regardless of whether Tenant subsequently procures such insurance.

5.2.2.6 *Non-Monetary Default.* Any non-monetary default of any of Tenant's obligations as set forth in this Lease, other than those specifically addressed in Sections 5.2.2.2, 5.2.2.3, 5.2.2.4 or 5.2.2.5, which Tenant fails to cure within thirty (30) days after written notice by City describing the default in reasonable detail.

5.2.3 Recovery of Damages Following Termination. If this Lease is terminated by City because of the occurrence of an Event of Default, then upon any such termination of this Lease, City may recover from Tenant:

5.2.3.1 Any unpaid Rent at time of termination;

5.2.3.2 Any other amount actually incurred and reasonably necessary to compensate City for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom.

5.3 Vacating the Property. At the termination of this Lease, Tenant shall quit and surrender possession of the Leased Land and City Property, and their appurtenances, to City in as good order and condition as they were delivered to Tenant on the Effective Date, reasonable wear and tear and damage by the elements excepted, and shall remove its personal property and any equipment from the Leased Land and City Property, as well as all structures, footings, and building pads. Notwithstanding the foregoing, Tenant shall leave in place any restroom facilities as long as such facilities have been floodproofed to the satisfaction of the City. Tenant agrees to pay any costs incurred by City if Tenant fails to comply with this provision, including reasonable attorneys' fees and costs expended on any action by City to compel removal by Tenant of its personal property and any equipment. City may remove the Tenant's personal property and equipment and dispose of or store them at Tenant's sole cost and expense. For the purposes of this Lease the improvements and fixtures to the Leased Land shall not be deemed to be Tenant's personal property or equipment in application of this Section 5.3.

5.4 Damages. City may recover from Tenant all damages City incurs by reason of a default of this Lease by Tenant, including reasonable costs of recovering possession and any and all other damages legally recoverable by City, and reimbursement of City's reasonable out of pocket costs, including legal costs and bank fees for dishonored checks. City may recover such damages at any time after a default of this Lease has occurred, including after termination of this Lease. Notwithstanding any law to the contrary, City need not commence separate actions to enforce Tenant's obligations for each month's Rent not paid, or each month's accrual of damages for Tenant's default, but may bring and prosecute a single combined action for all such Rent and damages.

5.5 Holding Over. If for any reason or no reason Tenant remains on the Leased Land after the expiration of the Term, City will suffer injury that is substantial, difficult, or impossible to measure accurately. Therefore, if Tenant remains on the Leased Land after the expiration of the Term, for any reason or no reason, then in addition to any other rights or remedies of City, Tenant shall pay to City, as liquidated damages and not as a penalty, for each month (prorated daily for partial months) during which Tenant holds over after the expiration of the Term, a sum equal to one hundred fifty percent (150%) of the Rent payable during the immediately preceding twelve month period. Additionally, Tenant shall be liable for all damages incurred by City as a result of Tenant holding over, including consequential damages.

5.6 Survival. No termination of this Lease and no taking possession of the Leased Land shall relieve City or Tenant of their respective liabilities and obligations under this Lease, all of which shall survive such expiration, termination or repossession, subject to any limitations on personal liability or recourse expressly set forth in this Lease.

6. Improvements and Inspection.

6.1 Approvals. At any time during the Term Tenant may apply for approval to construct, and may construct, those improvements listed and depicted in Exhibit C, and only upon receipt of whatever City approvals may be required. City shall be provided a copy of all architect's drawings for any such improvements to be constructed by Tenant. Tenant shall not construct or materially alter any improvements on the Leased Land without prior written approval from City. All alterations or improvements on the Leased Land by Tenant shall comply with all applicable laws, and shall be performed by state licensed contractors.

6.2 Reservations. The approval of this Lease by the City shall not be binding on the City Council, the City Planning Commission, or any other commission, committee, board or body of the City regarding any approvals required by such bodies regarding the Leased Land or the Facility. No action by City with reference to this Lease or any related documents shall be deemed to constitute issuance or waiver of any required City approval regarding the Leased Land or the Facility. Tenant acknowledges that execution of this Lease does not constitute approval by the City of any improvements on the Leased Land, and that Tenant will need to apply for approvals through the City's typical land use approval process.

6.3 Risk of Loss. Tenant shall bear the sole and complete risk of loss or damage to all fixtures, improvements and personal property of Tenant while on City Property or the Leased Land, including but not limited to damage from flooding. Tenant acknowledges and agrees that

City shall retain the right to use the City Property and Leased Land for collection and storage of storm drain runoff and other water, and may flood and/or drain the Leased Land at any time, without notice to Tenant, provided that City shall endeavor to provide advance notice to Tenant if it is feasible to do so.

6.4 Operation of Well; Discharge of Water. Tenant shall keep the well located on the Leased Land (“Well”) in good repair and in working order, at Tenant’s sole expense. Tenant may operate the Well to produce water for operation of the Facility, provided that City does not warrant or guarantee the quality or quantity of water produced by the Well. Tenant shall discharge water from the Leased Land only in such locations and at such times as are approved by City in writing.

6.5 Removal of Improvements. Within thirty (30) days of the expiration or termination of this Lease, Tenant shall remove all cable and pylon towers, as well as their foundations that Tenant installed, with the exception being any such equipment installed as part of operation or maintenance of the Well. All other improvements shall be surrendered up by Tenant, except as otherwise specified in Section 5.3 herein. Upon the effective date of this Lease, Tenant shall furnish to City at Tenant’s election a cash security deposit, or letter of credit or other bond, substantially in the form set forth in Exhibit “C”, securing completion of Tenant’s obligation to remove all such improvements at the end of the Term. Such cash security deposit, or letter of credit or bond shall be in the amount of one hundred twenty-five percent (125%) of the reasonable estimated cost to dismantle and remove from the Leased Land Tenant’s improvements. Once at the end of each five (5) year period during the Term City may require the cash security deposit, or letter of credit or bond amount, as the case may be, to be increased to reasonably reflect changes in the prevailing wage cost over time. Any surety supplying a security bond must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to City.

6.6 Inspections. City may enter upon the Leased Land at any time, without notice to Tenant, in order to inspect the Leased Land, the improvements thereon, and Tenant’s operations, provided that all City representatives shall comply at all times with Tenant’s health and safety procedures. Tenant shall not be liable to City or City representatives for damage to property or bodily injury in any circumstances where there is a breach of Tenant’s health and safety procedures by such representatives.

6.7 Security. Tenant shall, at its cost, maintain security measures upon the Leased Land at all times, regardless of whether Tenant is conducting operations. Such security measures shall include a system of video cameras for certain areas of the Leased Land with the capability of recording images, alarms, and response by security personnel.

6.8 Signs. Tenant shall post signs, at locations and with wording satisfactory to City, informing users of the Facility that it is not owned or operated by City and that users of the Facility do so at their own risk. Subject to receipt of required permits City, as landlord, agrees to allow Tenant to post signs to direct traffic flow, denote the entrance to the Facility, and advertising the Facility. Tenant shall have the right as part of any application for any Special Event permit to place temporary signage, banners and advertisements at the Facility in accordance with the permit obligations as to duration, sizes, location, and existence of such

temporary signage. Nothing in this paragraph shall affect City's rights or obligations while acting in its capacity as a regulatory body, nor require City to approve any permit applications while acting in such capacity.

7. Prevailing Wages.

7.1 Tenant acknowledges that City has made no representation, express or implied, to Tenant or any person associated with Tenant regarding whether or not laborers employed relative to the construction and installation of any improvements to the City Property, including but not limited to the construction of the Facility or the Leased Land, must be paid the prevailing per diem wage rate for their labor classification, as determined by the State of California, pursuant to California Labor Code Sections 1720 *et seq.* Tenant agrees with City that Tenant shall assume the responsibility and be solely responsible for determining whether or not laborers employed relative to any construction on the City Property must be paid the prevailing per diem wage rate for their labor classification, as determined by the State of California, pursuant to California Labor Code Sections 1720 *et seq.*

7.2 Except in the case of City's or its employees, council members, officers, agents and contractors gross negligence or intentional misconduct, Tenant shall additionally indemnify City in accordance with the provisions of Section 13 against any claims pursuant to California Labor Code Section 1781 arising from the date of mutual execution of this Lease or the construction or installation of any Tenant improvements on the City Property, in accordance with the terms of Section 7 of this Lease.

7.3 Notwithstanding any other provision of this Lease, City shall not be under any duty to monitor or ensure the compliance of Tenant with any State of California labor laws, including, without limitation, prevailing wage laws.

8. Prohibited Liens.

8.1 Prohibited Liens. Tenant shall keep the Leased Land and the City Property free from any liens arising out of any work performed, material furnished, or obligations incurred by Tenant ("**Prohibited Lien**"). Tenant shall provide written notice to City of each Prohibited Lien within five (5) days following Tenant's receipt of notice of such Prohibited Lien. Tenant shall, within thirty (30) days after receiving notice of a Prohibited Lien (but in any case within fifteen (15) days after Tenant receives notice of commencement of foreclosure proceedings regarding any Prohibited Lien), cause such Prohibited Lien to be paid, discharged, and cleared from title to the City Property; provided, however, that if Tenant disputes such Prohibited Lien in good faith, Tenant may maintain an appropriate dispute of such Prohibited Lien without payment, if Tenant provides a bond in lieu of the Prohibited Lien which is in conformance with applicable law and which is in an amount and form reasonably acceptable to the City releasing the Leased Land from the disputed Prohibited Lien. Tenant shall thereafter prosecute such action with reasonable diligence and continuity.

8.2 No Liens Against Public Property. Tenant acknowledges that the City Property is owned by City and is thus not subject to the imposition of mechanic's liens or other liens in favor of providers of labor, materials, or services on or to the Leased Land. Tenant shall inform each

provider of labor, material, or services on or to the Leased Land of the statutory unavailability of such liens with respect to the Leased Land, and that City is not responsible for payment of any claims by such providers of labor, material, or services.

9. **Maintenance.**

9.1 Maintenance Standard. Tenant shall, at its sole cost and expense, keep the Leased Land free of noxious weeds and trash, and in good and proper condition in compliance with all applicable laws and regulations concerning the use of the Leased Land. Tenant shall not cause trash or other debris to be placed on the City Property. In addition, Tenant shall make any repairs to the Leased Land or City Property caused by or incident to Tenant's use of the Leased Land or implementation of this Lease.

9.2 Maintenance Default. If, at any time during the Term, there is an occurrence of an adverse condition on any area of the Leased Land in contravention of Section 9.1 (each such occurrence being a "**Maintenance Deficiency**"), then City may provide notice to Tenant in writing of the Maintenance Deficiency. If Tenant fails to cure or commence and diligently pursue to cure the Maintenance Deficiency within thirty (30) calendar days of Tenant's receipt of notice of the Maintenance Deficiency, an Event of Default shall be deemed to have occurred and City may exercise any and all remedies available to City hereunder.

9.3 Graffiti. Graffiti, as defined in Government Code Section 38772, that has been applied to any exterior surface of a structure or improvement on the Leased Land, that is visible from any public right-of-way adjacent or contiguous to the Leased Land, shall be removed by Tenant by either painting over the evidence of such vandalism with a paint that has been color-matched to the surface on which the paint is applied or removed with solvents, detergents or water, as appropriate. Notwithstanding Section 9.2, if any such graffiti is not removed within seventy-two (72) hours after the time Tenant discovers or receives written notice of the graffiti, or, in the case of graffiti that cannot reasonably be removed within seventy-two (72) hours after the time Tenant discovers or receives notice of the graffiti, whichever is earlier, if Tenant does not duly commence such cure and diligently complete such cure within a reasonable time under the circumstances, then after notice to Tenant an Event of Default shall be deemed to have occurred and City may exercise any and all remedies available to City hereunder.

10. **"As Is" Condition of Property.**

10.1 Acceptance. Tenant accepts the Leased Land in its "As Is/Where Is" condition, without warranty of any kind, express or implied, including any warranty as to title, physical condition, soil conditions, zoning, land use restrictions, the availability or location of utilities or services, the suitability of the Leased Land for the Facility or any other use, the presence or absence of water upon the Leased Land at any time, and with full knowledge of the physical condition of the Leased Land, the nature of City's interest therein and rights retained thereto pursuant to this Lease, and all laws applicable to the Leased Land. Tenant has not relied and is not relying on any express or implied, oral or written representations or warranties made by City or its representatives, and all such representations and warranties are specifically disclaimed by City.

10.2 Waivers And Releases. BY EXECUTING THIS LEASE, TENANT WAIVES AND RELEASES THE CITY AND ITS REPRESENTATIVES FROM ALL CLAIMS ARISING AFTER THE DATE OF MUTUAL EXECUTION OF THIS LEASE RELATING TO THE CONDITION OF THE LEASED LAND AS OF THE DATE OF MUTUAL EXECUTION OF THIS LEASE OR AT ANY TIME DURING THE TERM OF THIS LEASE, WHETHER KNOWN OR UNKNOWN, SUSPECTED OR UNSUSPECTED. WITH RESPECT TO THE WAIVERS AND RELEASES CONTAINED IN THIS SECTION 10.2, TENANT WAIVES THE PROVISIONS OF CALIFORNIA CIVIL SECTION 1542 AND ALL SIMILAR PROVISIONS AND PRINCIPLES OF LAW. SECTION 1542 PROVIDES:

A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

Initials of Authorized Tenant Representative(s)

11. **Subordinate Rights.**

11.1 This Lease is subject and subordinate to the prior and future rights and obligations of City, its successors and assigns, to use the City Property in the exercise of its powers and in the performance of its duties. Accordingly, there is reserved and retained unto City, its successors, assigns, grantees, and permittees, the right to construct and reconstruct facilities and appurtenances in, upon, over, under, across, and along the City Property, and in connection therewith, the right to grant and convey to others, rights and interests to the City Property. Tenant acknowledges that such improvements may interfere with Tenant's operations.

11.2 This Lease is subject to all leases, easements, restrictions, conditions, covenants, encumbrances, liens, claims, and other matters of title which may affect the Leased Land now or hereafter.

12. **Insurance.**

12.1 Types; Amounts. Tenant shall obtain, and shall require any subcontractor to obtain, insurance in the amounts described below unless specifically altered or waived by City in writing ("**Required Insurance**"). If any of the Required Insurance contains a general aggregate limit, such insurance shall apply separately to this Lease or be no less than two times the specified occurrence limit. In the event that Tenant breaches its obligations under this Section 12 City may, in its sole discretion, require Tenant to increase the policy limits for any or all of the Required Insurance.

12.1.1 *General Liability Insurance.* Tenant shall maintain occurrence version general liability insurance, or equivalent form, with a combined single limit of not less than Five Million Dollars (\$5,000,000) per occurrence, which limit may be satisfied by a combination of primary and umbrella policies.

12.1.2 *"All Risk" Property Insurance.* Tenant shall maintain a policy of property insurance for perils usual to a standard "all risk" insurance policy on all its improvements or alterations in, on, or about the Leased Land, with limits equal to the value of all such improvements or alterations.

12.1.3 *Automobile Insurance.* Tenant shall maintain a policy of automobile insurance in customary commercially reasonable form of not less than One Million Dollars (\$1,000,000) per occurrence, which limit may be satisfied by a combination of primary and umbrella policies as determined by Tenant.

12.2 General Provisions. The general liability insurance policy shall name City, its elected officials, officers, employees, agents, and volunteers as additional insureds. The Required Insurance shall be primary as to Tenant's defense and indemnification obligations herein with respect to any insurance or self-insurance programs covering City, its elected officials, officers, employees, agents, and volunteers, or if in excess stand in an unbroken chain of coverage in excess of Tenant's scheduled underlying coverage. The Required Insurance shall contain standard separation of insureds provisions, and shall contain no special limitations on the scope of its protection to City, its elected officials, officers, employees, agents, and volunteers.

12.3 Certificates; Insurer Rating; Cancellation Notice. Prior to the date upon which this Lease has been executed by both Parties, Tenant shall furnish to City properly executed certificates of insurance which evidence all Required Insurance. Tenant shall maintain the Required Insurance at all times while this Lease is in effect, and shall replace any certificate, policy, or endorsement which will expire prior to that date. All policies shall be endorsed to provide the Required Insurance shall not be suspended, voided, reduced, canceled, or allowed to expire except on thirty (30) days prior written notice to City. Unless approved in writing by City, Tenant shall place the Required Insurance with insurers authorized to do business in the State of California and with a current A.M. Best rating of at least A-:VII.

13. Indemnity and Release.

13.1 Tenant Indemnity Obligations. Tenant hereby agrees to defend, indemnify and hold City and its officials, officers, agents and employees free and harmless from and against any and all claims, demands, causes of action, costs, liabilities, expenses, losses, damages or injuries of any kind in law or equity, to persons or property, including wrongful death, in any manner arising from or related to this Lease, the Facility, the use or occupancy by Tenant and/or its agents or employees of the Leased Land or the City Property, and/or Tenant's breach of any condition of this Lease. Tenant shall defend, with counsel selected by City, at Tenant's sole expense, any and all such suits, actions or proceedings, legal or equitable that may be brought or instituted against City, its officials, officers, agents or employees. Tenant shall pay and satisfy any judgment, award or decree that may be rendered against City, its officials, officers, agents or employees. Tenant shall reimburse City for any and all legal expenses and costs incurred by one or all of them in connection with this Lease or the indemnity herein provided. Tenant's obligation shall survive termination or expiration of this Lease, and shall not be restricted to insurance proceeds, if any, received by City or its officials, officers, agents or employees.

13.2 Liability of City. City shall not be liable for and Tenant shall indemnify City in accordance with Section 13.1 regarding any injury or damage to any property (of Tenant or any other person) or to any person occurring on or about the Leased Land. In addition, Tenant acknowledges that City would not have entered into this Lease if it were to be liable in damages under this Lease, or with respect to this Lease or the application thereof. Nothing in this Section 13.2 shall relieve City of liability for City or City's officials, officers, agents or employees gross negligence or intentional misconduct, except with respect to damages, which shall not be awarded to Tenant regardless of any gross negligence or intentional misconduct; in such cases injunctive or other equitable relief shall be Tenant's sole remedies. Notwithstanding any provision of this Lease to the contrary, City shall not be liable in damages to Tenant, or to any successor in interest of Tenant, or to any other person, and Tenant covenants not to sue for damages or claim any damages:

(a) For any breach of this Lease or for any cause of action that arises out of this Lease; or

(b) For the taking, impairment or restriction of any right or interest conveyed or provided under or pursuant to this Lease; or

(c) Arising out of or connected with any dispute, controversy or issue regarding the application or interpretation or effect of the provisions of this Lease.

14. **Legal Challenges.** Subject to the provisions and conditions of this Section 14, Tenant assumes the risk of delays or damages that may result to Tenant from any legal action filed by any person or entity related to City's approval of this Lease or issuance of any associated governmental approvals, including but not limited to legal actions contesting the adequacy of the environmental review undertaken in connection with this Lease or Tenant's uses of the Leased Land. If any person or entity files a legal action regarding City's approval of this Lease or issuance of any associated governmental approval, Tenant shall indemnify City pursuant to Section 13 against such legal action, including all attorney and court costs, monetary awards, sanctions, attorney fee awards, expert witness and consulting fees, and the expenses of any and all financial or performance obligations resulting from the disposition of the legal action. Nothing contained in this Section 14 is intended to be nor shall be deemed or construed to be an express or implied admission that City may be liable to Tenant or any other person for damages or other relief regarding any alleged or established failure of City to comply with any law.

15. **Right of First Refusal to Purchase.** Tenant shall have the right of first refusal to purchase the Leased Land in accordance with the terms and conditions set forth in Exhibit "E" attached hereto and incorporated herein by this reference.

16. **Assignment or Subletting.** Tenant shall not assign or sublease this Lease without the prior express written consent of the City, which consent may be withheld in the City's sole discretion, notwithstanding sections 1995.260 and 1995.270 of the California Civil Code, as they may be amended.

17. **Waiver.** The waiver by City or Tenant of any breach of any term, covenant, condition or provision contained herein shall not be deemed to be a waiver of such term, covenant, condition

or provision for any subsequent breach of the same or any other term, covenant, condition or provision contained herein.

18. **Attorneys' Fees.** The prevailing party in any action brought by either party hereto, based on any claim arising under this Lease, shall be entitled to reasonable attorneys' fees and court costs.

19. **No Relocation or Assistance.** Tenant acknowledges that Tenant is not entitled to relocation assistance or any other benefits under the Uniform Relocation Assistance Act or any other applicable provision of law upon termination of this Lease.

20. **Time.** Time is of the essence of this Lease.

21. **Notices.** All notices permitted or required under this Lease shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

Tenant:

Love Ride, Inc.
1240 Alice Street, Suite C
Woodland, California 95776
Attn: Scott Hartmann

With copy of default notices to:

Reed Smith LLP
101 Second Street, Suite 1800
San Francisco, California 94105
Attn: Simon T. Adams Esq.

City:

City of Woodland
300 First Street
Woodland, California 95695
Attn: Wendy Ross, Economic Development Manager
Attn: Nicholas J. Ponticello, Community Development Director

With copy of default notices to:

Best Best & Krieger LLP
500 Capital Mall, Suite 1700
Sacramento, CA 95814
Attn: Andrew Morris, Esq.

Such notice shall be deemed made when personally delivered or forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

22. **Entire Agreement; Amendments.** This Lease constitutes the entire agreement and understanding between the parties, and supersedes all offers, negotiations and other agreements concerning the subject matter contained herein. The provisions of this Lease may be amended only by mutual written consent of the Parties. Any amendments to this Lease must be in writing and executed by both parties.

23. **Principles of Interpretation.** No inference in favor of or against any party shall be drawn from the fact that such party has drafted any part of this Lease. The Parties have both participated substantially in its negotiation, drafting, and revision, with advice from legal counsel and other advisers of their own selection.

24. **Invalidity.** If any provision of this Lease is invalid or unenforceable with respect to either Party, the remainder of this Lease or the application of such provision to persons other than those as to whom it is held invalid or unenforceable, shall not be affected and each provision of this Lease shall be valid and enforceable to the fullest extent permitted by law.

25. **Successors and Assigns.** This Lease shall be binding on and inure to the benefit of the successors and permitted assignees of the respective parties.

26. **Governing Law and Venue.** This Lease shall be governed by the laws of the State of California. Any action to interpret or enforce this Lease shall be brought and maintained exclusively in the courts of and for Yolo County, California.

27. **Execution of Lease.** This Lease may be executed in duplicate counterparts, each of which shall be deemed an original.

28. **Survival.** All obligations of Tenant hereunder not fully performed as of the completion or termination of this Lease shall survive such completion or termination, including without limitation all indemnity obligations and obligations concerning the condition of the Leased Land and the City Property.

29. **Authority to Enter Agreement.** Both Parties represent to the other that they have the requisite power and authority to conduct their business and to execute, deliver, and perform the requirements of, this Lease. Each party warrants that the individuals who have signed this Lease have the legal power, right, and authority to enter into this Lease and bind each respective party.

30. **Discrimination.** Tenant, for itself and its successors and assigns, agrees that Tenant will not discriminate against any employee or applicant for employment because of sex, marital status, race, color, religion, creed, national origin, or ancestry, and that Tenant will comply with all applicable local, state and federal fair employment laws and regulations. Tenant covenants and agrees for itself, its successors and assigns, and every successor in interest to the Leased Land or any part thereof, that there shall be no discrimination against or segregation of any person or group of persons on account of race, color, creed, religion, sex, marital status, ancestry

or national origin in the lease, sublease, transfer, use, occupancy, tenure or enjoyment of the Leased Land, nor shall Tenant, or any person claiming under or through Tenant, establish or permit any such practice or practices of discrimination or segregation with reference to the selection, location, number, use or occupancy of lessees, sublessees or vendees of the Leased Land.

[Signatures on following page]

SIGNATURE PAGE
TO
GROUND LEASE AGREEMENT
(Velocity Island Park)

IN WITNESS WHEREOF this Lease is executed by the Parties as of the date set forth below (the "Effective Date").

LANDLORD:
CITY OF WOODLAND,
a California municipal corporation

TENANT:
LOVE RIDE INC.,
a Delaware corporation

By: _____
Paul Navazio
City Manager

By: _____
Name: _____
Title: _____

Date: _____

Date: _____

Attest:

By: _____
Ana Gonzalez
City Clerk

EXHIBIT "A"

DESCRIPTION AND SITE MAP OF LEASED LAND

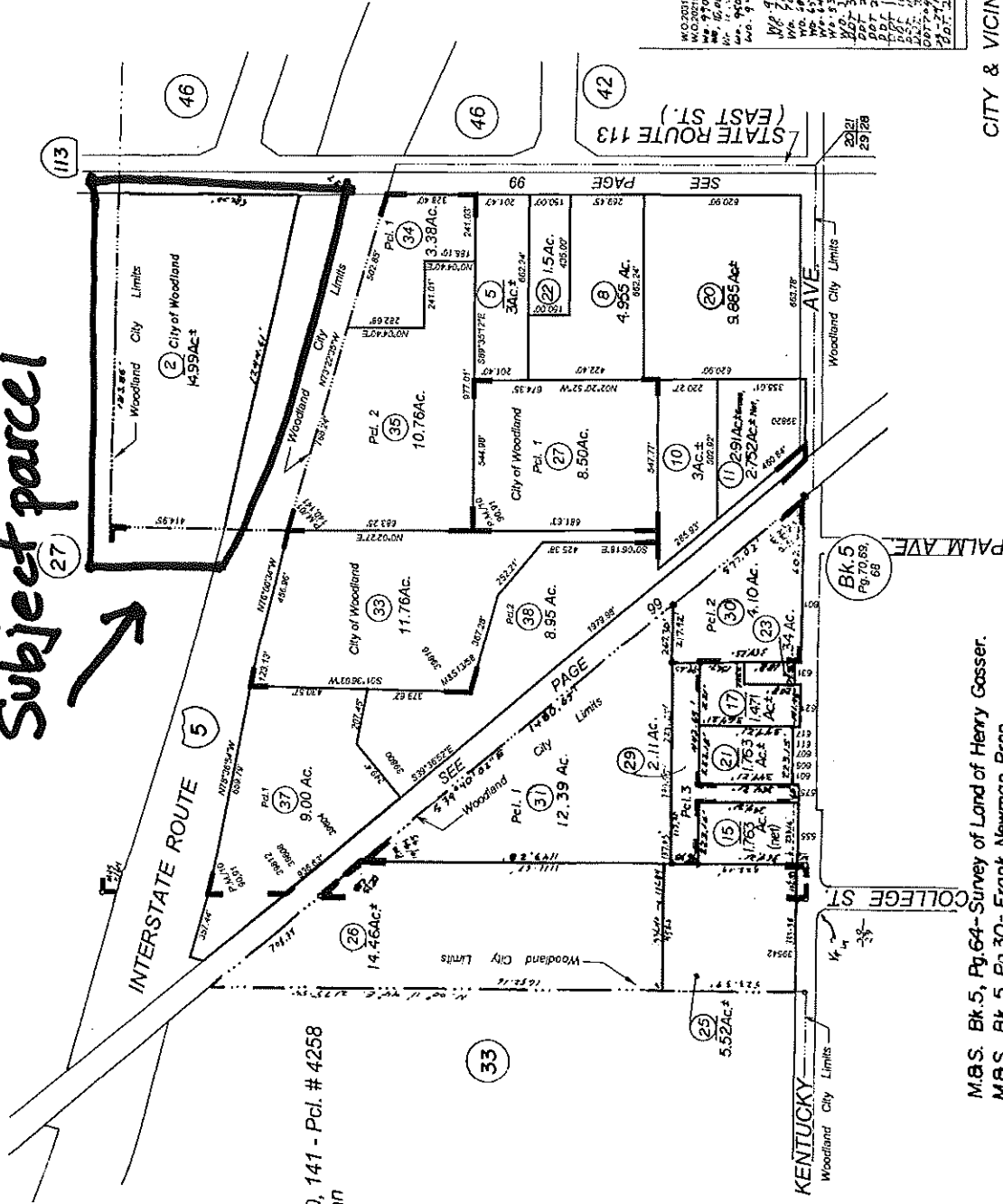
APN 027-340-002

27 - 34

POR. OF SEC. 20, T. 10N., R. 2E., M.D.B & M.

CAUTION - These Maps ARE NOT to be used for legal descriptions.

Subject parcel



P.M. Bk. 01, Pg. 140, 141 - Pcl. # 4258
for Ramos & Gorman

M.B.S. Bk. 5, Pg. 64 - Survey of Land of Henry Gosser.

M.B.S. Bk. 5, Pg. 30 - Frank Newman Prop.

P.M. Bk. 10, Pg. 90, 91 - Leo & Joann Volki. # 4020.

P.M. Bk. 10, Pg. 94, 95 - N. Kentucky Partners # 4058.

M.B.S. Bk. 13, Pg. 58 - Record of Survey.

(formerly por. 27 - 07)

NOTE - Assessor's Block Number Shown in Ellipses.

Assessor's Parcel Number Shown in Circles.

CITY & VICINITY OF WOODLAND

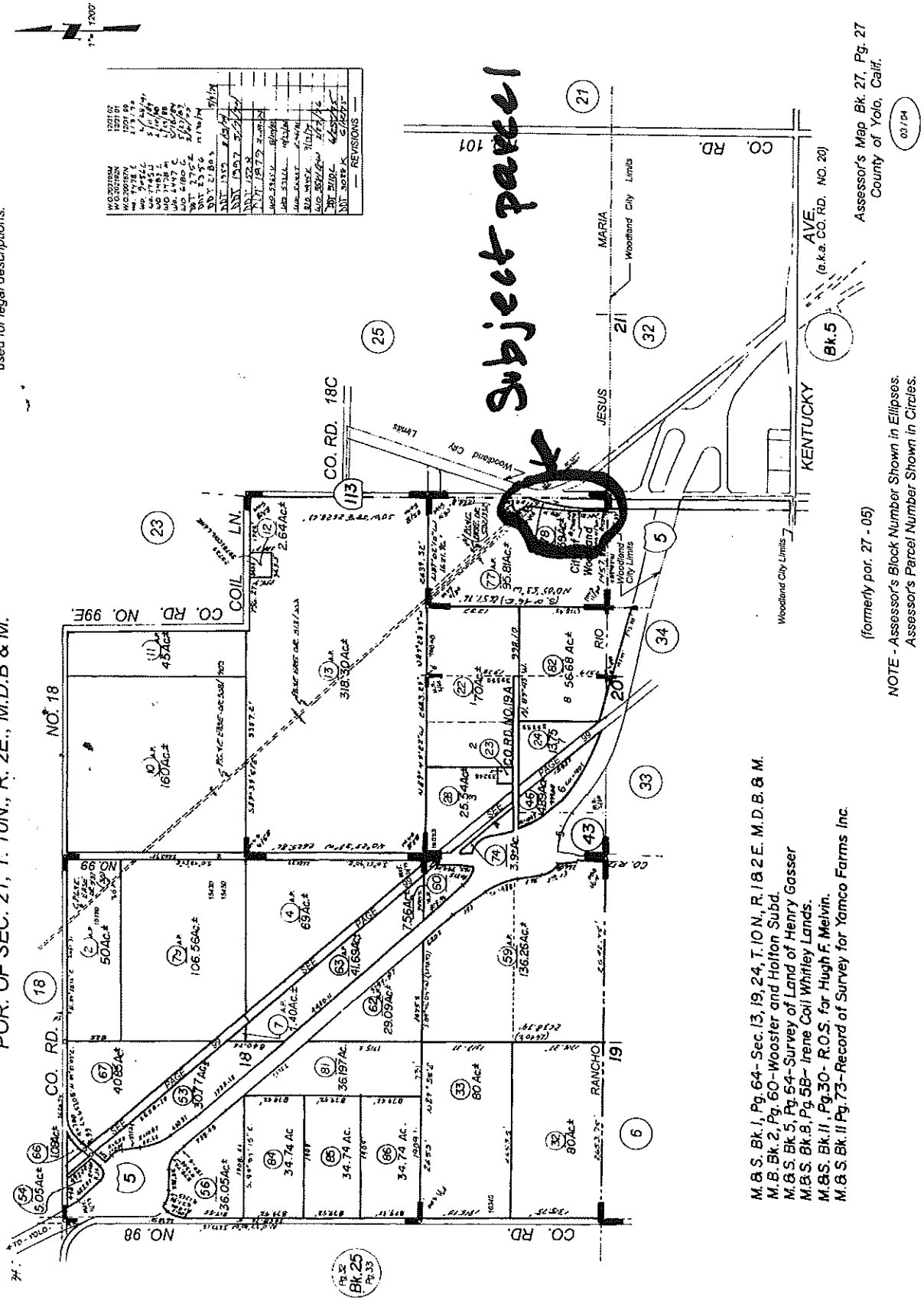
Assessor's Map Bk. 27, Pg. 34

County of Yolo, Calif.

03/04

CAUTION - These Maps ARE NOT to be used for legal descriptions.

POR OF RANCHO RIO JESUS MARIA, T. 10N., R. 2E. &
POR. OF SEC. 21, T. 10N., R. 2E., M.D.B & M.



M.B.S. Bk. 1, Pg. 64- Sec. 13, 19, 24, T. 10N., R. 182E. M.D.B. & M.
M.B. Bk. 2, Pg. 60- Wooster and Halton Subd.
M.B.S. Bk. 5, Pg. 54- Survey of Land of Henry Gasser
M.B.S. Bk. 8, Pg. 55- Irene Coil Whitley Lands.
M.B.S. Bk. 11, Pg. 30- R.O.S. for Hugh F. Melvin.
M.B.S. Bk. 11 Pg. 73- Record of Survey for Yamco Farms Inc.

(formerly par. 27 - 05)

NOTE - Assessor's Block Number Shown in Ellipses.
Assessor's Parcel Number Shown in Circles.

Assessor's Map Bk. 27, Pg. 27
County of Yolo, Calif.

03/1/04

NORTHWEST CORNER OF HWY 113 & INTERSTATE 5
WOODLAND, CA. 95776

ALL WORK SHALL COMPLY WITH:
Americans with Disabilities Act (ADA)
Accessibility Guidelines
for Buildings and Facilities

ESTRADA
SINCE 1961



VELOCITY ISLAND PARK

REAR SHEET

T1-1

SHEET INDEX

PROJECT DATA

—HOW DO THESE MEN
THINK ABOUT THE
FUTURE OF THE NATION?

1

THE

1952

EXHIBIT "B"

CONDITIONS OF APPROVAL FOR USE OF SITE

1. CONDITIONS OF APPROVAL

A. PLANNING – Conditional Use Permit

1. The project is as described in the staff report prepared for the September 20, 2012 Planning Commission meeting. The project shall be constructed as depicted on the Conceptual Site Plan, Landscape Plans, and building elevations dated 5/27/2011, included in the staff report, except as modified in these conditions of approval and with any changes necessary to meet city codes and specifications.
2. The applicant shall defend, indemnify, and hold harmless the City of Woodland, its agents, officers or employees from any claim, action or proceeding against the City or its agents, officers or employees to attack, set aside, void or annul an approval of the subject application by the City, its legislative body, advisory agencies or administrative officers. The City will promptly notify the applicant of any such claim, action or proceeding against the City and the applicant will either, at the City's discretion, undertake defense of the matter and pay the City's associated legal costs, or will advance funds to pay for defense of the matter by the City Attorney.
3. Final Plan Set: Prior to the issuance of building permits, the applicant shall include a Final plan set, with all conditions of approval incorporated or clearly listed on the plans. The conditions shall be printed on a full-size plan sheet(s).
4. The Applicant shall comply with the approved CEQA Mitigation Monitoring and Reporting Plan. Upon request, applicant shall provide a written report detailing compliance with MMRP to the Community Development Department for review.
5. The Conditional Use Permit shall not be issued until the appeal period has expired or final action on an appeal has been rendered.
6. The Conditional Use Permit must be exercised within **one year** of issuance, or it shall be null and void by act of law (Section 25-27-70).
7. At any time, upon request by the City, applicant shall provide a written report detailing compliance with Conditional Use Permit and Special Event Permits to the Community Development Department for review.
8. Applicant shall provide the Community Development Department with a check for the sum of **\$2,151.50** made out to Yolo County to record the environmental document with Yolo County.
9. Applicant to provide written verification that proper screening will block the visibility of roof mounted mechanical or utility equipment from the public.

10. Applicant shall comply with the State of California's new Water Efficient Landscape Ordinance AB 1881. The landscape architect shall document and attest to the compliance with the new State ordinance on the final landscape plans.
11. For landscaping on private property, a minimum of 15-gallon (or larger) trees is required. Landscaping on private property can also use shrubs from 1-gallon containers. All landscape stock shall be inspected by the project landscape architect prior to installation. No root bound plants shall be used, only healthy, well-formed, and vigorous plant material shall be used. Landscape architect to provide written verification as to plant health.
12. Enter into a landscape Maintenance Agreement with the City. The Agreement shall be recorded prior to issuance of a building permit to assure continuing maintenance of the landscaping.
13. Light poles shall not be located so as to conflict with the planting or future growth and shading of trees throughout the site. Parking and security lights shall not be taller than 20 feet above grade.
14. Applicant shall modify proposed landscape plan to use three (3) tree species in the parking lot as recommended by the City Arborist - Horn beam (*Carpinus betulus*), Purple Robe(*Robinia X ambigua 'Idahoensis'*), and Chinese Pistache "Keith Davey". City Arborist may select an evergreen tree as a substitute for one of the three tree species.
15. Applicant shall modify proposed landscape plans by replacing two thirds of the proposed Valley Oaks on the south and east perimeter to include two (2) additional varieties as recommended by the City Arborist - Little leaf Linden (*Tillia cordatta*) and Frontier Elm (*Ulmus X 'Frontier'*). City Arborist may select an evergreen tree as a substitute for one of the two tree species.
16. Prior to City issuing any building permit applicant shall have a Tree Protection Plan prepared by a licensed Arborist and submitted for review by the Community Development Department. This Plan shall identify trees to be retained and specific measures to be taken to protect the trees during construction and the long-range care and preservation of the trees.
17. Landscape Plan shall indicate a 3-inches of top dressing (bark) be used in all planter beds.
18. The applicant shall be required to provide replacement trees for all healthy trees removed from the site. The replacement requirement is two trees for every 6 inches of trees removed measured at diameter breast height (DBH). The replacement trees are in addition to those trees required as part of project approval per the City's Landscaping Ordinance and Community Design Standards. Replacement trees may be planted on site or applicant can pay into the City's tree fund at \$215 per replacement tree.
19. Photometric data shall be provided, and indicate that the parking area will be equipped with one (1) foot-candle of minimum maintained illumination per square foot of parking surface to include the entire paved area. The parking area shall be illuminated from dusk until the termination of business every operating day. Photometric data must also confirm the absent of "Hot Spots" or areas of ten (10) foot-candle of illumination per square foot or more.
20. The bathroom building shall use earth tone integral color CMU split face block. An earth tone color shall also be used for the standing seam metal roof. Applicant shall submit colors

to be used on the building(s) for review and approved by the Community Development Department.

21. Applicant shall construct a trash enclosure matching the bathroom design and materials. Trash enclosures are required to be cover (roof). The roof of the trash enclosure to match roof of bathroom.
22. Operations buildings on site shall use at least two earth tone colors. Applicant shall submit colors to be used on the building(s) for review and approval by the Community Development Department.
23. Should parking become a problem in the opinion of the City, the applicant shall provide additional parking and any necessary shuttle service to the site in order to ensure public safety to the satisfaction of the Community Development Department. Any off-site parking shall be reviewed and approved by the Community Development Department and may require the applicant to obtain a Condition Use Permit for the off-site parking site.
24. Applicant shall obtain a Special Event Permit prior to holding any special event or tournament. Applicant shall submit the request for such an event a minimum of 30 days prior to the scheduled event to the City's Special Event Committee. The Special Event Permit shall address special event parking, shuttle service, traffic control, noise control, sale of alcohol, security measures and advance notification to adjacent residences.
25. There shall be no sales or consumption of alcohol within the Park. Alcohol sales and consumption is only permitted with a City approved Special Event Permit. Applicant shall permanently post the Park with adequate signage to the satisfaction of the City.
26. Applicant to submit for review a geotechnical soils report with construction documents.
27. The use of temporary signs and attention getting devices (flags, sails, inflatable balloons, streamers, sponsor signs, etc.) shall require the applicant to submit plans for review and possible approval, a minimum of 30 days prior to use.
28. Applicant shall implement all of the safety measures outlines in their cable wakeboard park proposal. Applicant shall provide upon request at any time an incident report, tracking safety issues and accidents at the park to the Community Development Department for review.
29. The City shall require the applicant to implement additional safety measure at the park at any time should the City deem additional safety measure necessary.
30. Applicant shall provide a quality assurance report, at any time upon request from the City, to verify that the water quality of the lake is safe for human occupancy and water sports use.
31. Park operators shall provide proof of sufficient insurance for the operation of the park to the satisfaction of the City and YCPARMIA.

B. DEVELOPMENT ENGINEERING

FEES

1. Project shall pay all applicable development impact fees in effect at the time of building permit. Fees shall be based on the building s.f. of the bathroom and operations building and

any other buildings added to the approved site plan, as well as, meter fees for surface water and Storm drain fees shall be based on the paved area of the parking lot. Fees shall be based on the service category.

2. Project shall pay plan check and inspection fees on public improvements and on civil improvements constructed on City property.
3. The conditions of approval set forth herein include certain fees, dedication requirements, reservation requirements and/or other exactions. Pursuant to Government Code, Section 66020(d), these conditions constitute written notice of the amount of such fees, and a description of the dedications, reservations and other exactions.

The applicant is hereby notified that the 90-day protest period, commencing from the date of project approval, has begun. If the applicant fails to file a timely protest regarding any of the fees, dedication requirements, reservation requirements and/or other exactions contained in this notice, complying with all the requirements of Government Code, Section 66020, the applicant will be legally barred from later challenging such fees, dedications requirements, reservation requirements and/or other such exactions. Notwithstanding the foregoing, the City does not waive any rights it may have to enforce any settlement agreement, memorandum of understanding, or other agreement with the applicant which authorizes the City to impose certain fees, and which may waive the applicant's right to challenge the imposition of some or all of the fees, dedication requirements, reservation requirements, and/or other exactions set forth in these conditions of approval.

The applicant is hereby notified that the 90-day protest period, commencing from the date of project approval, has begun. If the applicant fails to file a timely protest regarding any of the fees, dedication requirements, reservation requirements and/or other exactions contained in this notice, complying with all the requirements of Government Code, Section 66020, the applicant will be legally barred from later challenging such fees, dedications requirements, reservation requirements and/or other such exactions. Notwithstanding the foregoing, the City does not waive any rights it may have to enforce any settlement agreement, memorandum of understanding, or other agreement with the applicant which authorizes the City to impose certain fees, and which may waive the applicant's right to challenge the imposition of some or all of the fees, dedication requirements, reservation requirements, and/or other exactions set forth in these conditions of approval.

REQUIRED SUBMITTALS:

1. Applicant shall prepare improvement plans for all work within the public right-of-way and civil improvement plans on City property and submit to the Development Engineering with an encroachment permit application for review and approval. The submittal shall include an engineer's estimate of cost for the public improvements and a plan check fee in the amount

of 3% of the engineer's cost estimate. Prior to building permit issuance, applicant shall obtain permit and post security for the full cost of the public improvements and improvements on City land. This submittal is separate from the building permit submittal.

Prior to issuance of the encroachment permit the balance of plan check and inspection fees (total plan check and inspection fees less the deposit) based on the final cost estimate shall be paid in full based on the City's fee schedule these fees are (based on the construction cost of the improvements: 12% of the first \$50,000, plus 10% of the next \$50,000, plus 9% of the next \$100,000, plus 8% of the next \$100,000, plus 7% of the amount over \$300,000.

2. Unless otherwise determined by the City Engineer, construction of public improvements will require that the applicant enter into an improvement agreement, and provide bonds and insurance.
3. Prior to start of work applicant shall obtain a Caltrans encroachment permit for all work within the right of way of East Street/SR 113. (Caltrans will also need to approve design of the sewer and water connections).
4. Prior to start of work applicant shall obtain a Railroad permit for work within the Railroad Right of Way.

SITE PLAN AND REQUIRED PUBLIC IMPROVEMENTS:

1. The following public improvements are required as a condition of development of this site, and shall be completed under the encroachment permit prior to certificate of occupancy providing the above conditions (required submittals) are met prior to building permit issuance. The Encroachment permit shall apply to the sidewalk, driveway, all utility connections, and all civil improvements (on and off site), and any traffic control or traffic impacts on the public street.
2. The applicant shall install utility connections to City of Woodland Standards and Specifications. This may include but is not limited to installation of new meter boxes, backflow prevention, cleanouts and/or laterals in a location approved by the City.
3. Backflow protection devices are required on the commercial and landscape irrigation water services for the project. Backflow devices shall be tested by a City-approved tester and results provided to the Public Works Department prior to occupancy.
4. Project shall incorporate mitigations for construction traffic as detailed in the environmental document.
5. The project is subject to the City's Storm Water Ordinance and must comply with the City of Woodland Technical Guidance Manual for Storm water Quality Control Measures. Site shall meet General Site Design Control Measures, Site Specific Control Measures, and Treatment Control Measures. The applicant may pay a Storm Water Quality in lieu fee if unable to meet treatment requirements. Site specific control measures will include entering into a maintenance agreement with the City.
6. The site may irrigate landscaping either from potable water or from the onsite well but there shall be no connection between the two systems. A separate landscape irrigation service with

meter and backflow will be required for an irrigation connection to the potable water connection.

7. Should ground dewatering be necessary for construction, applicant shall obtain a groundwater discharge permit from the State.
8. The Project is within the flood plain. Development shall comply with all applicable FEMA standards and regulations and all City requirements for development within a flood plain. Consult with the building officials.
9. Overhead power lines shall not run through the middle of the project, electrical facilities shall be undergrounded, unless if necessary due to flood requirements, may be routed around the edge of the project subject to the approval of the building official and City Engineer.
10. Improvement plans need to be revised to include the adjacent parcel access road.
11. The project shall widen the paved access road to 20 feet in width.
12. Project shall Relocate street light in the eye of the button hook at the intersection of SR 113 and site access road; or replace it with a breakaway pole.
13. Access Road and parking lot design sections shall be based on a design by a licensed Geotechnical Engineer. The access road shall be designed to handle a minimum of a 20 ton vehicle in a 10 year storm.
14. Applicant shall provide City Departments with access codes or keys for after hours emergency and storm drain maintenance.
15. Sewer Force main shall be owned and maintained by the applicant up to the point of connection to the City's gravity system.
16. Project improvements shall include repair and/or replacement of all access roadway lights.

EXHIBIT "C"

IMPROVEMENTS UPON LEASED LAND

EXHIBIT "D"

FORM OF PERFORMANCE BOND SECURING REMOVAL OF FACILITIES

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the CITY OF WOODLAND (hereinafter referred to as "City") has entered into a ground lease (hereinafter referred to as the "Ground Lease") with LOVE RIDE INC., a Delaware corporation d/b/a Velocity Island Park (hereinafter referred to as "Tenant") of certain real property owned by City, the terms and conditions of which Ground Lease are expressly incorporated herein by reference; and

WHEREAS, the Ground Lease requires Tenant, upon the expiration or termination of the Ground Lease, to remove all improvements installed or erected by Tenant upon the Leased Land; and

WHEREAS, Tenant is required by the Ground Lease to comply with the terms thereof and to furnish a bond for the faithful performance of the obligation to remove the improvements described therein;

NOW, THEREFORE, we, _____, the undersigned Tenant and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto City in the sum of _____ DOLLARS, (\$_____), said sum being not less than one hundred twenty-five percent (125%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Tenant, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall indemnify and save harmless the City, its officers and agents, as stipulated in the Contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

The obligations of Surety hereunder shall continue so long as any obligation of Tenant remains. Nothing herein shall limit the City's rights or Tenant or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

Whenever Tenant shall be, and is declared by City to be, in default under its obligation to remove improvements pursuant to the Contract, the Surety shall remedy the default pursuant to the Contract, or shall promptly, at City's option:

- (1) Take over and complete Tenant's obligations to remove improvements in accordance with all terms and conditions in the Contract; or
- (2) Obtain a bid or bids for completing Tenant's improvement removal obligations in accordance with all terms and conditions in the Contract and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a contract between such bidder, the Surety and City, and make available as work progresses sufficient funds to pay the cost of completion of the work, including other costs and damages for which Surety may be liable.
- (3) Permit City to complete the improvement removal work in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the work, including other costs and damages for which Surety may be liable.

Surety expressly agrees that City may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by Tenant.

Surety shall not utilize Tenant in completing the work nor shall Surety accept a bid from Tenant for completion of the work.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work and the provisions of Section 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20____.

TENANT

Name

By _____

SURETY:

By: _____
Attorney-In-Fact

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$ _____.

(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety) _____

(Name and Address of Agent or
Representative for service of _____

process in California, if different
from above)

(Telephone number of Surety and
Agent or Representative for service
of process in California)

ACKNOWLEDGMENT

State of California

County of _____)

On _____ before me,

(insert name and title of the officer)

personally appeared _____,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto.

EXHIBIT "E"

RIGHT OF FIRST REFUSAL TO PURCHASE

1. **Right of First Refusal.** City hereby grants to Tenant, from and after the Effective Date of the Lease, a continuing right of first refusal ("Right of First Refusal") with respect to any sale of the City's Property and/or the Leased Land by City which is available, or may become available for transfer to any third party (collectively, the "Available Space") during the Term of the Lease. Provided that Tenant is not in default of any terms or provisions of the Lease, Tenant's Right of First Refusal shall be perpetually superior in time and right to any rights, options, and privileges in, to, or for such Available Space of any other prospective or actual tenant, subtenant, assignee, licensee or other third party and except as expressly set forth below to City's rights therein for any purpose other than making the same available to Tenant. Notwithstanding the foregoing, this Right of First Refusal shall terminate upon the expiration or earlier termination of the Lease.

2. **City's Intent to Sell.** Prior to consummation of a sale of Available Space, City shall give written notice to Tenant (the "Availability Notice") of City's intention to sell the Available Space to third parties. At City's option, City may provide such notice in advance of communicating with third parties concerning the potential availability of Available Space. Thereafter, City shall not sell or otherwise transfer any Available Space unless it shall have complied with the provisions of this Exhibit E.

3. **City's Availability Notice.** City's Availability Notice shall specify with particularity the basic terms upon which the Available Space is being or will be offered, including, but not limited to, price, the date of anticipated delivery of possession, its location, size, and approximate configuration, improvements (if any) and any other quantifiable economic concessions and other material terms that City will accept with respect to a sale, or other transfer of the Available Space, which terms shall be established in City's sole discretion. The Availability Notice

4. **Tenant's Election.** Within thirty (30) days following Tenant's receipt of Availability Notice, Tenant shall, by written notice to City, elect one of the following: (a) accept City's proposed terms and purchase the Available Space under such terms; or (b) reject City's offer to purchase the Available Space under City's proposed terms.

(i) If Tenant elects to accept City's Offer then City and Tenant shall endeavor to close escrow on the sale of the Available Space by City to Tenant within ninety (90) days after the effective date of Tenant's notice containing such election.

(ii) If Tenant elects not to purchase the Available Space then City shall have the right to thereafter to transfer or convey the Available Space to a third person, provided that: (a) the purchase price paid for the Available Space shall not be less than one hundred percent (100%) of the price contained in City's Availability Notice; and (b) such transfer or

conveyance closes within three hundred sixty-five (365) days after: (1) the date of Tenant's notice rejecting the City Purchase Price; or (2) 30 days after Tenant's receipt of City's Availability Notice, whichever occurs first. If however, City desires to transfer or convey the Available Space for a price less than the City Purchase Price, less the sum of all commissions to be paid, or the transfer or conveyance of the Available Space does not occur within said three hundred sixty-five (365) day period, then City shall again deliver notice to Tenant of City's desire to sell the Available Space and the entire procedure described in this Exhibit E shall again apply.

5. **Closing Costs.** Except as otherwise set forth in the Lease, the closing costs and taxes associated with any sale of the Available Space between City and Tenant pursuant to this Exhibit E shall be allocated between the Parties in accordance with local custom within Yolo County.

6. **No Broker.** Tenant shall not involve any real estate broker in any transaction between Tenant and City for the purchase and sale of the Available Space occurring pursuant to this Exhibit E. City may retain one or more real estate brokers or other advisors to advise and represent it in connection with the sale of the Available Space. Each Party shall indemnify the other Party for any fees or commissions claimed by any broker claiming through such Party regarding any transaction between them for the purchase and sale of the Available Space occurring pursuant to this Exhibit E.

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VELOCITY ISLAND PARK PROJECT

Initial Study / Mitigated Negative Declaration

Prepared for
City of Woodland

July 2012



VELOCITY ISLAND PARK PROJECT

Initial Study / Mitigated Negative Declaration

Prepared for
City of Woodland

July 2012



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ENVIRONMENTAL CHECKLIST

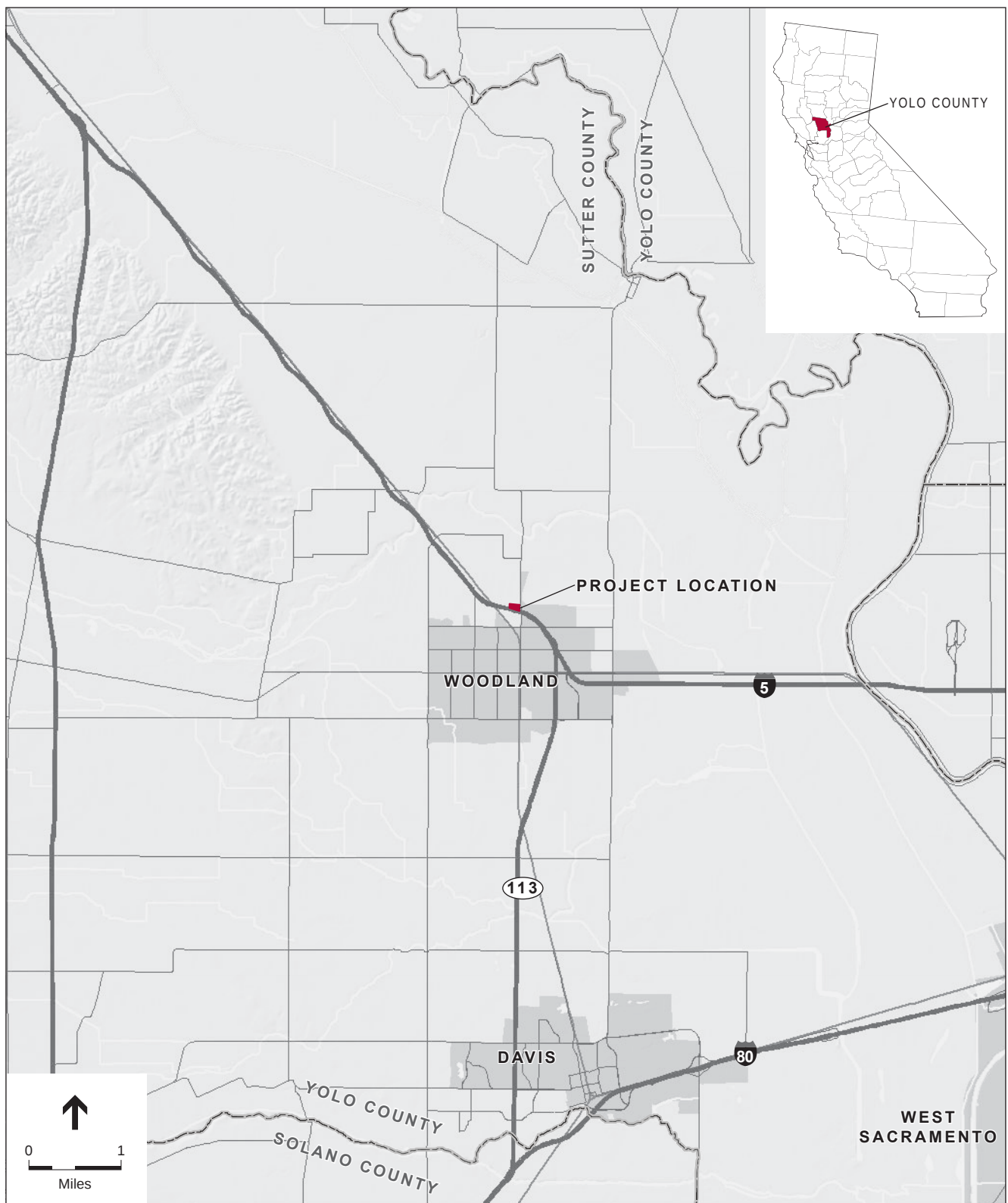
Initial Study/Mitigated Negative Declaration

1. **Project Title:** Velocity Island Park Project
2. **Lead Agency Name and Address:** City of Woodland
300 First Street
Woodland, CA 95695
3. **Contact Person and Phone Number:** Paul Hanson, AICP
Senior Planner
(530) 661-5820
4. **Project Location:** Dubach Detention Basin
755 North East Street
Woodland, CA 95776
5. **Project Sponsor's Name and Address:** Love Ride, Inc.
Scott Hartmann
1240 Alice Street, Suite C
Woodland, CA 95776
6. **General Plan Designation(s):** Open Space (OS)
7. **Zoning Designation(s):** Open Space (OS)

8. Description of Project:

Love Ride, Inc. (Love Ride) is proposing to develop a cable wakeboard park within the 15-acre Dubach Detention Basin (formerly Dubach Park) in the City of Woodland (APN# 027-340-002 & 027-270-078). The project site is located at 755 North East Street immediately northwest of Interstate 5/Highway 113 (see **Figure 1** and **Figure 2**). The project site, which is owned by the City, has been used as a hydrologic detention basin since 2008 when the park was closed. Prior to 2008, the park was a dual-use facility for youth baseball and winter stormwater detention.

Cable wakeboarding is a surface water sport, which involves riding a wakeboard over the surface of a body of water while being pulled by an overhead cable system. The cables are suspended in the air by a series of towers surrounding a small lake; an overhead cable rotates in a (usually) counterclockwise motion around the lake. Along the cable are a number of carriers from which towropes are attached pulling riders around the lake. See **Figures 3, 4, and 5** for visual simulations of the proposed project.



SOURCE: ESRI, 2006; and ESA, 2012

Velocity Island Park Project . 120269

Figure 1
Regional Location



SOURCE: Bing Maps, 2009; ESRI, 2009; and ESA, 2012

Velocity Island Park Project . 120269

Figure 2
Project Site

The project, known as “Velocity Island Park,” would create a 9-acre lake within the Dubach Detention Basin site and construct the overhead cable system and park amenities. The cable system will consist of the two (2) cable systems. The main cable system includes six truss-design stanchions with an electric motor pulling the overhead towline around the lake. The second cable line system consists of two separate towlines for straight line pulling. Each system includes two truss-design stanchions with an electric motor pulling the overhead towline in a straight line. Within the watercourse, the project includes two sandy islands, one for wake dampening, and the other for launching participants and spectator area. The project will also include floating and stationary docks for launching participants, and a decomposed granitic path 4 to 5 feet wide around the perimeter of the lake.

The facility proposes 76 parking spaces, restrooms (624 sq. ft.), rental building (640 sq. ft.), a snack bar/office (1,400 – 2,100 sq. ft.), and an observation deck. The project would operate from 8 a.m. to ½ hour before dusk every day of the week and expects 10 to 100 persons per day with more on special event days.

The City of Woodland is serving as the lead agency under the California Environmental Quality Act (CEQA). The required project entitlements include a Lease Agreement with the City, a conditional use permit (CUP), site plan review, and design review. The Planning Commission will consider approval of the proposed Mitigated Negative Declaration (MND) and then act on the CUP, site plan review, and design review. The Lease Agreement must be approved by the City Council.

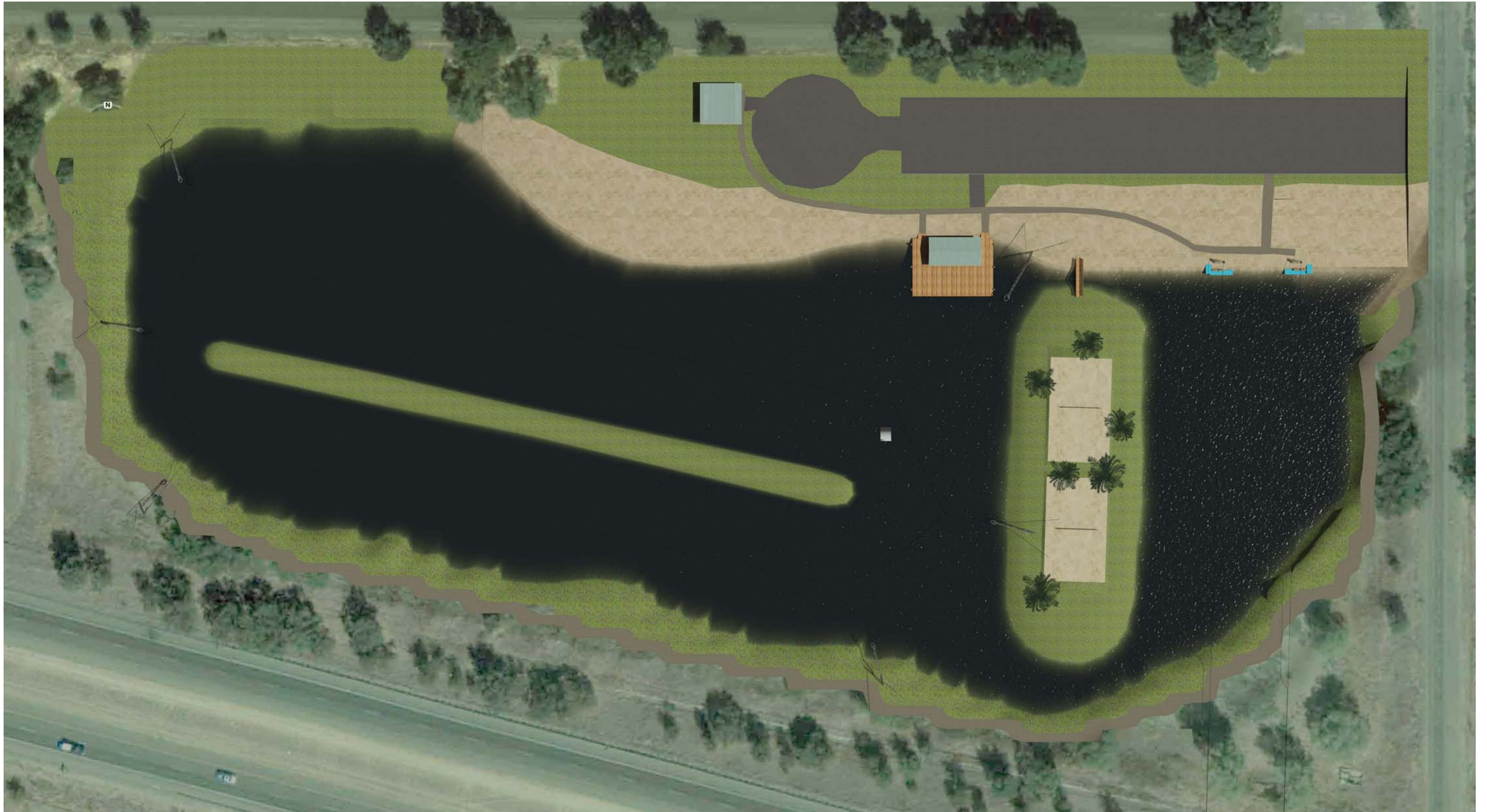
9. Surrounding Land Uses and Setting:

The project site is located in a largely agricultural area in a northern portion of the City of Woodland, CA (see Figure 1 and Figure 2). The project site has a City of Woodland General Plan and Zoning Designation of Open Space (OS). Uses appropriate to the area are allowed in the OS zone with approval of a conditional use permit, site plan review and design review.

Land uses surrounding the project site consist of various agricultural, commercial and industrial land uses. Existing agricultural operations are located immediately to the north and west. North East Street/Highway 113 is located immediately to the east with various businesses on the opposite side, including Valley Oaks Inn and several warehouses. Interstate 5 is located directly to the south with a large trucking operation on the other side.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement. Indicate whether another agency is a responsible or trustee agency):

The proposed project would disturb an area over one acre. Therefore, an NPDES Permit from the Regional Water Quality Control Board and preparation of a Storm Water Pollution Prevention Plan (SWPPP) will be required.



SOURCE: Bill Eral Design, 2012; and ESA, 2012

Velocity Island Park Project . 120269

Figure 3
Visual Simulation



SOURCE: Bill Eral Design, 2012; and ESA, 2012

Velocity Island Park Project . 120269

Figure 4
Visual Simulation



SOURCE: Bill Eral Design, 2012; and ESA, 2012

Velocity Island Park Project . 120269

Figure 5
Visual Simulation

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Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

- | | | |
|--|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☒ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☐ Geology, Soils and Seismicity |
| ☒ Greenhouse Gas Emissions | ☒ Hazards and Hazardous Materials | ☒ Hydrology and Water Quality |
| ☐ Land Use and Land Use Planning | ☐ Mineral Resources | ☐ Noise |
| ☐ Population and Housing | ☐ Public Services | ☐ Recreation |
| ☒ Transportation and Traffic | ☐ Utilities and Service Systems | ☐ Mandatory Findings of Significance |

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

- ☐ 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, no further environmental documentation is required.


Signature

Brian J. Grattidge
Printed Name

July 26, 2012
Date

Paul L. Hanson, Senior Planner
For

Environmental Checklist

Aesthetics

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
1. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

Discussion

- a) As described above, land uses surrounding the project site consist of various agricultural, commercial and industrial land uses. This visual context of the project area consists of existing agricultural operations located immediately to the north and west. North East Street/Highway 113 (Hwy 113) is located immediately to the east with various businesses on the opposite side. Interstate 5 (I-5) is located directly to the south with a large trucking operation on the other side. There are no scenic vistas within the vicinity of the project site. Because the project site is in a developed area and because there are no scenic vistas in the vicinity of the project site, the proposed project would not have an adverse effect on a scenic vista; therefore there would be **no impact**.
- b) A review of the current Caltrans Map of Designated State Scenic Highways indicates that there are no officially designated state scenic highways in Yolo County. A portion of State Route 16 in the northwest part of the County is an eligible state scenic highway, however it has not been designated as such at this time (and is not within the same view shed as the project site). Furthermore, there are no designated county scenic highways currently listed. Therefore, the proposed project would have **no impact** on scenic resources associated with a scenic highway or roadway, and no mitigation is required.
- c) As described above, the project site is located immediately adjacent to existing agricultural land uses as well as I-5 and Hwy 113. Existing developed industrial and commercial land uses are located on other sides of I-5 and Hwy 113. However, the site itself is currently an undeveloped detention basin. The project site is visible to several types of viewing groups including workers of the various businesses in the area and motorists traveling along I-5 and Hwy 113. The viewers are considered to have low to moderate sensitivity, and low (vehicle traffic) to moderate (employees) exposure. Development of the proposed project would result in a permanent change in local visual conditions (see Figures 4 and 5).

- The project site is surrounded by existing agricultural uses, I-5, and Hwy 113 with developed industrial and commercial land uses in the area. The visual character of the site would experience moderate change—the detention basin would be re-graded, filled with water, and two artificial islands created. A small amount (2,000 to 3,000 sq. ft.) of ancillary structures would be built and the parking lot enlarged. Additional landscaping would be added. The visual quality would not be substantially degraded. Therefore this impact is considered **less than significant**.
- d) The project site is located adjacent to existing developed land uses where lighting currently exists and is characteristic of typical nighttime city views. Automobile traffic on I-5 and Hwy 113, as well as existing industrial and commercial land uses in the area contribute to existing urbanized nighttime light sources and daytime glare in the vicinity of the project. The proposed project would not conflict with existing land uses in the area. Although the project would create new sources of light and glare, it would not adversely affect day or nighttime views as lighting associated with existing development surrounding the project site is prevalent in the project area. There are no adjacent residential uses that would be affected (nearest residences are located ½ mile away). Furthermore, all proposed outdoor lighting will be required to meet all city standards regulating outdoor lighting in order to minimize any impacts resulting from outdoor lighting on adjacent properties; therefore this impact is **less than significant**.

References

- California Department of Transportation (Caltrans), 2012. California Scenic Highway Program, available at: http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm; accessed May 15, 2012.
- City of Woodland, 2002. General Plan Policy Document; December 17, 2002.
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Agricultural and Forest Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
2. 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
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 by 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion

- a) According to the Department of Conservation's Farmland Mapping and Monitoring Program (DOC, 2010), the project site consists of Urban and Built-Up Land. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted as a result of the proposed project; therefore this impact is considered **less than significant**.
- b) The project site is designated as open space by the City of Woodland General Plan and Zoning Ordinance. The project site is not enrolled in a Williamson Act contract. Properties to the south and east are zoned and used for non-agricultural (commercial and industrial) development, however, properties to the north and west are zoned for agricultural uses. Although land used for agricultural purposes is located adjacent to the project site, the project would not negatively impact or otherwise interfere with these operations. Therefore, this impact is considered **less than significant**.
- c,d) As previously discussed, because the project site is located on a parcel currently used as a detention basin immediately adjacent to I-5 and Hwy 113 with developed industrial and commercial in the area, there would be no conflict with existing zoning for, or cause rezoning

of, forestland, timberland, or timberland zoned Timberland Production. No forestland would be lost or converted as a result of the proposed project. For these reasons, there would be **no impact** on forestland.

- e) The project is recreational in nature, and of a relatively low intensity. No sensitive residential uses would be introduced that could generate complaints or otherwise limit agricultural activity. Therefore, **no impact** related to direct or indirect conversion of farmland/forestland would result from the proposed project.

References

DOC, 2010. California Department of Conservation, Farmland Mapping and Monitoring Program, 2010.

City of Woodland, 2002. General Plan Policy Document; December 17, 2002.

Air Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
3. 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.				
Would the project:				
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 region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion

- a) The project site is within the Sacramento Valley Air Basin (SVAB), specifically in the City of Woodland, Yolo County, which is currently designated as a nonattainment area for state and national ozone standards, state particulate matter (PM10) standard, and federal PM2.5 (24-hour) standard. The Yolo-Solano Air Quality Management District (YSAQMD) *Triennial Assessment and Plan Update* (YSAQMD, May 2010) is the applicable Air Quality Management Plan (AQMP) that has been prepared to address ozone nonattainment issues.

If a City's General Plan is consistent with the most recently adopted AQMP, a project that is consistent with the General Plan's land use designation is considered consistent with applicable air quality plans and policies.

As stated in Section 10, Land Use and Planning, the proposed project would be consistent with the General Plan land use designations and zoning for the project site. In addition, the City's General Plan is consistent with the AQMP because data and projections from the General Plan are incorporated into the AQMP. Development of the project would not interfere with population and vehicle-miles-traveled (VMT) projections used to develop the 2010 *Triennial Assessment and Plan Update* planning projections as it would not increase the population of the area and VMT traveled would be negligible. Therefore, the proposed project would result in a less-than-significant impact because it would not substantially conflict with the region's Air Quality Management Plan.

- b) The project would result in short-term and long-term emissions of criteria air pollutants from construction and operations, respectively. These activities are described below.

Construction

The SVAB experiences occasional violations of ozone and particulate matter (PM₁₀ and PM_{2.5}) standards. Thus, during the construction phase of any given project basin wide violations can occur. Construction would involve use of equipment and materials that would emit ozone precursor emissions (i.e., reactive organic gases or ROG, and nitrogen oxides, or NO_x). Construction activities would also result in the emission of other criteria pollutants from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips. Emission levels for these activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers. Criteria pollutant emissions of ROG and NO_x from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during project development. Emissions were estimated using CalEEMod and are depicted below in **Table 1**. These emissions are also compared to the YSAQMD thresholds described in the *Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD, 2007). Construction activities are assumed to occur over a six month period. Additional assumptions and information are included in **Appendix A**.

TABLE 1
UNMITIGATED EMISSIONS FROM CONSTRUCTION ^{a, b}

Project Phase	ROG ^c	NOx ^c	CO ^d	PM ₁₀ ^d	PM _{2.5} ^d
Year 2012	0.3	2.3	49.9	32.0	14.2
Year 2013	0.5	0.4	25.2	3.2	3.0
YSAQMD Thresholds of Significance	10	10	NA	80	NA
Significant (Yes or No)?	No	No	No	No	No

a. Project construction emissions estimates were made using CalEEMod. See Appendix A for more information.
b. Values in **bold** are in excess of the applicable significance threshold. NA = Not Available.
c. Tons Per Year
d. Pounds Per Day

Although the project would not generate emissions during construction that would exceed the YSAQMD thresholds, the YSAQMD recommends that projects implement a set of best management practices during construction regardless of the significance determination to reduce dust emissions and avoid localized health impacts. Implementation **Mitigation Measures AIR-1** would reduce impacts to a less-than-significant level.

Operations

In regards to operations, the proposed project would increase the use at the project site by adding recreational facilities. The proposed project would generate approximately 100 daily vehicle trips (50 inbound and 50 outbound), and approximately 10 peak-hour trips (5 inbound and 5 outbound) during both the a.m. and p.m. peak hours. Operational emissions, including mobile, energy, and area (i.e., architectural coating, consumer

products, landscape equipment) sources were estimated using CalEEMod and are depicted below in **Table 2**. Additional assumptions and information are included in **Appendix A**.

As shown in Table 2, long-term operational emissions of the project would be less than significant.

TABLE 2
UNMITIGATED EMISSIONS FROM OPERATIONS ^{a, b}

Project Phase	ROG ^c	NOx ^c	CO ^d	PM10 ^d	PM2.5 ^d
Project Buildout	0.3	0.3	5.5	0.9	0.09
YSAQMD Thresholds of Significance	10	10	NA	80	NA
Significant (Yes or No)?	No	No	No	No	No

a. Project operational emissions estimates were made CalEEMod. See Appendix A for more information.
b. Values in **bold** are in excess of the applicable significance threshold. NA = Not Available.
c. Tons Per Year
d. Pounds Per Day

While CO emissions do not have a single daily or yearly threshold, the potential impact of CO concentrations is analyzed in item (d), below.

- c) According to the YSAQMD, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Alternatively, if a project does not exceed the identified significance thresholds, then the project would not be considered cumulatively considerable and would result in less-than-significant air quality impacts. As discussed for criteria "b" above, the project would result in less than significant construction emissions with mitigation incorporation, and less than significant operational emissions.

Mitigation Measure: Implement Mitigation Measures AIR-1.

- d) Some receptors are considered more sensitive than others to air pollutants. Reasons for greater sensitivity include pre-existing health problems, proximity to emissions source, or duration of exposure to air pollutants. Schools, hospitals and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential areas are also sensitive to poor air quality because people usually stay home for extended periods of time. The project would not be constructed adjacent to existing sensitive uses. Thus, toxic air contaminants (such as diesel particulate matter) from construction activities are not anticipated to result in the exposure of sensitive receptors to levels that exceed applicable standards.

The long-term operation of the project would not result in any sources of toxic air emissions. However, since the project would be located adjacent to I-5 and Highway 113, visitors would potentially be exposed to toxic air contaminants and criteria air pollutants from the

highways. However, this exposure would be for the short-term duration of park visitation. In addition, The YSAQMD's *Handbook for Assessing and Mitigating Air Quality Impacts* includes screening criteria for carbon monoxide hotspots. 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."

Since the project would result in minimal traffic (10 peak-hour trips) during both the a.m. and p.m. peak hours, these criteria would not be met.

In summary, the project would not expose sensitive receptors to substantial pollutant concentrations during construction or operations and this impact would be less than significant.

- e) As a general matter, the types of land use development that pose potential odor problems include wastewater treatment plants, refineries, landfills, composting facilities and transfer stations. No such uses would occupy the project site. Therefore the project would not create objectionable odors that would affect a substantial number of people and this impact would be less than significant.

Mitigation Measures

Mitigation Measure AIR-1: During active construction, the City shall require construction contractors to implement applicable YSAMD construction dust control measures, including:

1. Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
2. Haul trucks shall maintain at least 2 feet of freeboard; or cover all trucks hauling dirt, sand, or loose materials.
3. Plant vegetative ground cover in disturbed areas as soon as possible.
4. Cover inactive storage piles.
5. Sweep access road if visible soil material is carried out from the construction site.

References

Yolo-Solano Air Quality Management District (YSAQMD), 2007. *Handbook for Assessing and Mitigating Air Quality Impacts*, adopted July 11, 2007.

Yolo-Solano Air Quality Management District (YSAQMD), 2010. *Triennial Assessment and Plan Update*, adopted May 2010.

Biological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
4. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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 U.S. 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?	☐	☐	☐	☒

Data Sources / Methodology

Biological resources within the project site were identified by ESA biologist Chariss Tweedy through a field reconnaissance conducted on May 9, 2012, and by a field visit by ESA biologist Bob L. Jones on July 6, 2012. Prior to the reconnaissance survey, a review of pertinent literature and database queries were conducted for the project site and surrounding area. The reconnaissance survey consisted of a pedestrian survey of the project site in its entirety. The primary sources of data referenced for this study include the following:

- Federal Endangered and Threatened Species that may be Affected by Projects in the Woodland, California USGS 7.5-minute Topographic Quadrangle (USFWS, 2012);
- California Natural Diversity Database (CNDDDB), Rarefind 4 computer program (CDFG, 2012);
- California Native Plant Society's Inventory of Rare and Endangered Plants (v8-01a) (CNPS, 2012).

A list of special-status species with potential to occur on or near the project site was compiled from these sources and from information collected during the field reconnaissance. **Appendix B** includes the special-status species lists for the project region.

Regional Ecology

The project area is located in the central portion of the southern Sacramento Valley. Historically, this region supported extensive marshes, riparian woodlands intermixed with oak woodland, vernal pools, and grasslands. Intensive agricultural and urban development has resulted in substantial changes and conversions of these habitats. Present terrestrial habitats are characterized by agricultural lands, annual grassland, and riparian woodland/riparian scrub. There are several major water features that support emergent wetland vegetation. Because most native habitats have been altered by changes in land use, native plant communities are typically limited to areas along water courses and drainages, within designated reserves, or on untilled pasture lands.

Regionally, the study area is located in the Sacramento Valley which is located in the Great Valley Section. Typical elevations within this ecological subsection range from 20-feet above sea level up to 200-feet. Climate is typically hot and sub-humid. Mean annual precipitation is approximately 15 to 18-inches and mean annual temperature ranges from 59 to 60 degrees Fahrenheit. (Miles and Goudey, 1997)

Site Description

The project site is located in the City of Woodland (City) on Highway 113 North (N. East Street) immediately north of Interstate 5 (I-5). The project site is bounded by industrial uses to the south and east; and agriculture (tomatoes) to the north, west, and north east. The majority of the site is characterized as ruderal, occupied by weedy vegetation which was tall and thick in patches and sparse in other areas. During the time of the reconnaissance-level survey in May 2012, the majority of the interior of the project site was highly disturbed and appeared to be disked on a routine basis. Some planted trees are present within the interior such as redwood (*Sequoia sempervirens*), Western sycamore (*Platanus racemosa*), and Bradford pear. There are large trees present such as valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), and Goodding's black willow (*Salix gooddingii*) along the perimeter of the project site.

Plant Communities and Wildlife Habitats

Biological communities are assemblages of plant species that commonly occur together in the same area. Wildlife habitats generally correspond to plant communities. The biological communities described in this section generally follow the classification systems provided in the California Department of Fish and Game's (DFG) *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer, 1988), which is integrated with the California Wildlife Habitat Relationships (CWHR) System. Wildlife habitats generally correspond to plant communities. Plant communities are assemblages of plant species that occur together in the same area and are repeated across landscapes. Both species composition and relative abundance define them. Plant communities within the study area were identified using field reconnaissance and aerial photography. The CWHR habitat classification scheme has been developed to support the CWHR System, a wildlife information system and predictive model for California's regularly occurring birds, mammals, reptiles and

amphibians. The plant communities described below generally correlate with wildlife habitat types and are those found within the project site.

Disturbed / Ruderal

Disturbed/ruderal habitats are subjected to ongoing or past disturbances (e.g., vehicle activities, mowing). Disturbed/ruderal is the only habitat present within the project site and it supports a diverse weedy flora, primarily composed of non-native invasive species. Vegetation observed during the May 2012 site visit includes weedy grasses such as wild oats (*Avena* sp.), ryegrass (*Lolium multiflorum*), blessed milkthistle (*Silybum marianum*), yellow starthistle (*Centaurea solstitialis*), soft brome (*Bromus hordeaceus*), and ripgut brome (*B. diandrus*). The site is maintained by the City of Woodland and is periodically disked during the growing season to reduce fire danger. The site was not occupied by wetlands, ditches, or other watercourses.

Regulatory Setting

Federal

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (FESA) (16 United States Code [USC] 153 et seq.), the Migratory Bird Treaty Act (16 USC 703–711), and the Bald Eagle Protection Act (16 USC 668), among other programs discussed below.

Federal Endangered Species Act – Under the Federal Endangered Species Act (FESA) the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC 1533[c]). Two federal agencies oversee FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, and the National Marine Fisheries Service (NMFS) has jurisdiction over anadromous and marine fish as well as mammals. Section 7 of FESA mandates that all federal agencies consult with the USFWS and NMFS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. FESA prohibits the “take”¹ of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

Section 10 of FESA requires the issuance of an incidental take permit before any public or private action may be taken that could harm, harass, injure, kill, capture, collect, or otherwise hurt any individual of an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan that provides specific measures to offset project impacts on endangered or threatened species.

The USFWS also publishes a list of candidate species. Species on this list receive “special attention” from federal agencies during environmental review, although they are not protected otherwise under the FESA. The candidate species are those for which the USFWS has sufficient biological information to support a proposal to list as endangered or threatened. Project impacts on such species would be considered significant in this Initial Study. Species of Concern is an

¹ “Take” is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

informal term, not defined in the federal Endangered Species Act. The Sacramento Office of the United States Fish and Wildlife Service no longer maintains a Federal Species of Concern list.

Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed threatened or endangered species could be present in the project area and whether the project action would have a potentially significant impact on such species. In addition, the agency is required to determine whether the project action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]).

Similarly, the permitting responsibilities of the USACE include consultation with the USFWS and NMFS when federally listed species (i.e., listed under the FESA) are at risk. At both the state and federal levels, the process requires that a Biological Assessment be prepared to determine the effects on listed species. Under both USFWS and California Department of Fish and Game (CDFG) policy, species of concern are not subject to the same consultation requirements as listed endangered, rare, or threatened species, but the agencies encourage informal consultation for species of concern that may become officially listed before completion of the CEQA process.

Migratory Bird Treaty Act – The Migratory Bird Treaty Act (16 USC 703, Supp. I, 1989) prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs, and nests, except in accordance with regulations prescribed by the Secretary of the Interior.

State

California Department of Fish and Game

CDFG administers a number of laws and programs, discussed below, designed to protect fish and wildlife resources.

California Endangered Species Act – The California Endangered Species Act of 1984 (CESA) – Fish and Game Code Section 2050 et seq – regulates the listing and “take” of endangered and threatened species. A “take” of such a species may be permitted by CDFG through issuance of permits pursuant to Fish and Game Code section 2081, except for designed “fully protected” species (see subsection below).

Fully Protected Species – Prior to enactment of CESA, the designation of “Fully Protected” was used by CDFG to identify species that had been given special protection by the California Legislature by a series of statutes in the California Fish and Game Code. (See §§ 3503.5, 3505, 3511, 3513, 4700, 4800, 5050, 5515). Many fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations; however, the original statutes have not been repealed, and the legal protection they give the species identified within them remains in place. Fully Protected species may not be taken or possessed at any time; and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Because endangered or threatened species can be “taken” for development purposes with the issuance of a

permit by CDFG, “fully protected species” actually enjoy a greater level of legal protection than “listed” species.

Protection of Nesting Birds – Section 3503.5 of the California Fish and Game Code states that it is “unlawful to take, possess, or destroy the nests or eggs of any such bird of prey (i.e., species in the orders Falconiformes and Strigiformes) except otherwise provided by this code or any other regulation adopted hereto.” Active nests of all other birds (except English sparrow (*Passer domesticus*) and European starling (*Sturnus vulgaris*)) are similarly protected under Section 3503 of the California Fish and Game Code, as well as birds designated in the International Migratory Bird Treaty Action under Section 3513 of the California Fish and Game Code. Disturbance that causes nest abandonment and/or loss of reproductive failure is considered a take by the CDFG. This statute does not provide for the issuance of an incidental take permit.

Species of Special Concern – CDFG also designates California Species of Special Concern (CSC) which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species or fully protected species but may be added to official lists in the future. The SSC list is intended by CDFG as a management tool for consideration in future land use decisions. Under CDFG policy, CSC are not subject to the same consultation requirements as listed endangered, rare, or threatened species, but the agency encourages informal consultation for Species of Special Concern that may become officially listed before completion of the CEQA process.

CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a “candidate species” that has not yet been listed by either the USFWS or CDFG. Thus, CEQA provides an agency with the ability to protect a species from a project’s potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted. Examples of species that may be considered under CEQA Section 15380 include some vascular plants.

Local

City of Woodland General Plan

The 2002 City of Woodland General Plan (City of Woodland, 2002) includes conservation and enhancement goals and policies that strive to balance the need for growth with the need for protection of the City’s environmental resources, which contribute to the City’s economy and are important elements of the quality of life of City’s residents. These resources include water resources, fish and wildlife habitat, vegetation, open space, and air quality. The following conservation policies taken from the General Plan are designed to protect, restore, and enhance

habitats that support fish and wildlife and plant species so as to maintain populations at viable levels. The following goals and policies are relevant to the proposed project:

Goal 7.B: To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policy 7.B.1: The City shall participate in the countywide Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and A Joint Powers Agency to mitigate the impacts of growth projected under the General Plan on wildlife habitats in the Woodland Area.

Policy 7.B.2: Until the countywide Habitat Conservation Plan/Natural Community Conservation Plan is adopted, prior to approval of discretionary development permits involving parcels within a significant ecological resource area, the City shall require, as part of the environmental review process, a biotic resources evaluation of the site by a wildlife biologist. The evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of federally- or state-listed rare, threatened, or endangered species of plants or animals. Such evaluation will consider the potential for significant impact on these resources, and will identify feasible measures to mitigate such impacts or indicate why mitigation is not feasible. In approving any such discretionary development permit, the City shall determine the feasibility of the identified mitigation measures.

Significant ecological resource areas shall, at a minimum, include the following:

- a. Any habitat for federally- or state-listed rare, threatened or endangered animals or plants.
- b. Large areas of non-fragmented natural habitat.
- c. Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.

Goal 7.C: To preserve and protect the valuable vegetation resources of the Woodland area.

Policy 7.C.2: The City shall encourage landowners and developers to preserve natural vegetation in visually-sensitive areas and along important transportation corridors.

Policy 7.C.3: The City shall require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of permits or for project mitigation,

Policy 7.C.9: The City shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.

City of Woodland Tree Ordinance

The City of Woodland Municipal Code (City of Woodland, 2008) includes a section on trees. Chapter 20A governs the planting, removal, and preservation of street trees, heritage trees, specimen trees, and landmark trees on public property and private property within the city. The following Sections are applicable to the proposed project:

Section 20A-1-90. Development Projects - Tree Plan.

An application for a development project shall be accompanied by a tree plan containing the following information:

- 1) Contour map showing the location, size, species and condition of all existing trees which are located upon the property proposed for development;
- 2) Identification of those trees which the applicant proposes to preserve and those which are proposed to be removed and the reason for such removal;
- 3) A program for the preservation of street trees, heritage, specimen, landmark trees and trees with aesthetic value (trees with a nine-inch diameter or larger, measured fifty-four inches above the ground, in healthy condition) during and after completion of the development project, as required in the City standard specifications, engineering design standards, Section 8, grading and erosion control;
- 4) A program for the replacement of any trees proposed to be removed, as required by Section 20A-1-100
- 5) Any change in the trees to be saved and/or removed as designated on the approved development plan shall only be permitted upon the written approval of the director. (Ord. No. 1230, §4 (part); Ord. No. 1300 §4 (part).)

Section 20A-1-100. Tree Replacement Program.

A person owning or controlling a development project shall be required to replace street trees other than heritage, specimen or landmark trees, approved for removal as part of the approval of the project in accordance with subsection (1). Each heritage, specimen and/or landmark tree approved for removal shall be replaced in accordance with subsection (2).

- 1) For each six inches or fraction thereof of the diameter of a tree which was approved for removal, two trees of an approved species, each of a minimum fifteen-gallon container size shall be planted on the project site. However, an increased number of smaller size trees may be planted if approved by the director, or a fewer number of such trees of a larger size if approved by the director.
- 2) For each six inches or fraction thereof of the diameter of a tree which was approved for removal, four trees of an approved species, each of a minimum fifteen-gallon container size, shall be planted on the project site. However, an increased number of smaller size trees may be planted if approved by the director, or a fewer number of such trees of a larger size if approved by the director.
- 3) If the development site is inadequate in size to accommodate the replacement trees, the trees shall be planted on public property with the approval of the director. Upon the request of the developer and the approval of the director, the city may accept an in-lieu

payment of the current retail price per fifteen-gallon replacement tree on condition that all such payments shall be used for tree-related educational projects and/or planting programs of the city.

- 4) All trees planted under the provisions of this section shall be guaranteed for a period of one year from the date of final acceptance of the development project by the city. Any tree which does not survive for one year from that date shall be replaced by the developer and the replacement tree shall be guaranteed for one year. (Ord. No. 1230, § 4 (part); Ord. No. 1300 § 4 (part).)

Yolo County Joint Powers Agency

The Yolo County Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) Joint Powers Agency (JPA) was formed in August 2002 to serve two purposes. The first was for the purpose of acquiring Swainson's hawk habitat conservation easements. The second purpose was to serve as the lead agency for the preparation of a county-wide NCCP/HCP, which is now known as the Yolo Natural Heritage Program. The JPA also manages the Swainson's Hawk Interim Mitigation Fee Program. This program utilizes mitigation fees to acquire conservation easements to protect Swainson's hawk habitat (Yolo County, 2012).

The Yolo County NCCP/HCP is currently undergoing development and review by participating parties, including CDFG, USFW, and Yolo County. The finalized Plan will describe biological conservation and other measures that local agencies will perform, and will include a series of studies and surveys outlined by the Report of Independent Science Advisors. This report stipulates that the NCCP/HCP should include, for Yolo County, the biological goals, geographic area, plan duration, species to be addressed, and actions to be permitted. Biological goals will include specific goals that address: (1) sustaining and restoring species and habitats that are necessary to maintain continued viability of biological communities impacted by human changes to the landscape, and (2) conserving, restoring, protecting, and enhancing natural communities.

Special-Status Species

Definitions of Special-Status Species

Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this study following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term "special-status" includes the following:

- Federally listed or proposed under the Federal Endangered Species Act (50 Code of Federal Regulations [CFR] 17.11-17.12). They are the only species that are specifically regulated by the U.S. Fish and Wildlife Service on tribal lands.
- Candidates for listing under the Federal Endangered Species Act (61 FR 7596-7613)

- State listed or proposed under the California Endangered Species Act (14 California Code of Regulations [CCR] 670.5)
- Species listed by the by CDFG as a species of special concern
- Fully protected animals, as defined by the State of California (CDFG Code Section 3511, 4700, and 5050)
- Species that meet the definition of threatened, endangered, or rare under the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15380)
- Plants listed as rare or endangered under the California Native Plant Protection Act (CDFG Code Section 1900 et seq.)

Potentially Affected Listed and Proposed Species

A list of special-status plant and animal species that have the potential to occur within the vicinity of the study area was compiled based on data in the California Natural Diversity Database (CNDDDB) (CDFG, 2012), CNPS Inventory of Rare and Endangered Plants (CNPS, 2012), and the USFWS List of Federal Endangered and Threatened Species that may be Affected by Projects in the Woodland Quad (USFWS, 2012). Conclusions regarding habitat suitability and species occurrence are based on a reconnaissance-level area assessment conducted by ESA biologists, as well as existing literature and databases described previously.

Appendix B lists special-status plants and animals with the potential to occur within the project site. The “Potential for Occurrence” category is defined as follows:

- Unlikely: The project site and/or immediate area do not support suitable habitat for a particular species. Project site is outside of the species known range.
- Low Potential: Project site and/or immediate area only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate project area.
- Medium Potential: The project site and/or immediate area provide suitable habitat for a particular species, and habitat for the species may be impacted.
- High Potential: The project site and/or immediate area provide ideal habitat conditions for a particular species and/or known populations occur in immediate area and within the potential area of impact.

Discussion

- a) The following sub-sections provide a discussion of potential effects to special-status plant and animal species that may result from implementation of the project.

Special-Status Plants

The project site does not provide habitat for any special-status plant species. No special-status plant species are likely to occur within the site itself due to the high degree of disturbance. The majority of the site is dominated by ruderal vegetation. Therefore, implementation of the project will have **no impact** on special-status plants.

Special-Status Wildlife

Potential nesting habitat for Swainson's hawk and other raptors occurs within and along the immediate perimeter of the project site and on adjacent parcels within 0.25-mile of the project site. There are more than 30 CNDDDB Swainson's hawk records within 5-miles of the project site (CDFG, 2012). Project construction may impact nesting raptors during the breeding season. This is a potentially significant effect. **Mitigation Measure BIO-1** would reduce potential impacts on nesting raptors to a **less-than-significant** level. Because the site is routinely disked and maintained during the growing season, the property is not considered appropriate foraging habitat for Swainson's hawk.

- b) There is no riparian habitat or other sensitive natural community located within or adjacent to the project site. Therefore, there is **no impact** on riparian habitat or other sensitive natural communities.
- c) There are no wetlands or waters of the U.S. within or adjacent to the Project site. Therefore, there is **no impact** on federally protected wetlands.
- d) The proposed project would not *substantially* interfere 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. The project site is not located within an established native resident or migratory wildlife corridor or wildlife nursery site. Therefore, there is **no impact** to migratory wildlife corridors or nursery sites.
- e) Per the engineering drawings, construction of the proposed project would involve the removal of several trees. This is a potentially significant effect. **Mitigation Measure BIO-2** and **BIO-3** would reduce potential impacts on trees to a **less-than-significant** level.
- f) The General Plan conservation and enhancement goals are consistent with the draft NCCP/HCP and will be carried out through implementation of **Mitigation Measure BIO-1**. As the NCCP/HCP is still under development and has not yet been finalized or adopted, the proposed project would not conflict with conservation or other policies outlined therein. Furthermore, the project would not conflict with other conservation-based policies contained in adopted local plans. Therefore, no conflict would occur and there would be **no impact**.

Mitigation Measures

Mitigation Measure BIO-1: Potential Swainson's hawk or other raptor nests shall be protected as follows:

- a) The applicant shall make every effort to conduct any tree and shrub removal activities that are required for project construction outside of the migratory bird and raptor breeding season (February 15 through August 31). In addition, all trees slated for removal during the nesting season shall be surveyed by a qualified biologist no more than 48-hours before removal to ensure that no nesting birds are occupying the tree.
- b) If construction-related activities are to occur prior to tree removal during the nesting bird season (February 15 through August 31), a qualified biologist shall conduct a preconstruction survey of all potential nesting habitats within 15 days prior to the start of activities (grubbing, dirt-moving, mobilization, or other construction-related activities) and within 500 feet of

construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be resurveyed. The results of these surveys shall be documented in a technical memorandum that shall be submitted to the California Department of Fish and Game (DFG) (if nesting birds are documented) and the City of Woodland. A qualified biologist is one that has been approved by DFG as having the appropriate education background and experience to conduct nesting bird surveys.

- c) If an active nest is found during the preconstruction survey, a no-work buffer of 500 feet will be established unless otherwise approved by the DFG. The qualified biologist will coordinate with DFG to determine the appropriate nest avoidance, monitoring, and protective measures appropriate for the species and site conditions. In addition to establishment of a no-work buffer, these measures may include daily or spot-check monitoring of the nesting activity as deemed appropriate by DFG.
- d) If the preconstruction survey indicates that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by birds or that are located more than 500 feet from active nests may be removed (500 feet is the distance regularly recommended by DFG to prevent impacts to active avian nests).

Mitigation Measure BIO-2: Loss of tree resources on the project site will be mitigated as follows:

- a) The City of Woodland (City) shall ensure that the project applicant will comply with the City of Woodland's Municipal Code, Chapter 20A. Prior to construction, the applicant shall have a Certified Arborist conduct a tree survey of the trees located within the project boundaries and submit a Tree Plan to the Community Development Department.
- b) Removed trees will be replaced at a ratio of 2:1. Replacement trees shall be planted on the project site. All trees planted shall be purchased from a locally adapted genetic stock obtained within 50 miles and 1,000 feet in elevation of a project site. If the site does not have adequate room for replanting trees, the City may require payment to a tree replacement fund. Replacement trees shall be guaranteed for a period of one year from the date of final acceptance of the development project by the City. Any tree which does not survive for one year from that date shall be replaced by the developer and the replacement tree shall be guaranteed for one year.

Mitigation Measure BIO-3: Tree resources on the project site will be protected as follows:

Sensitive tree resources adjacent to construction activities may require additional protection. Buffer zones should include a minimum one-foot-wide buffer zone outside the drip line. The locations of these resources would be clearly identified on the construction drawings and marked in the field. Fencing or other barriers would remain in place until all construction and restoration work that involves heavy equipment is complete. Construction vehicles, equipment, or materials would not be parked or stored within the fenced area. No signs, ropes, cables, or other items would be attached to the protected trees. Grading, filling, trenching, paving, irrigation, and landscaping within the drip lines of oak trees would be limited. Grading within the drip lines of oak trees would not be permitted unless specifically authorized by a Certified Arborist.

Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
5. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion

- a) CEQA Guidelines Section 15064.5 requires the lead agency (the City of Woodland) to consider the effects of a project on historical resources. A historical resource is defined as any building, structure, site, or object listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR), or determined by the lead agency (City) to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California. The project site is undeveloped; there are no buildings or structures on the site. Therefore, the proposed project would have **no impact** on historical resources under CEQA.
- b) CEQA requires the lead agency to consider the effects of a project on archaeological resources and to determine whether any identified archaeological resource is a historical resource. CEQA Guidelines Section 15064.5 also requires consideration of potential project impacts on “unique” archaeological resources that do not qualify as historical resources. Public Resources Code (PRC) Section 21083.2 defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria. The resource:
1. contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information;
 2. has a special and particular quality, such as being the oldest of its type or the best available example of its type; and/or
 3. is directly associated with a scientifically recognized important prehistoric or historic event or person.

PRC Section 15064.5(c) (4) provides that, if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of a project on the resource are not considered significant.

Archival review completed at the Northwest Information Center (NWIC) of the California Historic Resources Information System documented all previous cultural resources investigations and cultural resources located within the ¼ mile records search study area. The records search indicated that one previous cultural resources investigation occurred within the records search study area by Far Western Anthropological Group in 2008 (Survey Number 35042) along Hwy 113. This survey occurred within 60 feet of the project area and yielded negative results within the record search study area. While there are no previously recorded cultural resources in the study area, the nearest historic-period resource is an unrecorded segment of the Southern Pacific Railroad (P-57-000400) just outside the Project area to the east, and a grove of historic oak trees (P-57-000132) is ¼ mile to the north of the Project area. The nearest recorded prehistoric archaeological resources are more than three miles away to the north-northeast. These resources are two rises containing burnt material (YOL-40 and YOL-41) near Grays Bend, an abandoned segment of the Sacramento River.

ESA archaeologist, Brian S. Marks, Ph.D., performed a cultural resources survey of the APE on May 9, 2012. Dr. Marks did not observe any cultural material more than 50 years old. While no evidence exists to indicate the presence of archaeological resources within the project area, the project area is located in an area that may have been attractive to prehistoric inhabitants (see **Appendix C**). The accidental discovery of archaeological materials during ground-disturbing activities cannot be entirely discounted. In the unlikely event that archaeological materials are unearthed, with implementation **Mitigation Measure CUL-1**, project impacts to archaeological resources would be **less than significant**.

- c) Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. The fossil yielding potential of a particular area is highly dependent on the geologic age and origin of the underlying rocks. In general, older sedimentary rocks (more than 10,000 years old) are considered most likely to yield vertebrate fossils of scientific interest.

The project site is located in Holocene-age (10,000 years Before Present [BP] to Present Day) fan alluvial deposits. No known paleontological resources or unique geologic features exist within the project area. Therefore, the proposed project is not likely to destroy, either directly or indirectly, a unique paleontological resource or site, or geological feature. Due to the nature of the proposed project, any proposed earth moving or excavation will occur in previous backfills or foundation soils. The project area therefore has a very low potential for the unanticipated discovery of fossils. Therefore, the proposed project would result in a **less than significant** impact on paleontological resources or unique geologic features.

- d) Results of the archival review discussed above indicate that the project area has a low potential to contain buried cultural materials including human remains. However, the possibility of uncovering human remains cannot be entirely discounted. In the unlikely event that human remains are uncovered during ground-disturbing activity, with implementation **Mitigation Measure CUL-2**, project impacts to human remains would be **less than significant**.

Mitigation Measures

Mitigation Measure CUL-1: If cultural resources are encountered, all activity in the vicinity of the find shall cease until it can be evaluated by a qualified archaeologist and a Native American representative. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the archaeologist and Native American representative determine that the resources may be significant, they will notify the City of Woodland. An appropriate treatment plan for the resources should be developed. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources.

In considering any suggested mitigation proposed by the archaeologist and Native American representative, the City will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the project area while mitigation for cultural resources is being carried out.

Mitigation Measure CUL-2: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent, who will help determine what course of action should be taken in dealing with the remains.

References

ESA, 2012. Velocity Island Project, Woodland, Yolo County, California: Phase I Cultural Resources Study. Prepared for the City of Woodland, May 2012.

Geology, Soils, and Seismicity

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

Discussion

- a) The proposed project area is relatively flat and is located in an area of low surface disturbance. According to the Department of Conservation, Division of Mines and Geology Special Publication 42, the proposed project site is not located within a delineated Alquist-Priolo Earthquake Fault Zone.

The seismic hazard most likely to impact the project site is ground shaking due to a large earthquake on one of the major active regional faults. Liquefaction is a process whereby water is unconsolidated sand and other granular materials is subjected to pressure usually caused by ground motion. Since fluids are not compressible and granular materials are, especially when shaken, the water seeks release. As water moves out of materials such as sand it causes the granular material to flow and lose strength. Such materials, in effect, behave as quicksand. The ground literally flows out from under the building. Earthquake shaking is a major cause of liquefaction and has resulted in severe damage areas of California. As noted above, the project site's topography is relatively flat and is not located within a delineated Alquist-Priolo Earthquake Fault Zone. Additionally, the

- probability of soil liquefaction actually taking place on the project site is considered to be a low to moderate hazard. Additionally, the project would comply with City of Woodland building regulations and the International Building Code; therefore, this impact would be **less than significant**.
- b) The proposed land use would include structures and landscaping that would minimize bare soil subject to erosion. Compliance with all applicable best management practices related to soil erosion outlined in the City of Woodland Code would minimize construction impacts relating to top soil erosion. This impact would be **less than significant**.
 - c) As discussed above, the proposed project site's topography is relatively flat and is not located within a delineated Alquist-Priolo Earthquake Fault Zone. Additionally, the probability of soil liquefaction actually taking place on the project site is considered to be a low to moderate hazard. With adherence to all applicable codes and regulations, including the International Building Code, geologic hazard impacts associated with on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be minimized. The impact would be **less than significant**.
 - d) Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when dry) or swelling (when wet). Expansive soils can also consist of silty to sandy clay. The extent of shrinking and swelling is influenced by the environment, including the extent of wet and dry cycles, and by the amount of clay in the soil. This physical change in the soils can react unfavorably with building foundations, concrete walkways, swimming pools, roadways, and masonry walls. In most developed areas, the existing layer of clay has been blended into more granular soils as a part of general site excavation, which helps to reduce the soil's expansiveness.

According to the NRCS Soil Survey, a majority of the project site is Yolo silt loam (Ya). The Yolo series consists of well-drained silt loams and silty clay loams on alluvial fans. Surface runoff is very slow and the soil is moderately permeable. This soil has a moderate shrink-swell potential, which is indicative of expansive soil conditions. A small portion of the project site consists of Sycamore silty clay loam, drained (St). The Sycamore series consists of somewhat poorly drained silty clay loams on alluvial fans. Surface runoff is very slow and permeability is moderately slow. This soil also has a moderate shrink-swell potential.

Although expansive soil conditions are present on the project site, compliance with all City building standards and practices, as well as application of the existing regulations identified in the International Building Code would minimize the risk associated with development of the proposed project, therefore this impact would be **less than significant**.

- e) The proposed project will connect to existing sewer systems; septic tanks would not be used as part of the proposed project, therefore there would be **no impact**.

References

California Department of Conservation, 2007. Division of Mines and Geology, Fault-Rupture Hazard Zones in California, Special Publication 42 Interim Revision 2007.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/> accessed May 15, 2012.

Greenhouse Gas Emissions

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
7. GREENHOUSE GAS EMISSIONS — Would 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?	☐	☐	☒	☐

Discussion

- a-b) Greenhouse gas (GHG) impacts are considered to be cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA, 2008). Since YSAQMD has not established a quantitative significance threshold for GHG impacts, for construction and operation, projects which would generate 900 metric tons per year (MT/yr) or less of CO₂e emissions are considered to have a less-than-significant impact. 900 MT/yr is used as it is considered to be a *de minimus* level which would capture approximately 90% of all GHG emissions (CAPCOA, 2008). If the project exceeds this threshold, a 29 percent reduction versus business-as-usual would be assessed pursuant to AB 32. This methodology is consistent with approaches described by CAPCOA, thresholds used by other air districts (such as SJVAPCD), and previous City of Woodland CEQA documents.

The project-related change in GHG emissions was calculated using the CalEEMod emissions model. CalEEMod is a land use emissions computer model designed to provide a platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation of a variety of land use projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

GHGs associated with construction would be generated by construction equipment, haul trucks, and worker vehicles. As shown in Appendix B, maximum annual GHGs of 232 metric tons of CO₂ would be emitted during the year 2012. This amount is less than the 900 MT/yr *de minimis* threshold value described above. Therefore, the construction-related impacts of the project on global climate change are considered less-than significant.

In regards to long-term operations, GHGs from on-road vehicles, area sources, energy, waste, and water/wastewater conveyance would be the primary sources of GHGs associated with project operations. Emissions are summarized below in **Table 3**.

TABLE 3
UNMITIGATED GHGS FROM OPERATIONS ^{a, b}

Project Source	CO ₂ e (MT/yr)
Area	0
Energy ^c	32
Mobile	129
Waste	1
Water	12
Total GHGs	174
Screening Threshold of Significance	900
Significant (Yes or No)?	No

a. Project operational emissions estimates were made CalEEMod, as well as a manual calculation of grid-electricity and GHGs associated with the motor to operate the ziplines. See Appendix B for more information.

b. Values in **bold** are in excess of the applicable significance threshold. NA = Not Available.

c. The "Energy" source category includes facility (from CalEEMod) and motor energy requirements.

As shown in Table 3, GHG emissions generated by these sources would equate to 174 metric tons of CO₂ per year. This amount is less than the 900 MT/yr *de minimis* threshold value described above. Therefore, the construction-related impacts of the project on global climate change would be **less than significant**.

The City of Woodland has not established a GHG reduction plan. The analysis described above indicates the project would not interfere with the State's implementation of AB 32 or the AB 32 Scoping Plan. The project would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This impact would be **less than significant**.

References

California Air Pollution Control Officers Association (CAPCOA), 2008. *CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*.

Hazards and Hazardous Materials

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

Discussion

- a) Construction and operation of the proposed project would potentially require the use of various types and quantities of hazardous materials (i.e. gasoline, solvents, oils, etc.). Furthermore, construction of the project could result in the exposure of workers or residents to hazardous wastes or materials, posing potential threats to their health, including the excavation of a previously unknown contaminated site. Implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would reduce potential impacts to less than significant levels, therefore this impact would be **less than significant**.
- b) During construction of the proposed project, it is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, etc. would be brought onto the site. In addition, proposed project operations may include the limited use of fuels and other hazardous materials such as those typically

- associated with equipment use and servicing. Although, these materials would be stored, handled, and transported per federal, state, and local regulatory requirements, as with any liquid or solid, during handling and transfer from one container to another, the potential for an accidental release exists. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose both a hazard to workers and residents, as well as the environment. Implementation of **Mitigation Measure HAZ-2** would reduce potential impacts to less than significant levels, therefore this impact would be **less than significant**.
- c) There are no existing or proposed schools within one-quarter mile of the project site. Furthermore, any hazardous materials used during demolition or construction would be stored, handled, and transported per federal, state and local regulatory requirements. Furthermore, implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would reduce potential impacts to less than significant levels; therefore, this impact would be **less than significant**.
- d) A Department of Toxic Substances Control (DTSC) Envirostor database records search was conducted for the entire project site. The database search concluded that the proposed project site and adjacent sites were not identified as being contaminated or as being a clean-up site, and, thus, did not identify any of the environmental conditions that may result in a significant hazard to the public. There are no identified hazardous environmental conditions on the project site. However, the project has not been the subject of a Phase 1 Environmental Site Assessment, the preparation of such an assessment is required prior to the construction of the project. With implementation of **Mitigation Measure HAZ-3**, this impact would be **less than significant**.
- e) The Watts Woodland Airport is located 5 ½ miles south-southwest, on County Road 94. The Sacramento International Airport is located at 6900 Airport Blvd., approximately 8 miles east of the project site. The project site is not located within an airport land use plan map, nor is it within two miles of a public use airport (SACOG, 2003). The proposed project would not result in a safety hazard for people residing or working in the project area; therefore, this impact would be **less than significant**.
- f) The proposed project site is not located within the vicinity of a private airstrip. The nearest private airstrip, Medlock Field, is located 5 ½ miles to the south of the project site. Therefore, there would be **no impact**.
- g) The proposed project will not interfere with an emergency response plan or emergency evacuation plan. Prior to approval, the applicant will be required to demonstrate compliance with all emergency access requirements and other emergency standards in place in the City of Woodland. This impact would be **less than significant**.
- h) As previously discussed, the project site is located on a parcel currently used as a detention basin immediately adjacent to agricultural uses, I-5 and Hwy 113 with developed industrial and commercial in the area and is not within or adjacent to a wildlands area, consequently,

the proposed project will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires; consequently, there would be **no impact**.

Mitigation Measures

Mitigation Measure HAZ-1: If soil contaminated by potentially hazardous materials is exposed during construction, the local responsible agency shall be notified. A work plan to characterize and possibly remove contaminated soil may be required by the local responsible agency or other regulatory agency.

Mitigation Measure HAZ-2: The applicant shall ensure all contractors and employees immediately control the source of any leak and contain any spill using appropriate spill containment and countermeasures. If required by any regulatory agency, contaminated media shall be collected and disposed of at an offsite facility approved to accept such media. In addition, all precautions required by the RWQCB for the NPDES construction activity storm water permits would be taken to ensure that no hazardous materials enter any nearby waterways.

Mitigation Measure HAZ-3: A Phase I Environmental Assessment must be completed by a qualified professional for the project before any ground disturbing activity begins.

References

Department of Toxic Substances Control (DTSC), 2012. Envirostor Database Search available at: <http://www.envirostor.dtsc.ca.gov/public/>; accessed May 16, 2012.

SACOG, 2003. Sacramento Area Council of Governments Airport Land Use Commission, Sacramento International Airport Comprehensive Land Use Plan; September 2003.

Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
9. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☒	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
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 within a 100-year flood hazard area structures that would 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?	☐	☐	☒	☐

Environmental Setting

The project site is located to the north of the City of Woodland, and currently serves as a hydrologic detention basin used by the City. Cache Creek is the nearest water body to the project site, and flows west to east approximately 1.5 miles to the north of the project site. Cache Creek eventually discharges into the Cache Creek Settling Basin, which is located northeast of the City, and approximately 2.5 miles east of the project site. During high flows, Cache Creek discharges into the Yolo Bypass, which eventually empties into the Sacramento-San Joaquin Delta, the San Francisco Bay, and the Pacific Ocean. Although Cache Creek is the nearest water body to the project site, drainage from the project site does not drain into Cache Creek. Under existing

conditions, the site is graded as a basin, and most stormwater occurring on site is retained on site. In the event of release from the project site, stormwater is carried via agricultural and City-maintained drainages, eventually discharging into the Yolo Bypass via the City's stormwater pump station.

The Federal Emergency Management Agency (FEMA) is responsible for delineating flood zones within the project area. FEMA's Flood Insurance Rate Maps (FIRMs) show the extent of anticipated 100-year flooding within the Project area, where 100-year flooding is defined as that occurring with a 1% annual chance of recurrence. The project site is located entirely within a 100-year flood zone. Flooding in this area is anticipated to occur as a result of flooding along Cache Creek.

With respect to water quality, the State Water Resources Control Board's Clean Water Act Section 303(d) List of Impaired Water Bodies provides a summary of pertinent water quality issues along waterways in the vicinity of the project. Cache Creek is included on the 303(d) list for the following constituents: boron (unknown source), mercury (resource extraction), and unknown toxicity (unknown source) (SWRCB, 2012).

Regulatory Setting

Federal Executive Order 11988

Under Executive Order 11988, FEMA is responsible for managing floodplain areas, which are defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a 1 percent or greater chance of flooding in any given year (the 100-year floodplain). FEMA requires that local governments covered by federal flood insurance (including Contra Costa County) pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain.

National Pollutant Discharge Elimination System Permit Program

The NPDES permit program was established by the Federal Clean Water Act to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify the following:

- Effluent and receiving-water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge;
- Prohibitions on discharges not specifically allowed under the permit; and
- Provisions that describe required actions by the discharger, including industrial pre-treatment, pollution prevention, self-monitoring, and other activities.
- In November 1990, the USEPA published regulations establishing NPDES permit requirements for municipal and industrial stormwater discharges. Phase 1 of the permitting program applied to municipal discharges of stormwater in urban areas where the population exceeded 100,000 persons. Phase 1 also applied to stormwater discharges from a large variety of industrial activities, including general construction activity, if the project would disturb more than 5 acres. Phase 2 of the NPDES stormwater permit regulations, which became effective in March 2003, required that NPDES permits be issued for construction

activity for projects that disturb between 1 and 5 acres. The USEPA has delegated its NPDES permitting function relevant to the Project area to the SWRCB, and the RWQCBs. Within this framework, the SWRCB provides coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity, as described below.

NPDES General Permit for Discharges of Stormwater Associated with Construction Activities

Construction activities disturbing 1-acre or more of land are subject to the permitting requirements of the NPDES General Construction Activity Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction NPDES Permit). A project applicant must submit a Notice of Intent to the CVRWQCB to be covered by the General Construction Permit prior to the beginning of construction.

On September 2, 2009, the SWRCB adopted a new General Construction Permit for Discharges of Storm Water Associated with Construction Activities, effective on July 1, 2010, replacing the existing permit. The new permit requires a risk-based permitting approach, dependent upon the likely level of risk imparted by a project. The new permit also contains several additional compliance items, including (1) additional mandatory Best Management Practices (BMPs) to reduce erosion and sedimentation, which may include incorporation of vegetated swales, setbacks and buffers, rooftop and impervious surface disconnection, bioretention cells, rain gardens, rain cisterns, implementation of pollution/sediment/spill control plans, training, and other structural and non-structural actions; (2) sampling and monitoring for non-visible pollutants; (3) effluent monitoring and annual compliance reports; (4) development and adherence to a Rain Event Action Plan; (5) requirements for permanent BMPs to match predevelopment hydrology in the post-construction period (for projects in areas with no approved Hydrograph Modification Management Plan); (6) numeric action levels and effluent limits for pH and turbidity; (7) monitoring of soil characteristics on site; and (8) mandatory training under a specific curriculum. Under the revised permit, BMPs are incorporated into the action and monitoring requirements for each Project area, including implementation of a Stormwater Pollution Prevention Plan (SWPPP). Under the updated permit, additional and more stringent monitoring, reporting, and training requirements for management of stormwater pollutants are implemented.

Discussion

- a,f) Construction of the Project would include the use of heavy machinery, including but not limited to transport trucks, bulldozers, graders, backhoes, earth movers, and other construction equipment. Use of these and similar types of heavy machinery would cause disturbance to surface sediments, loosen soils, remove existing vegetation, and potentially result in increased erosion on site. During large storm events, eroded soils could become entrained in stormwater, and could cause sedimentation on site or downstream, including along Project area waterways. During storm events, the use of heavy equipment during construction could also result in the accidental release of fuels, oils, lubricants, antifreeze, and other construction-related fluids into the environment.

These pollutants could become entrained in stormwater flows, and result in degradation of receiving water quality along downstream areas, potentially including Cache Creek.

These potential impacts could occur as a result of the installation of the proposed facilities. These potential increases in water quality pollution could result in an increase in pollutant levels in receiving waters, such that applicable water quality standards could be exceeded. However, the Project would be required to acquire coverage under the General Construction NPDES Permit. The conditions of that permit would include implementation of a SWPPP, as well as various additional measures intended to minimize potential construction period water quality degradation to the maximum extent practicable. Therefore, with adherence to permitting conditions of the General Construction NPDES Permit, construction related water quality degradation would be minimized, and this impact would be **less than significant**.

- b) Implementation of the proposed project would involve the use of groundwater both during construction and operation. Construction related groundwater use would be provided by an existing on-site well, and would be used in support of dust suppression and other construction related activities on site. Use of groundwater in support of project construction would be limited in extent and in time, and therefore is not anticipated to result in a long term reduction groundwater levels, or an associated impact to groundwater resources.

During project operation, groundwater would be utilized in order to provide water for the proposed onsite lake. Potable water would be provided by the City of Woodland water system. As discussed in the project description, water needed in support of project operation would be pumped from the existing on-site well for use on site. This well would be repaired from its existing condition, in order to support project-related pumping. This volume of water could result in some minor degree of reduction in groundwater levels, especially in the immediate vicinity of the existing well. However, the anticipated volume of groundwater pumping is not anticipated to be sufficient to result in drawdown of the underlying aquifer, such that groundwater levels would be regionally affected, or such that other municipal or private water supply wells within the vicinity of the project would be noticeably affected. Additionally, the proposed project does not meet state requirements for completion of a separate SB 610 water supply assessment (WSA), pursuant to California Water Code §10190. Therefore, this impact would be **less than significant**.

- c,d) During Project operations, changes in grading and installed facilities could result in changes in localized storm runoff, and the conveyance of that runoff into stormwater drainage facilities. Additionally, project construction would result in the installation of up to approximately 1 acre of new impervious surfaces. New impervious surfaces would be primarily associated with the proposed parking lot, but also with proposed shelters/buildings and paths on site that include non-pervious surfaces. In addition to these facilities, the project would include installation of a liner in the proposed pond area. Depending upon the final construction materials utilized, this liner could be considered impervious with respect to stormwater flows.

Due to the nature of the project, which is located in an existing topographic depression, stormwater from the site is anticipated to drain primarily internally into the project area.

However, during large storm events, discharge from the area could potentially occur. Therefore, unless properly designed, the proposed facilities that would be installed or modified under the Project could result in unintended changes in discharge or runoff patterns, such that increases in flows, erosion, or sedimentation could occur on site or downstream. Potential increases in flows, erosion, or sedimentation could have deleterious effects on site and downstream. Therefore, with implementation of **Mitigation Measure HYD-1**, the impact would be **less than significant**.

- e) As discussed previously, project implementation would result in the creation of about one acre of new impervious surface area. Drainage from the proposed parking lot and other proposed impervious surfaces on site are anticipated to be maintained primarily on site. In the event that discharges from the site do occur, improper handling of discharges, such as discharges to under-sized infrastructure, could result in potential downstream drainage related impacts. Therefore, this impact is considered potentially significant without mitigation. With implementation of **Mitigation Measure HYD-1**, the impact would be **less than significant**.
- g) The Project would not involve the construction of any housing. Therefore, **no impact** would occur.
- h) The Federal Emergency Management Agency (FEMA) is responsible for evaluating 100-year flood potential. The project is located within a 100-year flood zone. Project implementation would result in the construction of limited structures on site. However, the floodplain in the vicinity of the project site is large, and extends for several miles to the east and west. Therefore, while the proposed structures could result in some degree of interference with flood flows, the extent of that interference would be minimal, and is not anticipated to noticeably affect flood flows or flood heights in the vicinity of the proposed project, or within or adjacent to the City of Woodland or other nearby areas. Therefore, this impact would be **less than significant**.
- i) The project site is located in an area that is protected from flooding by existing levees. However, the Project would not involve construction along or other disturbance to an existing or proposed flood control levee, dam, or other flood control structure. Therefore, project implementation is not expected to affect the structural integrity or effectiveness of any dams or levees, such that a potential increase in flooding on site could occur. The project would involve the construction of small, non-residential structures. These structures must comply with the City's floodplain ordinance. Therefore, this impact would be **less than significant**.
- j) The Project site is located at an elevation of approximately 55 feet above sea level, and is located over 80 miles from the Pacific Ocean. Therefore, a tsunami is not anticipated to occur on site. Mudflows typically occur when erodible surficial sediments become entrained in major stormwater or other water flows. Mudflows typically occur in areas with high to moderate topographical relief having erodible soils, especially in areas where vegetation

has been or could become denuded. Mudflow can also occur as a result of volcanic activity. These conditions do not occur on site, and mudflows are not anticipated to occur on site.

Seiche refers to a standing wave that can occur within an enclosed waterbody. Within small lakes as proposed in support of the Project, seiche may occur as a result of seismic activity. Seiche may also be induced in enclosed harbors that are located on larger water bodies as a result of incoming waves or boat wakes. However, these conditions would not occur on site. In the event of seismic activity on site, minor seiche could conceivably occur. However, due to the relatively small surface area and relatively shallow depth of the proposed lake, generation of large waves is not anticipated. This impact would be **less than significant**.

Mitigation Measures

Mitigation Measure HYD-1: Prior to the initiation of Project construction, a comprehensive drainage plan shall be prepared by the Applicant, reviewed by the City engineer, and implemented for the installation of all proposed facilities that would require or result in grading or installation of new facilities on site. The drainage plan shall include measures to retain on site, infiltrate, or otherwise channel runoff away from areas of open soil and other features subject to erosion or flooding. As relevant, stormwater from the project site shall be channeled into receiving drainage ditches or canals that are sized appropriately to contain anticipated stormwater flows. Runoff waters shall be discharged in a manner to prevent downstream or offsite erosion, sedimentation, or flooding.

References

State Water Resources Control Board (SWRCB), 2012. 2010 Integrated Clean Water Act Section 303(d)/305(b) Report – Statewide. Available at:
http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml
Accessed July 5, 2012.

Land Use and Land Use Planning

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
10. LAND USE AND LAND USE PLANNING — Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion

- a) As described above, the project site is located on a parcel currently used as a detention basin immediately adjacent to agricultural uses, I-5 and Hwy 113 with developed industrial and commercial in the area. Although the project site is currently undeveloped, the project will be located in a developed non-residential area and will therefore not divide and established community. This impact would be **less than significant**.
- b) The *City of Woodland General Plan* Land Use Map designates the project site as Open Space (OS). The intention of this designation is to preserve and enhance open space lands to maintain the natural resources of the Woodland area. The City's zoning map also identifies the project site as Open Space (OS). The purpose of the OS zone is to preserve open space recreation areas, areas of historical and cultural value, and is devoted to the enjoyment of scenic beauty, conservation of natural resources and landscaped areas. Uses appropriate to the area are allowed in the OS zone with approval of a conditional use permit, site plan review and design review; therefore, this impact would be **less than significant**.
- c) As discussed under Biological Resources, the project site is not under the jurisdiction of a habitat conservation plan or natural community conservation plan (HCP/NCCP). The project is, however, subject to the Swainson's Hawk Interim Mitigation Fee Program. The proposed project would comply with this program, as described in Mitigation Measure BIO-2. Therefore, there would be **no impact**.

References

City of Woodland, 2002. General Plan Policy Document; December 17, 2002.

City of Woodland, 2003. Zoning Ordinance; adopted February 1, 1983; amended October 10, 2003.

Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
11. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion

- a,b) The project site has no significant mining resources or mining operations and no mineral resource zones have been identified; therefore there will be **no impact** to mineral resources.

References

City of Woodland, 2002. General Plan Policy Document; December 17, 2002.

Noise

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
12. NOISE — Would the project:				
a) Result in Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Result in Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) Result in A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) Result in A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☒
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

- a) The City of Woodland Municipal Code states that it is unlawful to make any loud, unnecessary, or unusual noise, which disturbs the peace within the city limits. The City includes the nighttime hours of 10:00 PM and 7:00 AM where no loud tools or noise creating blowers are to be used. The City also limits construction activities Monday through Saturday to 7:00 AM and 6:00 PM, and Sundays to 9:00 AM and 6:00 PM (unless a permit is granted). The City's General Plan states that new non-transportation noise sources shall not exceed 50 dBA hourly Leq or 70 dBA Lmax during the daytime hours of 7:00 AM and 10:00 PM or exceed 45 dBA hourly Leq or 65 dBA Lmax during the nighttime hours of 10:00 PM and 7:00 AM at the property line of lands designated for noise-sensitive uses.

Construction

Land uses surrounding the project site consist of various agricultural, commercial and industrial land uses. Existing agricultural operations are located immediately to the north and west. North East Street/Highway 113 is located immediately to the east with various businesses on the opposite side, including an Inn approximately 250 feet from the project boundary. Interstate 5 is located directly to the south with a large trucking operation on the other side. There are also several rural residences northwest of the project site, the closest of which is approximately 2,000 feet away.

The noise sensitive land uses in the vicinity of the project would be the residences to the northwest and the Inn to the east, which would be exposed to noise from the short-term construction of the proposed project. Noise from construction activities generally attenuates at a rate of 6 to 7.5 dBA per doubling distance. Based on the proposed project site layout and terrain, an attenuation of 7.5 dBA will be assumed. **Table 4** shows typical noise levels during different construction stages. **Table 5** shows typical noise levels produced by various types of construction equipment. Excavation noise levels are 89 dBA at 50 feet, which when attenuated to 2,000 feet, would expose the nearest residence to noise levels of up to 49 dBA Leq during the loudest of construction activities that would occur. The Inn would be exposed to noise levels of up to 72 dBA. With the existing traffic noise from I-5 and Highway 113 dominating the ambient noise environment, in conjunction with compliance with the City of Woodland nighttime and weekend construction limits, temporary construction noise would be **less than significant** with implementation of **Mitigation Measure NOI-1**.

TABLE 4
TYPICAL CONSTRUCTION NOISE LEVELS

Construction Phase	Noise Level ^a (dBA, Leq)
Ground clearing	84
Excavation	89
Foundations	78
Erection	85
Finishing	89

a Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

SOURCE: Bolt, Beranek, and Newman, 1971; Cunniff, 1977.

TABLE 5
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT

Construction Equipment	Noise Level ^a (dBA, Leq at 50 Feet)
Dump truck	88
Portable air compressor	81
Concrete mixer (truck)	85
Scraper	88
Jackhammer	88
Dozer	87
Paver	89
Generator	76
Backhoe	85

a Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

SOURCE: Bolt, Beranek, and Newman, 1971; Cunniff, 1977.

Operations

The project proposes 76 parking spaces, restrooms, operations building, and an observation deck. The project would operate from 8:00 a.m. to half-an-hour before dusk every day of the week. The recreational use is expected to generate up to 100 persons per day. Assuming an average of two passengers per vehicle and ten percent peak hour use, the project would generate up to 100 daily vehicle trips (50 inbound and 50 outbound), and approximately 10 peak-hour trips (5 inbound and 5 outbound) during both the a.m. and p.m. peak hours. In addition to traffic noise, the project would result in noise associated with the zipline operation and recreational user noise, such as cheering or shouting. These minimal sources of operational noise would result in an inaudible increase in noise due to existing traffic noise on the adjacent I-5 and Highway 113.

- b) Vibration and ground-borne noise issues tend to occur when physically forceful or ground-penetrating equipment is utilized, such as pile drivers or where blasting is necessary. No such equipment or activities are required during construction or operations of the proposed project. Thus, the proposed project would not generate significant groundborne vibration or groundborne noise impacts. Therefore, this impact would be **less than significant**.
- c) See the discussion regarding operation related noise for criterion “a” above. This would be a **less-than-significant** impact.
- d) As discussed in the “Construction” sub-section of criterion “a” above, the resulting impact would be **less than significant** with implementation of **Mitigation Measure NOI-1**.
- e) The project is not located within two miles of a public airport; therefore, the project would not expose people working in the area to excessive noise levels. **No impact** would occur.
- f) The project is not located within two miles of a private airstrip; therefore, the project would not expose people working in the area to excessive noise levels. **No impact** would occur.

Mitigation Measures

Mitigation Measure NOI-1: The project sponsor shall require construction contractors to implement the following mitigation measures:

- Consistent with the City of Woodland Municipal Code, all noise generating construction activities shall be limited to Monday through Saturday from 7:00 AM to 6:00 PM, and Sundays from 9:00 AM to 6:00 PM.
- All construction vehicles and equipment, fixed and mobile, shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- Construction staging areas shall be located as far as practicable from dwellings and the Inn so as to cause minimal disruption to these activities.
- Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.
- Prohibit unnecessary idling of internal combustion engines.

- Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a day and evening contact number for the City in the event of problems.

References

Bolt, Beranek, and Newman, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, 1971.

City of Woodland, Municipal Code, Current through Ordinance 1500, adopted October 21, 2008.

Cunniff, Patrick. 1977. *Environmental Noise Pollution*.

Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
13. POPULATION AND HOUSING — Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

- a,b,c) The proposed project will not result in the construction of new homes or the displacement of existing homes. As the project is a recreational facility that will draw on the local labor pool for employees, it will thus not induce substantial growth within the area; therefore there is **no impact**.

Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Discussion

- a.i) The project site will be served by the Woodland Fire Department (WFD). The WFD provides fire protection, fire prevention services, and paramedic emergency medical services to all areas of the Woodland. Specific services provided by the Fire Department include fire fighting, fire prevention, fire hydrant maintenance, training, fire dispatch, hazardous materials intervention, and weed abatement services. The WFD has three permanent fire stations, each of which is staffed by firefighters 24 hours a day, 7 days a week. The nearest WFD station is Fire Station 1 located at 101 Court Street approximately 1 ½ miles from the project site. The proposed project will pay required development impact fees in order to ensure adequate fire protection facilities within the City; therefore, this impact would be **less than significant**.
- a.ii) Law enforcement services will be the responsibility of the Woodland Police Department. The Woodland Police Department is located at 1000 Lincoln Avenue approximately 1½ miles from the project site. The proposed project will pay required development impact fees in order to ensure adequate law enforcement services within the City; therefore, this impact would be **less than significant**.
- a.iii) As previously described, the project site is located on a parcel currently used as a detention basin immediately adjacent to agricultural uses, I-5 and Hwy 113 with developed industrial and commercial in the area; no schools are located in the vicinity of the project site. In addition, the proposed project will not generate any additional residential population that will increase the demand for additional schools in the project area or the City as a whole; therefore, this impact would be **less than significant**.
- a.iv) See the recreation discussion below.
- a.v) The proposed project will not result in an adverse physical impact to any other public facilities; therefore there would be **no impact**.

Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
15. RECREATION — Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would 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?	☐	☐	☐	☒

Discussion

- a,b) The proposed project consists of constructing a cable wakeboard park; it would not contribute to an increase in the local population, and no additional demand on existing neighborhood and regional parks would be created. The Project site was previously a dual use facility – providing storm water detention during the wet season and a baseball field. However, the site does not currently function as a usable park site. The proposed project would provide additional recreational opportunities to City residents, and re-use a previous seasonal recreational facility. Therefore, the proposed project would have **no impact** on the use of existing neighborhood and regional parks.

Transportation and Traffic

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
16. TRANSPORTATION AND TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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 facilities?	☐	☐	☒	☐

Discussion

- a,b) Regional access to the project site is provided by Interstate 5 (I-5) located south of the project site, and State Route 113 (SR 113, also known as North East Street north of I-5), which provides direct access to the project site along the eastern boundary (see Figure 1 in the *Project Description*). I-5 is a freeway generally running north-south as it traverses California, but is aligned east-west in the project vicinity. There are three travel lanes in each direction near the study area. The most recent data published by California Department of Transportation (Caltrans) indicates that the Annual Average Daily Traffic (AADT) on the freeway in proximity to the project site is about 32,000 vehicles (Caltrans, 2011). Ramps to and from I-5 for the project site are located at the SR 113 interchange.

SR 113 is a north-south highway with one travel lane in each direction in the project vicinity. The route connects with I-80 near Davis, travels north through Woodland, and ends at SR 99 near Yuba City. In the project vicinity SR 113 transitions from overlapping with I-5 to a local road (North East Street) north of the I-5/SR 113 interchange. North East Street has four lanes south of Churchill Downs Avenue and one travel lane in each direction at the project site access. The AADT along the highway in proximity to the project site is about 6,600 vehicles (Caltrans, 2011).

The pavement width of North East Street at the project site driveway is roughly 30 feet. The posted speed limit is 55 miles per hour (mph). There is a slight vertical incline in the road south of the project site driveway, which crests where the at-grade railroad tracks cross the roadway diagonally. (See Figure 2 in the *Project Description*)

Existing Transit Facilities. Yolobus, operated by the Yolo County Transportation District (YCTD), provides both local and intercity service throughout Yolo County, including the City of Woodland. Although there are several local and express routes that operate in the City, there is no transit service in the project vicinity (YCTD, 2010).

Existing Bicycle Facilities. As described in the City of Woodland *Bicycle Transportation Plan* (2002), bicycle facilities are comprised of bike paths (Class I facilities), bike lanes (Class II facilities), and bike routes (Class III facilities). Bike paths are paved trails that are separated from the roadways. Bike lanes are lanes on roadways designated for bicycle use by striping, pavement legends, and signs. Bike routes are roadways that are designated for bicycle use with signs, with bicycles and vehicles sharing the road width. North East Street is a Class III facility in the four-lane segment between East Beamer Street and Churchill Downs Avenue, but does not extend to the project site access.

Existing Pedestrian Facilities. Pedestrian facilities are comprised of sidewalks, pedestrian paths, crosswalks, pedestrian signals and other pedestrian amenities. Sidewalks are not provided on North East Street in the project area due to the lack of pedestrian destinations and existing rural land use patterns.

Existing Traffic Conditions. Traffic level of service (LOS) conditions were assessed at the following two signalized intersections for the morning (a.m.) and afternoon (p.m.) peak hour under existing, existing plus project, cumulative, and cumulative plus project conditions:

1. North East Street (SR 113) / I-5 Northbound Ramps
2. North East Street (SR 113) / I-5 Southbound Ramps

Level of Service Calculation Methodology. Manual turning movement counts were conducted at the two study intersections during the a.m. and p.m. peak periods (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., respectively) in March 2012. Intersection operations were evaluated for the one hour during each peak period when the highest traffic volumes were measured. The existing lane configurations and peak-hour traffic volumes at the study intersections are presented in **Appendix D**.

The LOS concept is a qualitative characterization of traffic conditions associated with varying levels of traffic, based on quantitative measures of delay and congestion. Descriptions of conditions range from LOS A (free-flow condition) to LOS F (jammed/forced-flow condition), as described in the 2000 *Highway Capacity Manual* (HCM) (Transportation Research Board, 2000). The average delay for signalized intersections is calculated using the TRAFFIX analysis software and is correlated to a LOS designation as shown in **Table**

6. The operation analysis uses various intersection characteristics (e.g., traffic volumes, lane geometry, and intersection controls) to estimate the average control delay experienced by motorists traveling through an intersection. Detailed LOS output sheets are located in Appendix D. As shown in **Table 7**, both of the study intersections currently operate at acceptable levels of service, with each operating at LOS B during both peak hours.

TABLE 6
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Average Control Delay Per Vehicle (Seconds)	Description
A	≤ 10.0	Operations with very low delay occurring with favorable progression and/or short cycle length.
B	10.1 to 20.0	Operations with low delay occurring with good progression and/or short cycle lengths.
C	20.1 to 35.0	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.
D	35.1 to 55.0	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.
E	55.1 to 80.0	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.
F	> 80.0	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.

SOURCE: Transportation Research Board, 2000 *Highway Capacity Manual*.

TABLE 7
EXISTING INTERSECTION LEVELS OF SERVICE (LOS)^a

Intersection	Control Type	A.M. Peak		P.M. Peak	
		Delay	LOS	Delay	LOS
North East Street at Northbound I-5 Ramps	Signalized	18.9	B	18.9	B
North East Street at Southbound I-5 Ramps	Signalized	11.9	B	11.8	B

a. LOS calculations performed using TRAFFIX and the 2000 *Highway Capacity Manual* operations analysis methodology.

SOURCE: ESA, 2012.

Project Trip Generation and Distribution. The recreation facility proposes 76 parking spaces, restrooms, operations building, and an observation deck. The project would operate from 8:00 a.m. to half-an-hour before dusk every day of the week. The recreational use is expected to generate up to 100 persons per day. Assuming an average of two passengers per vehicle and ten percent peak hour use, the project would generate up to 100 daily vehicle trips (50 inbound and 50 outbound), and approximately 10 peak-hour trips (5 inbound and 5 outbound) during both the a.m. and p.m. peak hours.²

² Due to the unique proposed use of the site as a wakeboarding park, there are no known published trip generation data. General assumptions based on expected use were used to develop vehicle trip rates.

The vehicle trip distribution and assignment patterns for the project were estimated based in part on the expected travel patterns of regional and local users, and locations of complementary land uses, primarily residential land uses. It was therefore assumed that approximately 25 percent of project-related traffic would originate south of the project site from Woodland and beyond (SR 113), 60 percent from Northbound I-5 (Sacramento area), 10 percent from Southbound I-5, and 5 percent from north of the project site on North East Street.

As shown in **Table 8**, with the project traffic added to the roadway network, the average delay would increase marginally; however, both study intersections would continue to operate at acceptable levels of service, with each continuing to operate at LOS B during both peak hours. This is a **less than significant** impact.

TABLE 8
EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE (LOS) ^a

Intersection	Control Type	A.M. Peak		P.M. Peak	
		Delay	LOS	Delay	LOS
North East Street at Northbound I-5 Ramps	Signalized	18.9	B	18.9	B
North East Street at Southbound I-5 Ramps	Signalized	12.2	B	12.1	B

a. LOS calculations performed using TRAFFIX and the 2000 *Highway Capacity Manual* operations analysis methodology.

SOURCE: ESA, 2012.

Cumulative Conditions and Cumulative plus Project Conditions. Cumulative condition traffic volumes were forecasted using a standard cumulative growth rate to represent regional background traffic volumes. It was estimated that regional traffic would grow by two percent per year from 2012 to 2030. Existing traffic volumes at each of the study intersections were increased using that growth factor to derive the cumulative conditions traffic volumes at the study intersection.

The results of the LOS analysis for the Cumulative conditions are summarized in **Table 9**, and both study intersections would operate at an acceptable LOS B. Under Cumulative plus Project conditions, the average delay would increase marginally; however, both study intersections are projected to continue to operate at acceptable levels of service, LOS B, as shown in **Table 10**. This is a **less than significant** impact.

TABLE 9
CUMULATIVE INTERSECTION LEVELS OF SERVICE (LOS) ^a

Intersection	Control Type	A.M. Peak		P.M. Peak	
		Delay	LOS	Delay	LOS
North East Street at Northbound I-5 Ramps	Signalized	19.6	B	19.6	B
North East Street at Southbound I-5 Ramps	Signalized	12.3	B	12.5	B

a. LOS calculations performed using TRAFFIX and the 2000 Highway Capacity Manual operations analysis methodology.

SOURCE: ESA, 2012.

TABLE 10
CUMULATIVE PLUS PROJECT INTERSECTION LEVELS OF SERVICE (LOS) ^a

Intersection	Control Type	A.M. Peak		P.M. Peak	
		Delay	LOS	Delay	LOS
North East Street at Northbound I-5 Ramps	Signalized	19.6	B	19.6	B
North East Street at Southbound I-5 Ramps	Signalized	12.6	B	12.8	B

a. LOS calculations performed using TRAFFIX and the 2000 Highway Capacity Manual operations analysis methodology.

SOURCE: ESA, 2012.

Transit Impacts. The project is located in a rural area that is not served by transit. It would not conflict with adopted plans or policies supporting alternative transportation nor would the project impede the performance of existing transit facilities. Given the proposed land use and location, the project would not be expected to generate a demand for transit service. This is a **less than significant** impact.

Bicycle and Pedestrian Impacts. The proposed project would not alter the configuration or characteristics of the road network in the project area. Given the character of the project and the surrounding area (i.e., lack of pedestrian facilities and destinations), the project would not generate pedestrian trips. Likewise, the existing Class III bike route on North East Street could accommodate any bicycle trips, though the location and specific use aren't expected to generate a substantial number of bicycle trips. Therefore, the project would not increase the potential for conflicts between vehicles, pedestrians and bicycles, nor would the project constrain access for users of these facilities. This is a **less than significant** impact.

Construction Impacts. Project construction activities would generate off-site traffic that would include the initial delivery of construction vehicles and equipment to the project site, the daily arrival and departure of construction workers, and the delivery of materials throughout the construction period and removal of construction debris. Deliveries would generally include shipments of concrete, lumber, and other building materials for onsite structures, utilities (e.g., plumbing equipment and electrical supplies) and paving and landscaping materials. Construction activity would occur Monday through Friday between 8:00 a.m. and 5:00 p.m. in accordance with all applicable municipal codes and City ordinances. No weekend construction would occur.

Traffic generated from construction activities would be temporary (approximately six months), and therefore would not result in any long-term degradation in operating conditions on roadways in the project locale. The impact of construction-related traffic would be a temporary and intermittent lessening of the capacities of streets in the project site vicinity (including North East Street with a speed limit of 55 mph) because of the slower movements and larger turning radii of construction trucks compared to passenger vehicles. However, given the proximity of the project site to regional roadways (i.e., I-5 and SR 113), construction trucks would have relatively direct routes. Implementation of **Mitigation Measure TR-1** would ensure that these temporary construction traffic impacts would be **less than significant**.

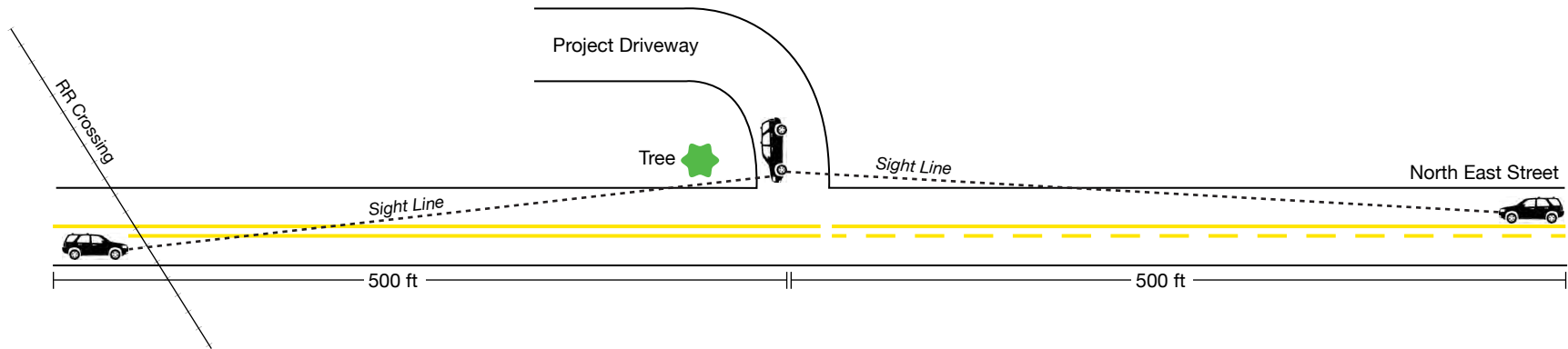
- c) The proposed recreation facility would not change air traffic patterns, increase air traffic levels or result in a change in location that would result in substantial safety risks. The project would have **no impact**.
- d) The proposed project would not increase traffic hazards due to design features of the recreational use. The project would not be expected to generate pedestrian activity given the existing land uses in the project vicinity (i.e., lack of pedestrian facilities and destinations). Points where conflicts could occur, such as the site driveway, would be designed to City standards, consistent with Caltrans standards (Caltrans, 2010).

Site access to the proposed project would be via the existing driveway on North East Street. Because the two-lane road does not include a queue pocket for vehicles approaching from the south (making a left-turn into the project site), available sight distance was investigated to determine if vehicles waiting to turn left into the site driveway would be visible to drivers of vehicles traveling northbound on North East Street. Sight distance is the continuous length of roadway ahead visible to a driver. Stopping sight distance is the minimum sight distance to be provided on a two-lane road for intersections and private road connections (Caltrans, 2012). The visibility for drivers exiting and approaching the project site was evaluated using standards outlined in Caltrans' *Highway Design Manual*.

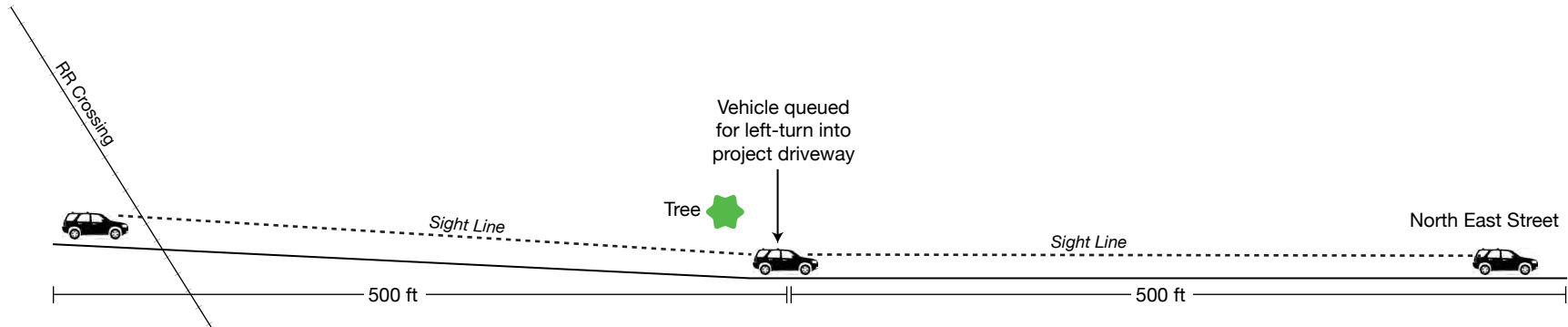
Field observations and measurements were conducted to determine the sight distance from two viewpoints: 1) for a driver wishing to exit from the driveway onto North East Street, and 2) for a driver approaching the driveway (ESA, 2012). Refer to **Figure 6**. A driver's view stopped at the driveway intersection with North East Street is unconstrained, looking north, and drivers have a sight distance of approximately 500 feet, looking south (to the second set of railroad crossing warning fixtures at the crest of the vertical curve). Likewise, drivers in vehicles traveling northbound on North East Street would have a view of a vehicle waiting for a gap in traffic to make a left-hand turn into the project site from approximately 500 feet (at the crest of the vertical curve just beyond the railroad crossing).

With a posted speed limit of 55 miles per hour (mph), North East Street needs to have a minimum sight distance of 500 feet for decision making, per the Caltrans *Highway Design Manual*. Therefore, the sight distance from the driveway is sufficient for both approaching vehicles and exiting vehicles.

A. Sight Distance of Existing Driver



B. Sight Distance of Approaching Driver



Based on these findings, there are no apparent circulation design features that would create a traffic safety hazard or significantly increase the potential for conflicts between vehicles, pedestrians and bicycles; therefore, impacts to traffic safety hazards would be **less than significant**.

- e) The proposed project is located on North East Street, a rural two-lane roadway near the project site driveway (four lanes south of Churchill Downs Avenue). The driveway location would not result in inadequate emergency access. There would be no blockage of access or traffic pattern disturbance that would significantly affect emergency access. Signs prohibiting parking would be posted along the access driveway to maintain clearance that would provide sufficient response time for emergency vehicles. In addition, the existing driveway location and width is sufficient to accommodate both ingress/egress traffic flows. The existing driveway would accommodate both emergency and general (public) vehicles. The proposed project would have a **less-than-significant** impact on emergency access.
- f) The project is located in rural area and the planned development would not conflict with adopted policies, plans, or programs supporting alternative transportation. The proposed project would not be expected to generate a demand for transit service, nor would it be expected to generate additional pedestrian trips, given the proposed location. The recreational project could, however, generate bicycle trips, which would be accommodated by the existing Class III bike route. Further, an exclusive bikeway/pedestrian path is outlined in the Bicycle Plan (2002), from the South City Limits to the project site. This project would require dedication of right-of-way by the railroad, but once complete would improve both pedestrian and bicycle access to the park.

The proposed project would not result in the obstruction or restriction of access to existing alternative modes of transportation or facilities therein; nor would the project result in the decrease in performance of such facilities and users of these modes. Based on these findings, the project would not conflict with policies, plans, or programs related to transit, bicycle, or pedestrian travel. This impact would be **less than significant**.

Mitigation Measures

Mitigation Measure TR-1: The City will require its construction contractor(s) to develop a construction management plan for review and approval. The plan will include at least the following items and requirements to reduce, to the maximum extent feasible, traffic congestion during construction:

- A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, signs, cones for drivers, and designated construction access routes;
- Identification of haul routes for movement of construction vehicles that would minimize impacts on motor vehicular, bicycle and pedestrian traffic, circulation and safety, and specifically to minimize impacts to the greatest extent possible on streets in the project area;

- Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur; and
- Provisions for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the City.

References

California Department of Transportation (Caltrans), 2010. *California Manual on Uniform Traffic Control Devices for Streets and Highways*, amended January 21, 2010.

California Department of Transportation (Caltrans), 2011. *2010 Traffic Volumes on California State Highways*, available online at <http://traffic-counts.dot.ca.gov/index.htm>.

California Department of Transportation (Caltrans), 2012. *Highway Design Manual*, Chapter 200, Geometric Design and Structure Standards, amended May 7, 2012.

City of Woodland, *Bicycle Transportation Plan*, 2002

ESA, Field Reconnaissance Survey, May 1, 2012.

Transportation Research Board, *Highway Capacity Manual – Chapter 2: Capacity and Level of Service Concepts*, December 2000.

Yolo County Transportation District (YCTD), *Yolobus System Map*, July 2010

Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
17. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

- a) The proposed project will connect to the existing City of Woodland wastewater system, likely through a private force main. Additionally, the proposed project will comply with all the wastewater requirements of the RWQCB; therefore, this impact would be **less than significant**.
- b,e) The proposed project would use an existing on-site well in order to fill the lake for the wakeboard park, however, the proposed project site would connect to the Woodland potable water system for potable water. The City anticipates that existing water supplies are sufficient to meet future water demand in the City. The project site will also connect to the municipal wastewater collection and treatment system. The City of Woodland owns and operates a Water Pollution Control Facility (WPCF) which treats wastewater from throughout the City's residential, commercial, and industrial users. A two-year project to upgrade and expand the WPCF was completed in 2007. The facility expanded from 7.8 million gallons per day (MGD) to its current 10.4 MGD. It also upgraded into a tertiary (advanced) treatment system. The tertiary system requirements were implemented in order to maintain strict water quality standards as WPCF treated effluent is discharged into the Tule Canal. The expansion, along with the higher water quality standards, resulted in a Class V designation for the WPCF

facility, the highest treatment rating in California. For the reasons discussed above, impacts on water supply and wastewater collection and treatment would be **less than significant**.

- c) See the Hydrology and Water Quality section above for a discussion of stormwater management. As previously discussed, the project site is located on a parcel currently used as a detention basin during the wet season. The project will not require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, thus this impact would be **less than significant**.
- d) As discussed above, groundwater is the sole source of water supply for the City of Woodland. The City's water supply is pumped from 16 operational groundwater wells located throughout the City into its distribution pipe system. The City anticipates that existing and planned water supplies are sufficient to meet future water demand in the City. The proposed project would not require new or expanded water supply resources or entitlements; therefore, this impact would be **less than significant**.
- f) The City of Woodland contracts with Waste Management Inc. for all solid waste collection services within City limits. This includes scheduled and unscheduled service for residential, commercial, and industrial customers. Solid waste collected within the City, including the project site, is disposed of at the Yolo County Central Landfill located at 44090 County Road 28H in Davis, CA. The Central Landfill, a 722-acre facility, is a Class III solid waste landfill, which provides comprehensive solid waste and recycling services, including municipal solid waste, recycling, salvaging, household hazardous waste, and business hazardous waste. Permitted maximum disposal at the Central Landfill is 1,800 tons per day. At the current waste disposal rate the landfill's closure date is estimated to be January 1, 2081, therefore there are approximately 69 years of active disposal life left at the landfill (Per. Comm., 2012). The landfill has sufficient permitted capacity to meet the solid waste disposal needs of planned growth within the City, including this project; therefore, this impact would be **less than significant**.

Furthermore, the City will comply with all state laws for proper waste disposal and waste diversion from landfills including the California Solid Waste Management Act (AB 939), which requires local governments (cities and counties) within the state to divert at least 50% of their waste from landfills.

- g) The proposed project will comply with all federal, state, and local statutes and regulations related to solid waste; therefore, there would be **no impact**.

References

- California Integrated Waste Management Board (CIWMB), 2012. Solid Waste Information System (SWIS), Facility/Site Summary Details: Yolo County Central Landfill (57-AA-0001). Available at: <http://www.calrecycle.ca.gov/SWFacilities/Directory/57-AA-0001/Detail/>. Accessed February 13, 2012.
- Per. Comm., 2012. Personnel Communication, Linda Sinderson, Deputy Director, Yolo County Planning and Public Works, Division of Integrated Waste Management; February 13, 2012.

Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
18. MANDATORY FINDINGS OF SIGNIFICANCE — Would 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 would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

- a) Per the impact discussions above, the project does not have the potential to substantially degrade the environment. Biological and cultural impacts, while potentially significant, would not substantially reduce a wildlife population, or eliminate an important historical resource. All effects related to biological and cultural resources would be reduced to less than significant with feasible mitigation. This impact would be **less than significant**.
- b) The proposed project would not result in cumulatively considerable negative impacts. No other significant projects are proposed in the project vicinity. In addition, cumulative effects of a more regional nature, including air, water, biology, and traffic, are described above, and would be **less-than-significant**.
- c) The proposed project would not cause substantial adverse effects on human beings. Effects related to human health and welfare, such as air quality, flooding, hazards and hazardous materials, and noise are discussed above, and would not result in any significant and unavoidable impacts; this impact would be **less than significant**.

Appendix A

Air Quality

Velocity Island
Yolo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	1.82	1000sqft
Parking Lot	76	Space
City Park	9	Acre

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Utility Company	Pacific Gas & Electric Company
Climate Zone	2	Precipitation Freq (Days)	54		

1.3 User Entered Comments

Project Characteristics -

Land Use - 9-acre lake modeled as city park; operations and restroom buildings modeled as general office building

Construction Phase - Reduced building construction duration based on minimal building space proposed

Grading - Assumes 14,520 cubic yards cut (~1 foot over the 9-acre lake), with half of the material to be used on site

Vehicle Trips - All trips assumed to be for the park, 100 daily one-way trips

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2012	0.31	2.28	1.42	0.00	0.34	0.13	0.47	0.09	0.13	0.22	0.00	231.87	231.87	0.02	0.00	232.38
2013	0.45	0.44	0.29	0.00	0.00	0.04	0.04	0.00	0.04	0.04	0.00	39.25	39.25	0.01	0.00	39.38
Total	0.76	2.72	1.71	0.00	0.34	0.17	0.51	0.09	0.17	0.26	0.00	271.12	271.12	0.03	0.00	271.76

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2012	0.31	2.28	1.42	0.00	0.16	0.13	0.29	0.09	0.13	0.22	0.00	231.87	231.87	0.02	0.00	232.38
2013	0.45	0.44	0.29	0.00	0.00	0.04	0.04	0.00	0.04	0.04	0.00	39.25	39.25	0.01	0.00	39.38
Total	0.76	2.72	1.71	0.00	0.16	0.17	0.33	0.09	0.17	0.26	0.00	271.12	271.12	0.03	0.00	271.76

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.16	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	7.61	7.61	0.00	0.00	7.66
Mobile	0.10	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.00	129.06	129.06	0.01	0.00	129.18
Waste						0.00	0.00		0.00	0.00	0.50	0.00	0.50	0.03	0.00	1.12
Water						0.00	0.00		0.00	0.00	0.00	11.63	11.63	0.01	0.00	11.99
Total	0.26	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.50	148.30	148.80	0.05	0.00	149.95

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.16	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	7.61	7.61	0.00	0.00	7.66
Mobile	0.10	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.00	129.06	129.06	0.01	0.00	129.18
Waste						0.00	0.00		0.00	0.00	0.50	0.00	0.50	0.03	0.00	1.12
Water						0.00	0.00		0.00	0.00	0.00	11.63	11.63	0.01	0.00	11.99
Total	0.26	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.50	148.30	148.80	0.05	0.00	149.95

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.09	0.00	0.09	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.42	0.24	0.00		0.02	0.02		0.02	0.02	0.00	36.27	36.27	0.00	0.00	36.36
Total	0.05	0.42	0.24	0.00	0.09	0.02	0.11	0.05	0.02	0.07	0.00	36.27	36.27	0.00	0.00	36.36

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.20	0.00	0.00	1.20
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.20	0.00	0.00	1.20

3.2 Site Preparation - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.09	0.00	0.09	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.42	0.24	0.00		0.02	0.02		0.02	0.02	0.00	36.27	36.27	0.00	0.00	36.36
Total	0.05	0.42	0.24	0.00	0.09	0.02	0.11	0.05	0.02	0.07	0.00	36.27	36.27	0.00	0.00	36.36

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.20	0.00	0.00	1.20
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.20	0.00	0.00	1.20

3.3 Grading - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.07	0.00	0.07	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.07	0.52	0.32	0.00		0.03	0.03		0.03	0.03	0.00	47.52	47.52	0.01	0.00	47.64
Total	0.07	0.52	0.32	0.00	0.07	0.03	0.10	0.03	0.03	0.06	0.00	47.52	47.52	0.01	0.00	47.64

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.02	0.27	0.12	0.00	0.17	0.01	0.18	0.00	0.01	0.01	0.00	34.22	34.22	0.00	0.00	34.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00
Total	0.02	0.27	0.14	0.00	0.17	0.01	0.18	0.00	0.01	0.01	0.00	36.22	36.22	0.00	0.00	36.24

3.3 Grading - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.07	0.00	0.07	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.07	0.52	0.32	0.00		0.03	0.03		0.03	0.03	0.00	47.52	47.52	0.01	0.00	47.64
Total	0.07	0.52	0.32	0.00	0.07	0.03	0.10	0.03	0.03	0.06	0.00	47.52	47.52	0.01	0.00	47.64

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.02	0.27	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	34.22	34.22	0.00	0.00	34.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00
Total	0.02	0.27	0.14	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	36.22	36.22	0.00	0.00	36.24

3.4 Building Construction - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.16	1.05	0.66	0.00		0.07	0.07		0.07	0.07	0.00	102.61	102.61	0.01	0.00	102.88
Total	0.16	1.05	0.66	0.00		0.07	0.07		0.07	0.07	0.00	102.61	102.61	0.01	0.00	102.88

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	3.20	0.00	0.00	3.20
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.85	4.85	0.00	0.00	4.86
Total	0.00	0.02	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	8.05	8.05	0.00	0.00	8.06

3.4 Building Construction - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.16	1.05	0.66	0.00		0.07	0.07		0.07	0.07	0.00	102.61	102.61	0.01	0.00	102.88
Total	0.16	1.05	0.66	0.00		0.07	0.07		0.07	0.07	0.00	102.61	102.61	0.01	0.00	102.88

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	3.20	0.00	0.00	3.20
Worker	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.85	4.85	0.00	0.00	4.86
Total	0.00	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.05	8.05	0.00	0.00	8.06

3.4 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.07	0.05	0.00		0.00	0.00		0.00	0.00	0.00	7.33	7.33	0.00	0.00	7.35
Total	0.01	0.07	0.05	0.00		0.00	0.00		0.00	0.00	0.00	7.33	7.33	0.00	0.00	7.35

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.34
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.57

3.4 Building Construction - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.07	0.05	0.00		0.00	0.00		0.00	0.00	0.00	7.33	7.33	0.00	0.00	7.35
Total	0.01	0.07	0.05	0.00		0.00	0.00		0.00	0.00	0.00	7.33	7.33	0.00	0.00	7.35

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.34
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.57

3.5 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.06	0.34	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.06	0.34	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	1.95	0.00	0.00	1.96
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	1.95	0.00	0.00	1.96

3.5 Paving - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.06	0.34	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.06	0.34	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	1.95	0.00	0.00	1.96
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	1.95	0.00	0.00	1.96

3.6 Architectural Coating - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56
Total	0.37	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.39
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.39

3.6 Architectural Coating - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56
Total	0.37	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.39
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.39

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.10	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.00	129.06	129.06	0.01	0.00	129.18
Unmitigated	0.10	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.00	129.06	129.06	0.01	0.00	129.18
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	99.99	99.99	99.99	246,596	246,596
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	99.99	99.99	99.99	246,596	246,596

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	14.70	6.60	6.60	33.00	48.00	19.00
General Office Building	14.70	6.60	6.60	0.00	0.00	0.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	5.93	5.93	0.00	0.00	5.96
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	5.93	5.93	0.00	0.00	5.96
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	31555.2	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	31555.2	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
General Office Building	20374.1					5.93	0.00	0.00	5.96
Parking Lot	0					0.00	0.00	0.00	0.00
Total						5.93	0.00	0.00	5.96

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
General Office Building	20374.1					5.93	0.00	0.00	5.96
Parking Lot	0					0.00	0.00	0.00	0.00
Total						5.93	0.00	0.00	5.96

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.16	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.16	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.17	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.17	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					11.63	0.01	0.00	11.99
Unmitigated					11.63	0.01	0.00	11.99
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 10.7233					10.92	0.00	0.00	10.99
General Office Building	0.323475 / 0.198259					0.71	0.01	0.00	1.00
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
Total						11.63	0.01	0.00	11.99

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 10.7233					10.92	0.00	0.00	10.99
General Office Building	0.323475 / 0.198259					0.71	0.01	0.00	1.00
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
Total						11.63	0.01	0.00	11.99

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.50	0.03	0.00	1.12
Unmitigated					0.50	0.03	0.00	1.12
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.77					0.16	0.01	0.00	0.35
General Office Building	1.69					0.34	0.02	0.00	0.77
Parking Lot	0					0.00	0.00	0.00	0.00
Total						0.50	0.03	0.00	1.12

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.77					0.16	0.01	0.00	0.35
General Office Building	1.69					0.34	0.02	0.00	0.77
Parking Lot	0					0.00	0.00	0.00	0.00
Total						0.50	0.03	0.00	1.12

9.0 Vegetation

Velocity Island
Yolo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	1.82	1000sqft
Parking Lot	76	Space
City Park	9	Acre

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Utility Company	Pacific Gas & Electric Company
Climate Zone	2	Precipitation Freq (Days)	54		

1.3 User Entered Comments

Project Characteristics -

Land Use - 9-acre lake modeled as city park; operations and restroom buildings modeled as general office building

Construction Phase - Reduced building construction duration based on minimal building space proposed

Grading - Assumes 14,520 cubic yards cut (~1 foot over the 9-acre lake), with half of the material to be used on site

Vehicle Trips - All trips assumed to be for the park, 100 daily one-way trips

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	10.61	84.92	49.87	0.09	28.11	4.28	32.02	9.94	4.28	14.22	0.00	9,266.55	0.00	0.95	0.00	9,286.52
2013	37.82	35.53	25.17	0.05	0.31	2.94	3.24	0.01	2.94	2.95	0.00	4,373.37	0.00	0.51	0.00	4,384.07
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	10.61	84.92	49.87	0.09	18.08	4.28	22.36	9.94	4.28	14.22	0.00	9,266.55	0.00	0.95	0.00	9,286.52
2013	37.82	35.53	25.17	0.05	0.01	2.94	2.95	0.01	2.94	2.95	0.00	4,373.37	0.00	0.51	0.00	4,384.07
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Mobile	0.62	1.74	5.52	0.01	0.82	0.06	0.87	0.03	0.06	0.09		837.82		0.03		838.51
Total	1.51	1.75	5.53	0.01	0.82	0.06	0.87	0.03	0.06	0.09		847.99		0.03	0.00	848.74

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Mobile	0.62	1.74	5.52	0.01	0.82	0.06	0.87	0.03	0.06	0.09		837.82		0.03		838.51
Total	1.51	1.75	5.53	0.01	0.82	0.06	0.87	0.03	0.06	0.09		847.99		0.03	0.00	848.74

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	10.43	84.72	47.82	0.07		4.27	4.27		4.27	4.27		7,997.69		0.93		8,017.28
Total	10.43	84.72	47.82	0.07	18.07	4.27	22.34	9.93	4.27	14.20		7,997.69		0.93		8,017.28

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.18	0.20	2.05	0.00	0.37	0.01	0.38	0.01	0.01	0.02		292.11		0.02		292.49
Total	0.18	0.20	2.05	0.00	0.37	0.01	0.38	0.01	0.01	0.02		292.11		0.02		292.49

3.2 Site Preparation - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	10.43	84.72	47.82	0.07		4.27	4.27		4.27	4.27	0.00	7,997.69		0.93		8,017.28
Total	10.43	84.72	47.82	0.07	18.07	4.27	22.34	9.93	4.27	14.20	0.00	7,997.69		0.93		8,017.28

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.18	0.20	2.05	0.00	0.01	0.01	0.02	0.01	0.01	0.02		292.11		0.02		292.49
Total	0.18	0.20	2.05	0.00	0.01	0.01	0.02	0.01	0.01	0.02		292.11		0.02		292.49

3.3 Grading - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.59	0.00	6.59	3.32	0.00	3.32						0.00
Off-Road	6.76	51.98	31.88	0.05		3.00	3.00		3.00	3.00		5,240.07		0.60		5,252.76
Total	6.76	51.98	31.88	0.05	6.59	3.00	9.59	3.32	3.00	6.32		5,240.07		0.60		5,252.76

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.19	26.37	11.56	0.04	21.21	0.91	22.12	0.13	0.91	1.04		3,783.06		0.10		3,785.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.15	0.16	1.71	0.00	0.30	0.01	0.31	0.01	0.01	0.02		243.43		0.02		243.74
Total	2.34	26.53	13.27	0.04	21.51	0.92	22.43	0.14	0.92	1.06		4,026.49		0.12		4,029.00

3.3 Grading - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.59	0.00	6.59	3.32	0.00	3.32						0.00
Off-Road	6.76	51.98	31.88	0.05		3.00	3.00		3.00	3.00	0.00	5,240.07		0.60		5,252.76
Total	6.76	51.98	31.88	0.05	6.59	3.00	9.59	3.32	3.00	6.32	0.00	5,240.07		0.60		5,252.76

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.19	26.37	11.56	0.04	0.13	0.91	1.04	0.13	0.91	1.04		3,783.06		0.10		3,785.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.15	0.16	1.71	0.00	0.01	0.01	0.02	0.01	0.01	0.02		243.43		0.02		243.74
Total	2.34	26.53	13.27	0.04	0.14	0.92	1.06	0.14	0.92	1.06		4,026.49		0.12		4,029.00

3.4 Building Construction - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.80	0.42	0.00	0.04	0.02	0.07	0.00	0.02	0.03		126.52		0.00		126.59
Worker	0.13	0.14	1.48	0.00	0.26	0.01	0.27	0.01	0.01	0.02		210.97		0.01		211.24
Total	0.20	0.94	1.90	0.00	0.30	0.03	0.34	0.01	0.03	0.05		337.49		0.01		337.83

3.4 Building Construction - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.80	0.42	0.00	0.00	0.02	0.03	0.00	0.02	0.03		126.52		0.00		126.59
Worker	0.13	0.14	1.48	0.00	0.01	0.01	0.02	0.01	0.01	0.02		210.97		0.01		211.24
Total	0.20	0.94	1.90	0.00	0.01	0.03	0.05	0.01	0.03	0.05		337.49		0.01		337.83

3.4 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.74	0.39	0.00	0.04	0.02	0.06	0.00	0.02	0.03		126.49		0.00		126.55
Worker	0.12	0.13	1.33	0.00	0.26	0.01	0.27	0.01	0.01	0.02		206.27		0.01		206.52
Total	0.18	0.87	1.72	0.00	0.30	0.03	0.33	0.01	0.03	0.05		332.76		0.01		333.07

3.4 Building Construction - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.74	0.39	0.00	0.00	0.02	0.03	0.00	0.02	0.03		126.49		0.00		126.55
Worker	0.12	0.13	1.33	0.00	0.01	0.01	0.02	0.01	0.01	0.02		206.27		0.01		206.52
Total	0.18	0.87	1.72	0.00	0.01	0.03	0.05	0.01	0.03	0.05		332.76		0.01		333.07

3.5 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93		2,917.64		0.50		2,928.05
Paving	0.09					0.00	0.00		0.00	0.00						0.00
Total	5.62	33.81	20.89	0.03		2.93	2.93		2.93	2.93		2,917.64		0.50		2,928.05

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.15	1.54	0.00	0.30	0.01	0.31	0.01	0.01	0.02		238.00		0.01		238.29
Total	0.14	0.15	1.54	0.00	0.30	0.01	0.31	0.01	0.01	0.02		238.00		0.01		238.29

3.5 Paving - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05
Paving	0.09					0.00	0.00		0.00	0.00						0.00
Total	5.62	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.15	1.54	0.00	0.01	0.01	0.02	0.01	0.01	0.02		238.00		0.01		238.29
Total	0.14	0.15	1.54	0.00	0.01	0.01	0.02	0.01	0.01	0.02		238.00		0.01		238.29

3.6 Architectural Coating - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.31					0.00	0.00		0.00	0.00						0.00
Off-Road	0.49	2.96	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10
Total	37.80	2.96	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.31	0.00	0.06	0.00	0.06	0.00	0.00	0.00		47.60		0.00		47.66
Total	0.03	0.03	0.31	0.00	0.06	0.00	0.06	0.00	0.00	0.00		47.60		0.00		47.66

3.6 Architectural Coating - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.31					0.00	0.00		0.00	0.00						0.00
Off-Road	0.49	2.96	1.94	0.00		0.27	0.27		0.27	0.27	0.00	281.19		0.04		282.10
Total	37.80	2.96	1.94	0.00		0.27	0.27		0.27	0.27	0.00	281.19		0.04		282.10

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00		47.60		0.00		47.66
Total	0.03	0.03	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00		47.60		0.00		47.66

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.62	1.74	5.52	0.01	0.82	0.06	0.87	0.03	0.06	0.09		837.82		0.03		838.51
Unmitigated	0.62	1.74	5.52	0.01	0.82	0.06	0.87	0.03	0.06	0.09		837.82		0.03		838.51
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	99.99	99.99	99.99	246,596	246,596
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	99.99	99.99	99.99	246,596	246,596

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	14.70	6.60	6.60	33.00	48.00	19.00
General Office Building	14.70	6.60	6.60	0.00	0.00	0.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
NaturalGas Unmitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	86.4526	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	0.0864526	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.20					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.69					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.20					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.69					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Velocity Island
Yolo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	1.82	1000sqft
Parking Lot	76	Space
City Park	9	Acre

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Utility Company	Pacific Gas & Electric Company
Climate Zone	2	Precipitation Freq (Days)	54		

1.3 User Entered Comments

Project Characteristics -

Land Use - 9-acre lake modeled as city park; operations and restroom buildings modeled as general office building

Construction Phase - Reduced building construction duration based on minimal building space proposed

Grading - Assumes 14,520 cubic yards cut (~1 foot over the 9-acre lake), with half of the material to be used on site

Vehicle Trips - All trips assumed to be for the park, 100 daily one-way trips

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	10.62	84.94	49.65	0.09	28.11	4.28	32.04	9.94	4.28	14.22	0.00	9,211.80	0.00	0.95	0.00	9,231.73
2013	37.82	35.56	25.13	0.05	0.31	2.94	3.24	0.01	2.94	2.95	0.00	4,344.65	0.00	0.51	0.00	4,355.32
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	10.62	84.94	49.65	0.09	18.08	4.28	22.36	9.94	4.28	14.22	0.00	9,211.80	0.00	0.95	0.00	9,231.73
2013	37.82	35.56	25.13	0.05	0.01	2.94	2.95	0.01	2.94	2.95	0.00	4,344.65	0.00	0.51	0.00	4,355.32
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Mobile	0.61	1.82	5.68	0.01	0.82	0.06	0.88	0.03	0.06	0.09		758.48		0.04		759.23
Total	1.50	1.83	5.69	0.01	0.82	0.06	0.88	0.03	0.06	0.09		768.65		0.04	0.00	769.46

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Mobile	0.61	1.82	5.68	0.01	0.82	0.06	0.88	0.03	0.06	0.09		758.48		0.04		759.23
Total	1.50	1.83	5.69	0.01	0.82	0.06	0.88	0.03	0.06	0.09		768.65		0.04	0.00	769.46

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	10.43	84.72	47.82	0.07		4.27	4.27		4.27	4.27		7,997.69		0.93		8,017.28
Total	10.43	84.72	47.82	0.07	18.07	4.27	22.34	9.93	4.27	14.20		7,997.69		0.93		8,017.28

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.19	0.22	1.83	0.00	0.37	0.01	0.38	0.01	0.01	0.02		253.36		0.02		253.71
Total	0.19	0.22	1.83	0.00	0.37	0.01	0.38	0.01	0.01	0.02		253.36		0.02		253.71

3.2 Site Preparation - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	10.43	84.72	47.82	0.07		4.27	4.27		4.27	4.27	0.00	7,997.69		0.93		8,017.28
Total	10.43	84.72	47.82	0.07	18.07	4.27	22.34	9.93	4.27	14.20	0.00	7,997.69		0.93		8,017.28

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.19	0.22	1.83	0.00	0.01	0.01	0.02	0.01	0.01	0.02		253.36		0.02		253.71
Total	0.19	0.22	1.83	0.00	0.01	0.01	0.02	0.01	0.01	0.02		253.36		0.02		253.71

3.3 Grading - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.59	0.00	6.59	3.32	0.00	3.32						0.00
Off-Road	6.76	51.98	31.88	0.05		3.00	3.00		3.00	3.00		5,240.07		0.60		5,252.76
Total	6.76	51.98	31.88	0.05	6.59	3.00	9.59	3.32	3.00	6.32		5,240.07		0.60		5,252.76

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.30	27.14	13.21	0.04	21.21	0.92	22.13	0.13	0.92	1.05		3,760.60		0.11		3,762.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.15	0.19	1.53	0.00	0.30	0.01	0.31	0.01	0.01	0.02		211.13		0.01		211.42
Total	2.45	27.33	14.74	0.04	21.51	0.93	22.44	0.14	0.93	1.07		3,971.73		0.12		3,974.35

3.3 Grading - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.59	0.00	6.59	3.32	0.00	3.32						0.00
Off-Road	6.76	51.98	31.88	0.05		3.00	3.00		3.00	3.00	0.00	5,240.07		0.60		5,252.76
Total	6.76	51.98	31.88	0.05	6.59	3.00	9.59	3.32	3.00	6.32	0.00	5,240.07		0.60		5,252.76

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.30	27.14	13.21	0.04	0.13	0.92	1.05	0.13	0.92	1.05		3,760.60		0.11		3,762.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.15	0.19	1.53	0.00	0.01	0.01	0.02	0.01	0.01	0.02		211.13		0.01		211.42
Total	2.45	27.33	14.74	0.04	0.14	0.93	1.07	0.14	0.93	1.07		3,971.73		0.12		3,974.35

3.4 Building Construction - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.82	0.52	0.00	0.04	0.03	0.07	0.00	0.03	0.03		125.28		0.00		125.36
Worker	0.13	0.16	1.32	0.00	0.26	0.01	0.27	0.01	0.01	0.02		182.98		0.01		183.23
Total	0.20	0.98	1.84	0.00	0.30	0.04	0.34	0.01	0.04	0.05		308.26		0.01		308.59

3.4 Building Construction - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.82	0.52	0.00	0.00	0.03	0.03	0.00	0.03	0.03		125.28		0.00		125.36
Worker	0.13	0.16	1.32	0.00	0.01	0.01	0.02	0.01	0.01	0.02		182.98		0.01		183.23
Total	0.20	0.98	1.84	0.00	0.01	0.04	0.05	0.01	0.04	0.05		308.26		0.01		308.59

3.4 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.75	0.49	0.00	0.04	0.02	0.06	0.00	0.02	0.03		125.24		0.00		125.31
Worker	0.12	0.14	1.19	0.00	0.26	0.01	0.27	0.01	0.01	0.02		178.79		0.01		179.02
Total	0.19	0.89	1.68	0.00	0.30	0.03	0.33	0.01	0.03	0.05		304.03		0.01		304.33

3.4 Building Construction - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.75	0.49	0.00	0.00	0.02	0.03	0.00	0.02	0.03		125.24		0.00		125.31
Worker	0.12	0.14	1.19	0.00	0.01	0.01	0.02	0.01	0.01	0.02		178.79		0.01		179.02
Total	0.19	0.89	1.68	0.00	0.01	0.03	0.05	0.01	0.03	0.05		304.03		0.01		304.33

3.5 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93		2,917.64		0.50		2,928.05
Paving	0.09					0.00	0.00		0.00	0.00						0.00
Total	5.62	33.81	20.89	0.03		2.93	2.93		2.93	2.93		2,917.64		0.50		2,928.05

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.17	1.37	0.00	0.30	0.01	0.31	0.01	0.01	0.02		206.30		0.01		206.57
Total	0.14	0.17	1.37	0.00	0.30	0.01	0.31	0.01	0.01	0.02		206.30		0.01		206.57

3.5 Paving - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05
Paving	0.09					0.00	0.00		0.00	0.00						0.00
Total	5.62	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.17	1.37	0.00	0.01	0.01	0.02	0.01	0.01	0.02		206.30		0.01		206.57
Total	0.14	0.17	1.37	0.00	0.01	0.01	0.02	0.01	0.01	0.02		206.30		0.01		206.57

3.6 Architectural Coating - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.31					0.00	0.00		0.00	0.00						0.00
Off-Road	0.49	2.96	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10
Total	37.80	2.96	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.27	0.00	0.06	0.00	0.06	0.00	0.00	0.00		41.26		0.00		41.31
Total	0.03	0.03	0.27	0.00	0.06	0.00	0.06	0.00	0.00	0.00		41.26		0.00		41.31

3.6 Architectural Coating - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.31					0.00	0.00		0.00	0.00						0.00
Off-Road	0.49	2.96	1.94	0.00		0.27	0.27		0.27	0.27	0.00	281.19		0.04		282.10
Total	37.80	2.96	1.94	0.00		0.27	0.27		0.27	0.27	0.00	281.19		0.04		282.10

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00		41.26		0.00		41.31
Total	0.03	0.03	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00		41.26		0.00		41.31

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.61	1.82	5.68	0.01	0.82	0.06	0.88	0.03	0.06	0.09		758.48		0.04		759.23
Unmitigated	0.61	1.82	5.68	0.01	0.82	0.06	0.88	0.03	0.06	0.09		758.48		0.04		759.23
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	99.99	99.99	99.99	246,596	246,596
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	99.99	99.99	99.99	246,596	246,596

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	14.70	6.60	6.60	33.00	48.00	19.00
General Office Building	14.70	6.60	6.60	0.00	0.00	0.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
NaturalGas Unmitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	86.4526	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	0.0864526	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.20					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.69					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.20					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.69					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Grid Electricity Associated with Motor

1 hp motor running for an hour = .745 kwh

1x50 hp motors, 6 hrs per day, 360 days/yr

80460 kwh/year

Project Annual Electrical Use:

80,460 kWh (kilowatt hours)/year

80 MWh (megawatt hours)/year

Indirect GHG gases	Emission Factor lb/mWh	Annual		CO2	Annual
		Project Electricity mWh	GHGs metric tons	Equivalent Factor	CO2 Equivalent Emissions (metric tons)
Carbon Dioxide (CO2)	641.35	80	23	1	23
Nitrous Oxide (N2O)	0.011	80	0.0	296	0
Methane (CH4)	0.029	80	0.0	23	0

Total Indirect GHG Emissions from Project Electricity Use=

24

Ref: Emission Factors from CalEEMod

Appendix B

Bio Resources

CNPS *California Native Plant* Inventory of Rare and Endangered Plants

Plant List

13 matches found. *Click on scientific name for details*

Search Criteria

Found in 9 Quads around 38121F7

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
<u>Astragalus pauperculus</u>	depauperate milk-vetch	Fabaceae	annual herb	4.3	S3.3	G3
<u>Astragalus tener</u> var. <u>tener</u>	alkali milk-vetch	Fabaceae	annual herb	1B.2	S2	G2T2
<u>Atriplex cordulata</u>	heartscale	Chenopodiaceae	annual herb	1B.2	S2.2?	G2?
<u>Atriplex depressa</u>	brittlescale	Chenopodiaceae	annual herb	1B.2	S2.2	G2Q
<u>Atriplex joaquiniana</u>	San Joaquin spearscale	Chenopodiaceae	annual herb	1B.2	S2	G2
<u>California macrophylla</u>	round-leaved filaree	Geraniaceae	annual herb	1B.1	S2	G2
<u>Centromadia parryi</u> ssp. <u>rudis</u>	Parry's rough tarplant	Asteraceae	annual herb	4.2	S3.2	G4T3
<u>Chloropyron palmatum</u>	palmate-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.1	S1	G1
<u>Hibiscus lasiocarpus</u> var. <u>occidentalis</u>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb	1B.2	S2.2	G4
<u>Lepidium latipes</u> var. <u>heckardii</u>	Heckard's pepper-grass	Brassicaceae	annual herb	1B.2	S1.2	G4T1
<u>Lessingia hololeuca</u>	woolly-headed lessingia	Asteraceae	annual herb	3	S3	G3
<u>Navarretia leucocephala</u> ssp. <u>bakeri</u>	Baker's navarretia	Polemoniaceae	annual herb	1B.1	S2	G4T2
<u>Trifolium hydrophilum</u>	saline clover	Fabaceae	annual herb	1B.2	S2	G2

Suggested Citation

California Native Plant Society (CNPS). 2012. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. Accessed on Thursday, April 26, 2012.

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Selected Elements by Element Code
California Department of Fish and Game
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
AAAAA01180	Ambystoma californiense California tiger salamander	Threatened	Threatened	G2G3	S2S3	SSC
ABNGA11010	Nycticorax nycticorax black-crowned night heron	None	None	G5	S3	
ABNGE02020	Plegadis chihi white-faced ibis	None	None	G5	S1	WL
ABNKC06010	Elanus leucurus white-tailed kite	None	None	G5	S3	FP
ABNKC19070	Buteo swainsoni Swainson's hawk	None	Threatened	G5	S2	
ABNKD06030	Falco columbarius merlin	None	None	G5	S3	WL
ABNNB03031	Charadrius alexandrinus nivosus western snowy plover	Threatened	None	G4T3	S2	SSC
ABNNB03100	Charadrius montanus mountain plover	Proposed Threatened	None	G2	S2?	SSC
ABNSB10010	Athene cunicularia burrowing owl	None	None	G4	S2	SSC
ABPAU08010	Riparia riparia bank swallow	None	Threatened	G5	S2S3	
ABPBXB0020	Agelaius tricolor tricolored blackbird	None	None	G2G3	S2	SSC
AFCJB34020	Pogonichthys macrolepidotus Sacramento splittail	None	None	G2	S2	SSC
AMACC02010	Lasionycteris noctivagans silver-haired bat	None	None	G5	S3S4	
AMACC05030	Lasiurus cinereus hoary bat	None	None	G5	S4?	
AMACC05060	Lasiurus blossevillii western red bat	None	None	G5	S3?	SSC
AMACC10010	Antrozous pallidus pallid bat	None	None	G5	S3	SSC
AMAJF04010	Taxidea taxus American badger	None	None	G5	S4	SSC
ARAAD02030	Emys marmorata western pond turtle	None	None	G3G4	S3	SSC
ARADB36150	Thamnophis gigas giant garter snake	Threatened	Threatened	G2G3	S2S3	
CTT61420CA	Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	None	None	G2	S2.2	
CTT71130CA	Valley Oak Woodland Valley Oak Woodland	None	None	G3	S2.1	



Selected Elements by Element Code
California Department of Fish and Game
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
ICBRA03030	<i>Branchinecta lynchi</i> vernal pool fairy shrimp	Threatened	None	G3	S2S3	
ICBRA06010	<i>Linderiella occidentalis</i> California linderiella	None	None	G3	S2S3	
ICBRA10010	<i>Lepidurus packardi</i> vernal pool tadpole shrimp	Endangered	None	G3	S2S3	
IICOL02106	<i>Cicindela hirticollis abrupta</i> Sacramento Valley tiger beetle	None	None	G5TH	SH	
IICOL48011	<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	Threatened	None	G3T2	S2	
IIHYM15010	<i>Myrmosula pacifica</i> Antioch multilid wasp	None	None	GH	SH	
PDBRA1M0K1	<i>Lepidium latipes var. heckardii</i> Heckard's pepper-grass	None	None	G4T1	S1.2	1B.2
PDCHE040B0	<i>Atriplex cordulata</i> heartscale	None	None	G2?	S2.2?	1B.2
PDCHE041F3	<i>Atriplex joaquiniana</i> San Joaquin spearscale	None	None	G2	S2	1B.2
PDCHE042L0	<i>Atriplex depressa</i> brittlescale	None	None	G2Q	S2.2	1B.2
PDFAB0F8R1	<i>Astragalus tener var. tener</i> alkali milk-vetch	None	None	G2T2	S2	1B.2
PDFAB400R5	<i>Trifolium hydrophilum</i> saline clover	None	None	G2	S2	1B.2
PDGER01070	<i>California macrophylla</i> round-leaved filaree	None	None	G2	S2	1B.1
PDMAL0H0R3	<i>Hibiscus lasiocarpus var. occidentalis</i> woolly rose-mallow	None	None	G4	S2.2	1B.2
PDPLM0C0E1	<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	None	None	G4T2	S2	1B.1
PDSCR0J0J0	<i>Chloropyron palmatum</i> palmate-bracted bird's-beak	Endangered	Endangered	G1	S1	1B.1

Record Count: 37



Selected Elements by Scientific Name

California Department of Fish and Game

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	None	G2G3	S2	SSC
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T2	S2	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S2	SSC
<i>Atriplex cordulata</i> heartscale	PDCHE040B0	None	None	G2?	S2.2?	1B.2
<i>Atriplex depressa</i> brittlescale	PDCHE042L0	None	None	G2Q	S2.2	1B.2
<i>Atriplex joaquiniana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S2S3	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S2	
<i>California macrophylla</i> round-leaved filaree	PDGER01070	None	None	G2	S2	1B.1
<i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened	None	G4T3	S2	SSC
<i>Charadrius montanus</i> mountain plover	ABNNB03100	Proposed Threatened	None	G2	S2?	SSC
<i>Chloropyron palmatum</i> palmate-bracted bird's-beak	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
<i>Cicindela hirticollis abrupta</i> Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3	WL
<i>Great Valley Mixed Riparian Forest</i> Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	PDMAL0H0R3	None	None	G4	S2.2	1B.2



Selected Elements by Scientific Name
California Department of Fish and Game
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G5	S3S4	
<i>Lasiurus blossevillii</i> western red bat	AMACC05060	None	None	G5	S3?	SSC
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4?	
<i>Lepidium latipes var. heckardii</i> Heckard's pepper-grass	PDBRA1M0K1	None	None	G4T1	S1.2	1B.2
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S2S3	
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G3	S2S3	
<i>Myrmosula pacifica</i> Antioch multilid wasp	IIHYM15010	None	None	GH	SH	
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S3	
<i>Plegadis chihi</i> white-faced ibis	ABNGE02020	None	None	G5	S1	WL
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020	None	None	G2	S2	SSC
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2S3	
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S4	SSC
<i>Thamnophis gigas</i> giant garter snake	ARADB36150	Threatened	Threatened	G2G3	S2S3	
<i>Trifolium hydrophilum</i> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Valley Oak Woodland Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	

Record Count: 37

These buttons will not appear on your list.

Revise Selection

Print this page

Print species list before going on to letter.

Make Official Letter

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 120426030702

Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates

- *Branchinecta lynchi*
 - vernal pool fairy shrimp (T)
- *Desmocerus californicus dimorphus*
 - valley elderberry longhorn beetle (T)
- *Lepidurus packardii*
 - vernal pool tadpole shrimp (E)

Fish

- *Hypomesus transpacificus*
 - delta smelt (T)
- *Oncorhynchus mykiss*
 - Central Valley steelhead (T) (NMFS)
- *Oncorhynchus tshawytscha*
 - Central Valley spring-run chinook salmon (T) (NMFS)
 - winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- *Ambystoma californiense*
 - California tiger salamander, central population (T)
- *Rana draytonii*
 - California red-legged frog (T)

Reptiles

- *Thamnophis gigas*
 - giant garter snake (T)

Quads Containing Listed, Proposed or Candidate Species:

WOODLAND (514A)

County Lists

No county species lists requested.

Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Important Information About Your Species List**How We Make Species Lists**

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

See our [Protocol](#) and [Recovery Permits](#) pages.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service.
- During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.
- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.
- Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our [Map Room](#) page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. [More info](#)

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be July 25, 2012.

Appendix C

Cultural Resources

VELOCITY ISLAND PARK PROJECT

Phase I Cultural Resources Study

Prepared for:

City of Woodland
300 First Street
Woodland, CA 95695

May 2012

Prepared by:

ESA
2600 Capitol Ave, Suite 200
Sacramento, CA 95816



Author:

Brian S. Marks, Ph.D., R.P.A.

Project Site Location:

U.S.G.S. Quadrangle: Grays Bend
Township 10 North, Range 2 East, Section 26
Acres: Approx. 15
Keywords: Woodland, Dubach Park,

VELOCITY ISLAND PROJECT, WOODLAND, YOLO COUNTY, CALIFORNIA

Phase I Cultural Resources Study

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Author:

Brian S. Marks, Ph.D., R.P.A.



Project Site Location:

U.S.G.S. Quadrangle: Woodland
Township 10 North, Range 2 East, Section 20
Acres: Approx. 15
Keywords:

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Los Angeles

Oakland

Olympia

Palm Springs

Petaluma

Portland

San Diego

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Seattle

Tampa

Woodland Hills

120269

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VELOCITY ISLAND PARK PROJECT

Phase I, Cultural Resources Study

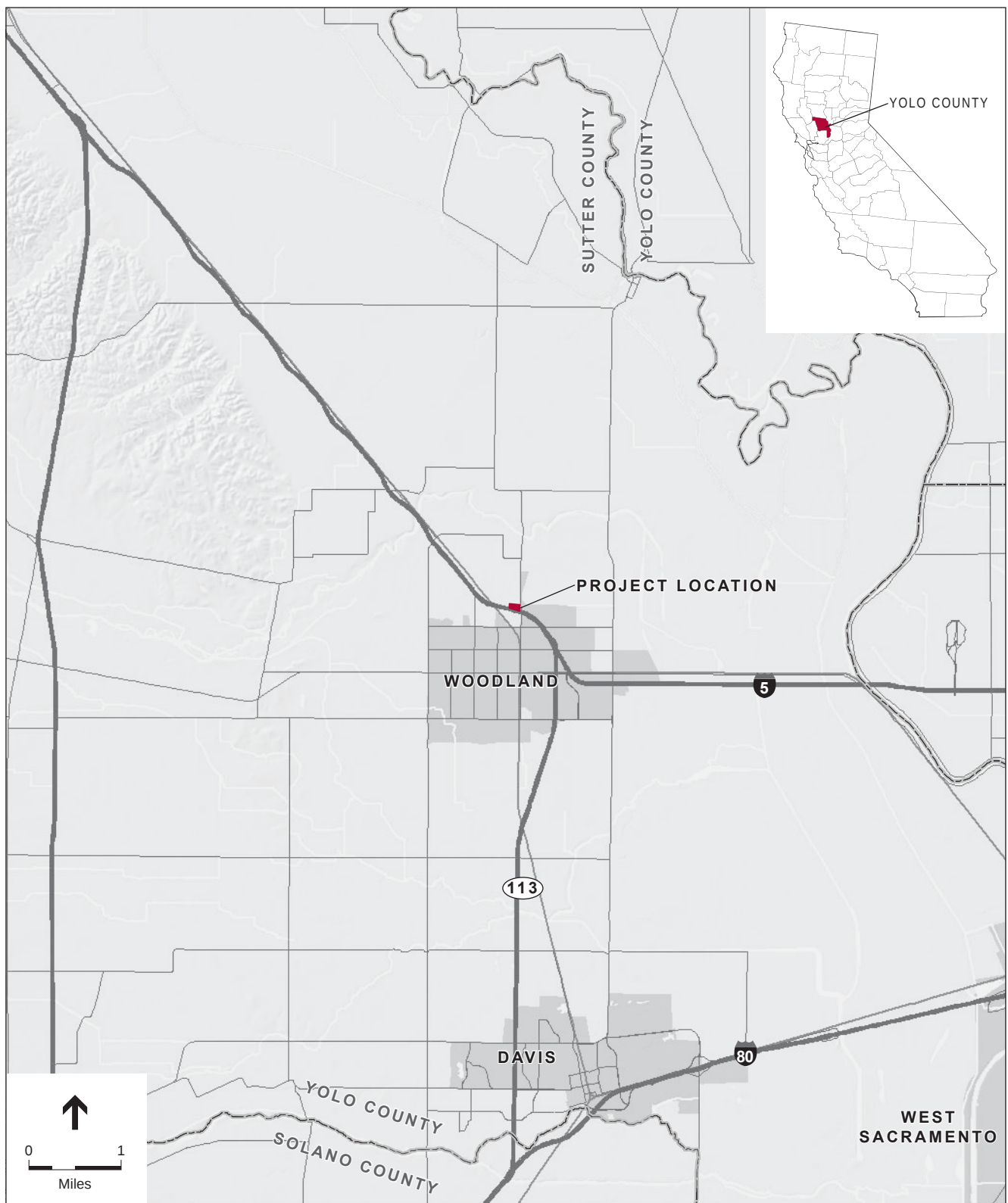
Introduction

ESA is preparing an Initial Study/Mitigated Negative Declaration (IS/MND) for the Velocity Island Project (Project). The City of Woodland (City), as the Lead Agency pursuant to the California Environmental Quality Act (CEQA), is proposing to convert the approximately 15-acre former sports complex into a cable wakeboarding park.

The Project parcel is in the eastern portion of the City in Yolo County, California in the southwest quarter of the southeast quarter of Section 20 in Township 10 North, Range 2 East on the USGS Woodland 7.5 minute topographic quadrangle (**Figure 1**). The Project area is an approximately 15-acre abandoned former sports complex named Dubach Park located in the northwest corner of the intersection of Highway 113 (Hwy 113) and Interstate 5 (I-5) (**Figure 2**). The Project will convert the former sports complex into a cable wakeboarding park. The Project plans included ground disturbing activity in the form of the creation of a pond, a 4-5 foot granitic path around the pond, parking lots, and several buildings.

ESA contacted the Native American Heritage Commission (NAHC) and requested they provide information from their Sacred Land File (SLF) and a list of Native Americans that to contact. the search failed to indicate the presence of any known sacred Native American sites within the vicinity of the Project. ESA sent letters to Native American organizations included on the NAHC list. To date, no responses have been received.

Based on results of archival review including local environmental information and archaeological, historical, and ethnographic data, it was anticipated that on site field investigation of the Project area had a low likelihood of encountering cultural items, features, or sites. The field survey found the Project area to be 10 to 20 feet lower than the surrounding ground surface, and did not find any cultural resources within the area.



SOURCE: ESRI, 2006; and ESA, 2012

Velocity Island Park Project . 120269

Figure 1
Regional Location



SOURCE: Bing Maps, 2009; ESRI, 2009; and ESA, 2012

Velocity Island Park Project . 120269

Figure 2
Project Site

Regulatory Framework

Several laws and regulations require federal, state, and local agencies to consider the effects a Project may have on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies (e.g., State Historic Preservation Office [SHPO] and the Advisory Council on Historic Preservation). CEQA; and the California Register of Historical Resources (CRHR), Public Resources Code (PRC) 5024, are the primary State laws governing and implementing preservation of cultural resources of national, State, regional, and local significance.

State

California Environmental Quality Act

CEQA (codified at Public Resources Code sec 21000 et seq.) is the principal statute governing environmental review of projects occurring in the State. CEQA requires lead agencies to determine if a project would have a significant effect on historical or unique archaeological resources. The Guidelines recognize that a historical resource includes: (1) a resource in the CRHR; (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the *CEQA Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the *CEQA Guidelines*, then the site may be treated in accordance with the provisions of CEQA Section 21083, which is a unique archaeological resource. As defined in Section 21083.2 of CEQA a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the Project on those resources shall not be considered a significant effect on the environment (*CEQA Guidelines* Section 15064.5(c)(4)).

The State implements the NHPA through its statewide comprehensive cultural resources surveys and preservation programs. The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historic Resources Inventory. The SHPO is an appointed official who implements historic preservation programs within the State's jurisdictions.

California Register of Historical Resources

The CRHR is "an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC § 5024.1[a]). The criteria for eligibility for the CRHR are based upon NRHP criteria (PRC § 5024.1[b]). Certain resources are determined by the statute to be automatically included in the CRHR, including California properties formally determined eligible for, or listed in, the NRHP.

To be eligible for the CRHR, a prehistoric or historic-period property must be significant at the local, State, and/or federal level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the CRHR must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the NRHP, but it may still be eligible for listing in the CRHR.

Additionally, the CRHR consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The CRHR automatically includes the following:

1. California properties listed on the NRHP and those formally Determined Eligible for the NRHP;
2. California Registered Historical Landmarks from No. 770 onward; and,
3. Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the CRHR.

Other resources that may be nominated to the CRHR include:

1. Historic resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the NRHP, the CRHR, and/or a local jurisdiction register);
2. Individual historic resources;
3. Historic resources contributing to historic districts; and,
4. Historic resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

Local

Yolo County General Plan

The Yolo County General Plan identifies goals, policies, and implementation measures related to the protection and preservation of cultural resources (Yolo County, 2009). These goals and policies focus on the preservation and protection of cultural resources (Goal CO-4) by encouraging continuity of historic use and/or architectural authenticity (Policy CO-4.4), avoidance and/or mitigation of effects on Native American archaeological and cultural resources (Policy CO-4.13), acknowledgement of local tribal heritage (Policy CO-4.11), and coordination with tribes that have cultural affiliation to the area (Policy CO-4.12).

City of Woodland General Plan

The City of Woodland General Plan identifies goals, policies, and implementation measures related to the protection and preservation of cultural resources (City of Woodland, 2002). Chapter 6 of their General Plan includes policies and implementation programs to achieve the goals below (From City of Woodland General Plan, 2002: Chap. 6:1-11

- GOAL 6.A:** To preserve and maintain sites, structures, and landscapes that serve as significant, visible reminders of the city's social, architectural, and agricultural history.
- GOAL 6.B:** To combine historic preservation and economic development so as to encourage owners of historic properties to upgrade and preserve their properties in a manner that will conserve the integrity of such properties in the best possible condition.
- GOAL 6.C:** To preserve the character and livability of Woodland's neighborhoods and strengthen civic pride through neighborhood conservation.
- GOAL 6.D:** To integrate historic preservation more fully into Woodland's comprehensive planning process.
- GOAL 6.E:** To promote community awareness and appreciation of Woodland's history and architecture.
- GOAL 6.F:** To protect Woodland's Native American heritage.

Archival Research

Native American Contact

ESA contacted the Native American Heritage Commission (NAHC) on April 25, 2012 and requested they provide information on locations of importance to Native Americans from their Sacred Land File (SLF) and a list of Native Americans that to contact. The NAHC responded on May 3, 2012 with the SLF search results and contact list. The results of the search failed to indicate the presence of any known sacred Native American sites within the vicinity of the Project. The NAHC provided a list of seven Native American organizations to contact concerning locations of importance to Native Americans in the Project area. ESA sent a letter on May 3, 2012 to each organization on the NAHC list, providing information about the proposed Project and requesting information on locations of importance to Native Americans (Appendix A). To date, no responses have been received.

Previous Studies

ESA staff conducted a records search for this Project on April 30, 2012 at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) (NWIC File # 11-1192) at Sonoma State University. Staff consulted records of previous cultural resources investigations and previously recorded cultural resources.

They accessed records by utilizing the Woodland USGS 7.5-minute quadrangle map. The study included a ¼ mile buffer around the Project area. The archival research results presented below include cultural resources and investigations located within ¼ mile of the Project area. In addition to Information Center maps and site record forms, other sources that were reviewed included historic maps, the Directory of Properties in the Historic Property Data File for Yolo County, the National Register of Historic Places, the California Register of Historic Resources, the *California Inventory of Historic Resources* (1976), the *California Historical Landmarks* (1996), and the *California Points of Historical Interest* (1992).

Previous Cultural Resources Investigations

The records search documented all previous cultural resources investigations and cultural resources located within the ¼ mile records search study area. The records search indicated that one previous cultural resources investigation occurred within the records search study area by Far Western Anthropological Group in 2008 (Survey Number 35042) along Hwy 113. This survey occurred within 60 feet of the project area and yielded negative results within the record search study area.

Previously Recorded Cultural Resources

While there are no previously recorded cultural resources in the study area, the nearest historic-period resource is an unrecorded segment of the Southern Pacific Railroad (P-57-000400) just outside the Project area to the east, and a grove of historic oak trees (P-57-000132) is ¼ mile to

the north of the Project area. The nearest recorded prehistoric archaeological resources are more than three miles away to the north-northeast. These resources are two rises containing burnt material (YOL-40 and YOL-41) near Grays Bend, an abandoned segment of the Sacramento River.

Additional Archival Research

ESA Staff reviewed aerial photographs for multiple years between 1993 and 2010; topographic maps from 1907 to the most current (USGS Woodland 7.5 and 15-minute topographic maps); and General Land Office maps from 1858 and determined that the Project area was agricultural fields at least until the construction of I-5 in the late 1960s. By 1993, the Project area had become a borrow pit, turning the area into a large bowl and the City had converted the area into Dubach Park, a baseball/softball park. It is likely that the construction of I-5 used material from the Project area to construct the Hwy 113 overpass, changing the Project area into a borrow pit. The park operated three fields until 2008, when the City demolished the fields and related structures, except for the one storage shed in the northern portion of the property.

Setting

Natural Setting

The Project area is within flat bottomland of the Sacramento Valley. Elevations in this area are generally less than 100 feet above mean sea level (amsl), though no portion of the Project area is more than 56 feet amsl, with the majority being approximately 40 feet amsl. There is little resemblance between today's environmental context and that of 150 years ago as a large proportion of the land has either been leveled and intensively farmed, dredged and channelized (creeks and sloughs), or developed (e.g. Cities of Woodland and Davis, farm complexes, excavated drainage areas, and other features). As a result, most of the native vegetation, riparian plant and animal associations, and well as avian and land fauna have been displaced. Prior to Euro-American settlement, natural resources of this area were abundant and supported stable and very substantial Native American populations. These populations were concentrated along waterways and in association with natural levees and other elevated lands. While some occupations occurred on the flood plain, these were likely seasonal habitation sites or used sporadically during resource gathering (Bennyhoff 1977)

The geology within the Project area consists of Holocene Alluvium. Soil within the Project area consists of Holocene Great Valley delta fan deposits and basin deposits, transported via the Sacramento River, Putah Creek, and other unnamed (and rerouted) drainages. According to Meyer and Rosenthal (2008) the Project area is in an area with a high potential for containing buried Holocene deposits, including archaeological deposits.

The climate of the Sacramento Valley is Mediterranean, with hot, dry summers and cool, moist winters. Summer daytime temperatures often exceed 100 degrees F, with low humidity and cooler nights. Winter temperatures infrequently fall below freezing. Yearly rainfall is between 15 and 25 inches, with the majority of rain falling during the winter months. The valley receives ample water supply due to high mountains which trap moisture that finds its way down to the valley through numerous creeks and streams. The Sacramento River is the major river running north/south through

the valley. The Sacramento gathers the snow melt out of the Sierras via tributaries, such as the Yuba, Feather, and American rivers, and flows to the Sacramento/San Joaquin Delta and eventually into Sacramento Bay. Other tributaries include the east/west trending Cache and Putah creeks.

Prior to flood control projects the area east of the Sacramento River was an alluvial plain that consisted of frequently flooded wetlands. The last 100 years of agriculture has all but eradicated the native vegetation within the Project area. Fauna associated with this area typically includes coyote, bobcat, deer, ground squirrel, red-tailed hawk, peregrine falcon, ducks, jackrabbit, cottontail rabbit, gopher, and various rodents. Additionally, Yolo County is along the Pacific Flyway, a route utilized by migratory birds from Alaska to Patagonia.

Prehistoric Setting

Archaeologists initially developed a three-part cultural chronological sequence, called the Central California Taxonomic System (CCTS), to explain local and regional cultural change in prehistoric central California from about 4,500 years ago to the time of European contact (Beardsley, 1948, 1954). In 1969, several researchers who met at U.C. Davis worked out several substantive taxonomic problems that had developed with the CCTS.

The Windmill Pattern was the earliest comprehensive view of the region, at around the terminal-Paleoindian Period to Lower Archaic (~6000 B.C. to ~3000 B.C.) (Beardsley, 1954; Heizer & Fenenga, 1939). This cultural horizon reflected a people well adapted to riverine and marshland environments. Scholars have maintained that these Penutian speakers came from the Columbia Plateau or western Great Basin and settled in the bountiful Delta region where they gave rise to many of the Bay Area cultures that survived up to historic times, such as the Costanoan, Miwok, Yokut, and Wintun (Fagan, 1995).

The Windmill economy was diffuse in breadth, a common trait among peoples during this time, whereby the people would make use of a wide range of resources so as to reduce risk in times of resource shortfall, such as those caused by climatic shifts. The artifactual evidence of the Windmill tradition suggests a wide range of specialized technology suited to the diffuse nature of their diet. These artifacts included large projectile points (spear or dart tips), baked-clay net sinkers, bone fish hooks, and spears. Mortars and milling slabs are predominant during this time period, as well as charmstones and abalone shell and olive snail ornaments and beads (Beardsley 1948; Heizer, 1949; Heizer and Fenenga 1939).

The subsequent Berkeley Pattern or Cosumnes culture (~2000 B.C. to A.D. 300), comparable to the emerging Archaic Period in California prehistory (3000 B.C. to A.D. 1000), reflects a change in socioeconomic complexity and settlement patterns. Many of the settlements of this period, given their size and intensity of use, demonstrated that populations were denser and more sedentary, yet continued to exploit a diverse resource base—from woodland to grassland and marshland, to bayshore resources throughout the San Francisco Bay Area (Bickel, 1978; King, 1974). Moreover, the Archaic Period was indicative of increasing sociopolitical complexity and the radiation of peoples into new ecological niches (Chartkoff & Chartkoff, 1984).

Out of the Cosumnes Tradition came the Hotchkiss Tradition (or “Late Horizon”) by the Emergent Period, or about 500 A.D. The peoples of the Hotchkiss Tradition were likely flourishing in the Stockton and Delta region up to contact with Europeans. Indeed, the materials recovered related to the Hotchkiss Tradition—mortars and pestles, bone awls, bow and arrow—were in many ways similar to those identified at Buena Vista Lake—further indicating the trade relationships that were maintained between the Delta inhabitants and the southern San Joaquin Valley peoples (Rosenthal, et. al 2008).

Ethnographic Setting

Patwin Indians historically inhabited the Project area. Patwin territory was an extensive region within north-central California and included the lower portion of the west side of the Sacramento Valley west of the Sacramento River from about the location of the town of Princeton in the north to Benicia in the south (Kroeber, 1925). The Patwin were bounded to the north, northeast, and east by other Penutian-speaking peoples (the Nomlaki, Wintu, and Maidu, respectively), and to the west by the Pomo and other coastal groups. Within this large territory, there are three Patwin groups: the River, Hill, and Southern Patwin groups. Although in actuality a more complex set of linguistic and cultural differences existed than indicated by these three geographic divisions. Near the Project area, the Patwin are believed to have reached the Carquinez/Suisun area by about 1,500 BP (Whistler, 1977; McCarthy, 1985).

As with most of the hunting-gathering groups of California, the “tribelet” represented the basic social and political unit. Typically, a tribelet chief would reside in a major village where ceremonial events were also typically held. The status of such individuals was patrilineally inherited among the Patwin, although village elders had considerable power in determining who actually succeeded to particular positions. The chief’s main responsibilities involved administration of ceremonial and economic activities. Such individuals decided when and where various fishing, hunting or gathering expeditions would occur, and similarly made critical decisions concerning the more elaborate ceremonial activities. He also played a central role in resolving conflicts within the community or during wars which occasionally broke out with neighboring groups. Apparently, a Patwin chief had more authority than his counterparts among many of the other central California groups (McKern, 1922; Kroeber, 1925).

The onslaught of Euro-American culture negatively impacted Patwin culture and peoples. By 1871–72, when Stephen Powers surveyed the state gathering ethnographic information, the Patwin culture appeared to him to be virtually extinct.

Euro-American influences within Patwin territory increased dramatically as ranching and farming became popular in the area. Euro-American settlers, especially within the Sacramento Valley, quickly made inroads into lands occupied by Native Americans. Conflicts grew in number, and Patwin populations continued to decline from military skirmishes, vigilante raids, and other causes. In 1972, the Bureau of Indian Affairs listed only 11 remaining Patwin descendants (Johnson, 1978:352). Despite the massive decline in population, the Patwin still reside in Solano County and many intermarried with the Wintu (Johnson, 1978:352).

Historical Setting

Regional

Although the Spanish had made forays into the Central Valley since about 1769, it was not until 1808 that Capitán Gabriel Moraga explored, and named, the Sacramento area. Other than gathering Indians for the missions, or chasing down those that had taken horses and cattle, the Spanish took little interest in the area. Occasional trappers, such as Jedediah Smith, made infrequent forays through the area.

In 1839, John A. Sutter arrived at the confluence of the American and Sacramento rivers, with the expectation of a land grant from the Mexican government. He built a fort, originally called New Helvetia, later known as Sutter's Fort. In 1841, Sutter received his 97 square mile land grant. He developed fisheries, a flourmill, and a lumber mill, and soon attracted other businesses. In 1848, gold appeared in a flume at Sutter's lumber mill near the Nisenan village of "Culloma" (later known as Coloma). Soon the Sacramento Valley was teeming with miners on their way to the gold fields.

Aside from John Sutter, the Mexican government made several other land grants in the Sacramento Area during the 1830s and 1840s. Cattle ranching was the mainstay of California's economy during Mexican rule, specifically the hide and tallow trade. During this time the Mexican government issued several land grants in this portion of the Central Valley. Mexico issued these grants to both Mexican citizens as well as some non-citizens. Mexico used the grants to encourage settlement in the largely unsettled lands of Alta California, hoping to secure their hold on land occupied by Russia, Great Britain, and the United States.

During the American Period, land use diversified during this time, and while mining became an important activity along the American River, ranching remained the primary land use away from the river. In general, the Sacramento Valley provided cattle ranchers with prime ranch land that contained wide open grasslands and abundant water.

Settlers soon began occupying these lands, acquiring land through several means. The earliest settlers used the Land Law of 1820, which allowed them to purchase up to 80 acres of land from the federal government at the price of \$1.25 an acre. The Homestead Act of 1862 enabled anyone to enter a homestead claim for a quarter-section of land (160 acres). Once the applicant built a dwelling on the land, dug a well, plowed a minimum of 10 acres, fenced a portion of the land, and lived there for five years, the claimant received a patent (federal deed). As an alternative to plowing 10 acres, the applicant could complete the homestead requirements by planting and successfully cultivating 10 acres of timber. As Congress had decided that the disposition of public land would not generate revenue for the federal government, the only costs borne by the applicant were those associated with establishing a homestead, plus a \$14 patent filing fee (Sandoz 1963:47).

The lenient terms of the Homestead Act meant that the landless poor, such as recent immigrants and day laborers, could be elevated to the status of landowner. These terms, including the absence of any criteria for qualification, also meant that people who were not knowledgeable about farming practices could get 160 acres of land just as easily as someone with extensive farming experience. This was often problematic with regard to the success of a homestead, especially when coupled

with arid conditions. Despite these basic problems, during the years 1863 to 1900, more than 600,000 farmers received clear title under the act to lands totaling 80 million acres (Hibbard 1965).

The Stock Raising Homestead Act of 1916 was another Federal program used for the transfer of Federal land into private hands. This allowed for the acquisition of land deemed unfit for any other purpose than stock grazing and the growing of forage. Private individuals received more than 70 million acres of land this way (Earthworks 2007).

Early homestead laws steered settlers towards farming rather than ranching. Partly as a consequence of this, and due to market demands, many began to turn from open-range cattle ranching to farming. The Sacramento Valley, a natural grassland, lent itself well to dry-land grain farming, specifically wheat. Farmers were soon producing more wheat than California markets could absorb. The completion of the trans-continental railroad in 1869, which opened markets across the country, saved them from ruin. Wheat production soared, so that by 1889, 3.5 million acres of land in California were growing wheat. Subsequently, wheat production declined rapidly as a result of market saturation and poor management practices. By 1900, wheat production had dropped by 65%. Much of the land was depleted and left fallow (California Department of Transportation 2007:50).

Local History

Yolo County was one of the original counties when California entered the United States in 1850. During the Gold Rush, the migration influx did not enter Yolo County, as the Sacramento River was a difficult barrier to cross and there was little reason to cross the river. The Sacramento Valley remained relatively isolated and sparsely populated until the advent of the Gold Rush period. Sacramento's proximity to mining areas, and its accessibility to maritime traffic, quickly made the area quickly a trading and economic center. Commerce along the Sacramento River encouraged continued population growth, with many of the miners and farmers settling along the natural levees of the Sacramento River. The settlements recognized that the active flood plain deposited fertile soils in the lands nearest to the river, which supported bountiful crops and provided easy access to transportation corridors along the river itself (Hoover, et. al., 2002).

In 1851, John Morris built a store at the modern day corner of First and Clover streets in Woodland. Six years later, Frank S. Freeman purchased the store, along with 160 acres of land with the intent to establish a town that would be a large trading center for the local rich agricultural land. In 1861, Freeman became the Postmaster of the Woodland Post Office.

Following flooding in Washington (California-present day West Sacramento), Woodland became the county seat of Yolo County. By the end of the 1860s, railroads connected Woodland to Davisville (Davis) and Marysville. Woodland's population continued to grow and nearly tripled in the post-war era between 1950 and 1980. The economics of Woodland focused on the processing of agriculture products such as rice, sugar beets, and tomatoes. By 1970, I-5 and State Route 113 replaced the railroad lines as the main transportation arteries

Field Survey

Survey Methodology

ESA archaeologist, Brian S. Marks, Ph.D., performed a cultural resources survey of the Project area on May 9, 2012. The goal of the survey was to identify surface evidence of archaeological materials and historic built features. While the current ground surface is 10 to 20 feet below the surrounding area, Meyer and Rosenthal (2008) suggest the area has a high potential for buried cultural deposits. As such, Dr. Marks surveyed the property to determine if the removal of the upper ground could have revealed these deposits or removed them altogether.

Based on results of archival review including local environmental information and archaeological, historical, ethnographic data, and the history of disturbance within the Project area, it was anticipated that on-site field investigation of the Project area had a low likelihood of encountering cultural items, features, or sites. Dr. Marks surveyed the former sports complex using systematic survey transects spaced approximately 15 meters apart. He examined the surface for constituents of archaeological sites, such as artifacts, features, or culturally modified soil horizons.

Survey Findings

At the time of the survey, the Project area contained thistle, mustard weed, wild oat, fox tail, and other weeds for vegetation with trees along the periphery. The Project area is a large bowl, approximately 10-20 feet below the surrounding ground surface. A paved road from the northeast corner provides access into the bowl, and a fenced area containing a former maintenance shed is 5-10 feet higher than the rest of the bowl (**Figure 3**). The northern portion of the Project area contained many rocks, likely used as the base for parking lots and access roads. The infield areas and other dirt areas now contain foxtails and wild oat weeds, while the former grass (outfield) areas contain thistle and mustard weed (**Figure 4**).

Electrical conduit pipes for stadium lighting are still in the ground as are the lamp posts along the entrance way. The surface visibility within the bowl ranges from 10 to 100 percent, with the better visibility in the former infield and parking lot areas than in the former outfield areas. The slopes of the embankments had almost no visibility, while the access road around the top of the embankment ranged from 50 to 100 percent depending on the vegetation thickness. Dr. Marks did not observe any cultural material more than 50 years old. Furrows remain in the soil from the removal of parking lot, and disking activities.



Figure 3
The Project Area, Facing East



Figure 4
The Project Area, Facing Southwest

Conclusions and Recommendations

ESA contacted the Native American Heritage Commission (NAHC) and requested they provide information from their Sacred Land File (SLF) and a list of Native Americans that to contact. The search failed to indicate the presence of any known sacred Native American sites within the vicinity of the Project. ESA sent letters to Native American organizations included on the NAHC list. To date, no responses have been received.

Archival research, Native American scoping, and field survey for the Project did not identify any archaeological resources within the Project area. The nearest historic period - resource is the Southern Pacific Railroad, just outside the Project area to the east. While the area has a high potential for buried resources (Meyer and Rosenthal 2008), the removal of material from the bowl likely removed any archaeological material as well.

Although no prehistoric archaeological sites are within ½-mile of the Project area, the nature of the Project nonetheless would involve ground-disturbing activities that could extend into undisturbed soil. It is possible that such actions could unearth, expose, or disturb subsurface archaeological, historical, or Native American resources that were not observable on the surface. In the event that previously unidentified archaeological or Native American resources are uncovered during Project implementation, all work should cease in the vicinity of the find until a qualified archaeologist evaluates the find. If construction activity unexpectedly encounters human remains, workers should follow Health and Safety Code Section 7050.5. Aside from implementing “cease work” measures in the event archaeological resources or human remains are encountered during Project construction, no further cultural resources work is recommended.

References

- Beardsley, R.K. *Temporal and areal relationships in central California archaeology. Parts I and II.* University of California Archaeological Survey Reports. Nos. 24 & 25: Berkeley, California, 1954.
- Bennyhoff, J. 1977. *Ethnogeography of the Plains Miwok.* Davis: University of California, center for Archaeological Research at Davis, Publication 5.
- California Department of Parks and Recreation (DPR), *California Historical Landmarks*, 1996.
- California Department of Parks and Recreation (DPR), *California Inventory of Historic Resources*, 1976.
- California Department of Transportation, 2007. *A Historical Context and Archaeological Research Design for Agricultural Properties in California.* Division of Environmental Analysis, California Department of Transportation, Sacramento, CA.
- Chartkoff, J.L and Chartkoff, K.K. *The Archaeology of California.* Stanford University Press: Stanford, California, 1984.
- Earthworks, 2007. “The Stock Raising Homestead Act and Mining Claims.” Online document. http://www.earthworkSACTION.org/library/detail/the_stock_raising_homestead_act_and_mining_claims.

- Fagan, B.M. Ancient North America: The archaeology of a continent. Thames and Hudson: New York, 1995.
- Heizer, R.F. The archaeology of central California I: The Early Horizon. *University of California Anthropological Records*, Vol. 12(1): 1–84: Berkeley, 1949.
- Heizer, R. F., and F. Fenenga. Archaeological horizons in central California. *American Anthropologist* 41: 378–399, 1939.
- Hibbard, Benjamin H., 1965. *A History of the Public Land Policies*, University of Wisconsin Press.
- Johnson, Patti J., 1978. Patwin. In: *Handbook of North American Indians*, volume 8, edited by Robert F. Heizer, pp. 350-360. 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. Reprinted 1976 by Dover, New York.
- Levy, R., 1978. Eastern Miwok. In California, edited by R.F. Heizer, PP. 398-413. Handbook of North American Indians, vol. 8, W.C. Sturtevant General Editor, Washington D.C.; Smithsonian Institution.
- Meyer, Jack and Jeffery S. Rosenthal. 2008. *A Geoarchaeological Overview and Assessment of Caltrans District 3*.
- McKern, W.C. 1922. Functional Families of the Patwin. *American Archaeology and Ethnology* 13 (7): 235-258.
- Office of Historic Preservation (OHP), *California Points of Historical Interest*, 1992.
- Powers, Stephen. 1877. The Tribes of California, Contributions of North American ethnology, Vol. III Washington D.C.: United States Department of the Interior, U.S. Geographical and Geological Survey of the Rocky Mountains Region.
- Sandoz, Mari, 1963. *Old Jules*, University of Nebraska Press, Lincoln, NE.
- Rosenthal, Jefferey s., Gregory G. White, an Mark Q Sutton. 2007. The Central Valley: A View from the Catbird's Seat. In *California Prehistory: Colonization, Culture, and Complexity*. Edited by Terry L. Jones and Kathryn A. Karr. Altamira Press, New York.
- Whistler, K.A. 1977. Wintun Prehistory: An Interpretation Based on Reconstruction of Plant and Animal Nomenclature. Pages 157-174 in Proceedings of the Third Annual Meeting of the Berkeley Linguistics Society, Berkeley Linguistics Society. Berkeley, CA.

APPENDIX A

Personnel Qualifications



BRIAN MARKS, PHD, RPA

Senior Associate I

Dr. Marks has worked on terrestrial and underwater archaeology projects in California, Nevada, Washington, Florida, and Georgia since 1997. His duties include the identification and determination of National Register of Historic Places (NRHP) eligibility of archaeological sites based type, age, composition, source of artifacts recovered at all levels of field investigation from reconnaissance to Phase III mitigation and data recovery for terrestrial and underwater projects in California, Nevada, Washington, Florida and Georgia. He has surveyed, mapped, excavated, interpreted and analyzed artifacts, as well as published reports on a variety of diverse archaeological sites. Dr. Marks has experience assessing and evaluating sites, gathering and interpreting remote sensing data, working within GIS, and has overseen numerous terrestrial and underwater projects and tasks. He has an understanding of the pertinent laws and procedures necessary for compliance with various Federal and State regulatory agencies.

Education

Ph.D., Anthropology, Florida State University

M.S., Anthropology, Florida State University

B.S., Underwater Archaeology, University of California at Davis

15 Years Experience

Registrations

Register of Professional Archaeologists (#15173)

Professional Affiliations

Society for American Archaeology

Society for California Archaeology

Register of Professional Archaeologists since 2004

Merit Badge Counselor for Boy Scouts - Archaeology, Oceanography, and Astronomy

Certifications

Commercial Class B drivers license with passenger and air brake endorsements

Boat US certification in small boat operation

OSHA Construction Site Safety Certified

AAUS Science Diver rated to 90 feet

NAUI Master Scuba Diver

Relevant Experience

D209081.00 DWR North Bay Aqueduct Alternate Intake Project EIR Lead

Archaeologist. Dr. Marks lead a crew of archaeologists in the survey along a proposed pipeline easement from the Sacramento River to Fairfield, CA. Dr. Marks insured the project meets Section 106 guidelines as well as CEQA regulations; wrote the technical report; and prepared the EIR

D211229.00 Comstock Mining BLM Baseline Studies and Permitting

Archaeologist. Dr. Marks assisted in the field survey of mining related activities in western Nevada, assisted with report writing, and handled all data management and GIS mapping for the project.

D211146.00 Patterson Fish Screen Project Archaeological Services.

Archaeologist. Dr. Marks assisted in mitigation measures outlined in the IS/MND/EA following the discovery of sensitive cultural resources during the construction of a fish screen along the San Joaquin River. Dr. Marks also assisted with GIS mapping and report writing.

D207221.00 Sacramento County Airport System On-Call Natural Resources Advisory & Consulting Services. Lead Archaeologist.

Dr. Marks performed monitoring/surveying of field maintenance disking activities at the Sacramento International Airport, and completed surveys for expansion plans.

D205142.00 South Bay Aqueduct Maintenance and Rehabilitation Project

Archaeologist. The excavation for a temporary fiber optics trench impacted a historic-period trash deposit. Dr. Marks assisted in monitoring the excavation of the trench, and backfill. Dr. Marks also lead the examination of the material within the spoil pile. In the technical report prepared by Dr. Marks, he determined that the refuse pile was an early-mid-20th century and was not significant.

D211480.00 Turlock Irrigation District Tunnel #2 Open Cut Project - Cultural Resources Report. *Lead Archaeologist.* The Turlock Irrigation District proposed to open cut the #2 tunnel along the Turlock Canal due to weakening within the tunnel's ceiling. Dr. Marks surveyed the excavation corridor and spoil pile areas; utilized GIS mapping, and wrote the technical report.

D207511.10 La Grange Rd & Dry Creek Bridge Replacement, Merced County. *Lead Archaeologist.* The County of Merced seeks to replace the La Grange Road Bridge over Dry Creek. Dr. Marks conducted the field survey and found several groups of bedrock mortars directly beneath the bridge. Dr. Marks prepared a Caltrans Archaeological Survey Report and recommended monitoring during the removal of the bridge.

D120029.00 El Dorado UHSD Bio/Cultural Res Study. *Lead Archaeologist.* El Dorado Union High School District proposes a sixth high school south of El Dorado Hills. Dr. Marks surveyed the project area and prepared a technical report update to a 2001 EIR. Dr. Marks relocated the two previously recorded sites and located two more sites and two isolated finds. Dr. Marks recommended avoiding all resources until they can undergo evaluation.

D210540.00 On-Call Environmental Support Services - San Joaquin County Public Works-Mormon Slough. *Lead Archaeologist.* The San Joaquin County Public Works Department proposes to widen the channel downstream of the Bellota Fish Weir. Dr. Marks found lithic debris in a gravel bar within the river channel and in the report written in support of the USACOE 404 permit, recommended that the material came from a washed out site up stream.

D211607.00 Sunnydale Sewer Tunnel Project Archaeological Investigations. *Technical Analyst.* Excavation of a sewer tunnel revealed a shipwreck. Dr. Marks utilized GIS and historic maps to recreate the coastline south of Candlestick Point to get a better understanding of when the cove was filled in.

D210676.00 RD2035 Intake/ Woodland-Davis Water Supply Project EIR, Water Right Acquisition Support and Permitting, Davis and Woodland, Yolo County CA. *Lead Archaeologist.* Dr. Marks conducted a cultural resources survey of the proposed Davis & Woodland Water Supply and was responsible for insuring the project meets Section 106 guidelines as well as CEQA regulations. As no resources were encountered during the survey, there will be no negative effect from this project.

D210586.00 VA Outpatient Clinic and Community Living Center Environmental Consulting Services, Stockton, CA. *Archaeologist.* Dr. Marks conducted a cultural resources study on two potential sites for a VA outpatient clinic and community living center. He surveyed the proposed sites and wrote the technical reports.

D210541.00 Union Pacific Railroad Modernization Project, San Joaquin County, CA *Lead Archaeologist.* Dr. Marks conducted a cultural resources study of the proposed expansion of the UP Intermodal Facility in Lathrop. and was responsible for insuring the project meets CEQA guidelines, surveying the project area, and he wrote the cultural resources section of the EIR.

D210324 Cadiz Groundwater Project, San Bernardino County, CA.

Archaeologist. Dr. Marks prepared the DPR forms and associated maps using GIS for the 28 newly recorded archaeological sites and eight updated archaeological sites.

D209259.00 Mather Specific Plan EIS, Sacramento, CA. Lead Archaeologist. Dr.

Marks conducted a cultural resources study of the former Mather Air Force Base and was responsible for insuring the project meets Section 106 guidelines, surveying the project area, and writing the cultural resources section of the EIS. The survey included the airport, an aircraft hanger, a former tarmac, a radar station, and two munitions storage areas. As most of the changes in land use will occur away from the actual airport used for training in WWI and WWII and as a staging point during all wars in the Pacific Theater, there will be no negative effect on the airport.

Prior to Joining ESA...

Eureka Lock Training Site, Department of Military Affairs, Florida Army National Guard, Eureka, FL. *Project Supervisor and Co-Principal Investigator.*

Dr. Marks served as the project supervisor and co-principal investigator to survey an area around and including the Eureka Lock and Dam in Eureka, Florida along the Oklawaha River. The lock and dam complex was part of the ill-fated Cross-Florida Barge Canal and marks the terminus of that system in Eastern Florida. Dr. Marks lead a team that performed background research of the project area and conducted a Phase I Cultural Resources Assessment Survey which included pedestrian inspection and shovel tests placed at regular intervals. During consultation with the State Historic Preservation Officer (SHPO), it was determined that the structures surrounding the lock gates and the complex as a whole, while not 50 years old, would be eligible for the NRHP and were recorded with Florida Master Site File. Dr. Marks recorded these elements and prepared a report for the SHPO as part of National Environmental Policy Act (NEPA) Section 106 compliance.

Little Hazel Creek Mitigation Creek, Restoration Systems, LLC, Habersham County, GA. *Cultural Resource Task Leader.*

Dr. Marks was a member of a multi-disciplinary team involved with the restoration of a portion of Little Hazel Creek with Habersham County, Georgia. He was responsible for the cultural resources survey and conducted background research at the Georgia Master Site File (GMSF) lead the field crew that performed regular interval shovel testing along the proposed alignment and pedestrian inspection of the Area of Potential Effect. Dr. Marks prepared a cultural resources survey report for the United States Army Corps of Engineers' Office in Savannah, Georgia as part of NEPA Section 106 compliance.

Bear Creek Mitigation Bank, Mitigation Resources, Bay and Calhoun Counties, FL. *Project Supervisor and Co-Principal Investigator.*

Dr. Marks served as project supervisor and co-principal investigator for the Bear Creek Mitigation Bank in the Panhandle area of Florida. The project was proposing to restore the natural drainage of the property and create wetlands within an area of silviculture. Dr. Marks performed the background research of the area at the Florida Master Site File (FMSF) and lead a field crew in the cultural resources survey. Shovel tests were placed within areas of proposed impact and areas exhibiting a high probability or containing cultural resources, and the area was subjected to pedestrian inspection. Dr. Marks prepared a cultural resources survey report for the Florida SHPO as part of Section 273 of the Florida Statutes and NEPA Section 106.

Heather Island Mitigation Bank, Mitigation Resources, Marion County, FL. *Project Supervisor and Co-Principal Investigator.*

Dr. Marks served as project supervisor and co-principal investigator for the Heather Island Mitigation Bank in Central Florida. The project was proposing to restore the natural drainage of the property and create wetlands within an area of silviculture. Dr. Marks performed the background research of the area at the FMSF and led a field crew in the cultural resources survey. Shovel tests were placed within areas of proposed impact and areas exhibiting a high probability or containing cultural resources, and the area was subjected to pedestrian inspection. The survey revealed several resources including a section of the Marjorie Carr Cross Florida Greenway, (originally the proposed route

of the Cross Florida Barge Canal), several lithic scatters and a historic roadway. Dr. Marks documented these resources for the FMSF and prepared a cultural resources survey report for the Florida SHPO as part of Section 273 of the Florida Statutes and NEPA Section 106.

Natural Bridge Battlefield, Florida State Parks, Leon County, FL. *Project Supervisor and Lead Archaeologist.* Dr. Marks was project supervisor and lead archaeologist for the cultural resources investigation of the Natural Bridge Battlefield Historic State Park in southern Leon County. The State of Florida purchased 50+ acres of land to expand the existing Natural Bridge Battlefield State Park, and required a cultural resources inventory of the property that contained a large portion of the original battlefield. In addition to background research, Dr. Marks lead a field crew in regular interval shovel testing, pedestrian inspection, and metal detection of the entire park. In addition, Dr. Marks assisted the park rangers in utilizing and organizing a force of over two hundred volunteers to assist archaeological investigation over a two day period. Following the survey, Dr. Marks assisted in lab analysis, artifact identification, and the preparation of the report for SHPO as part of Section 273 of the Florida Statutes and NEPA Section 106.

AIRPORTS

Eagle Aviation Hangers at Craig Municipal Airfield, Jacksonville, FL. *Lead Archaeologist.* Dr. Marks served as lead archaeologist for a survey within the airport grounds for a new industrial warehouse to comply with state and county permitting requirements. While the airport was a historic resource, as this former WWII training field was the home of the Blue Angels first airshow in 1946, the Area of Potential Effects for the warehouse would not impact any significant portions of the airport, nor would it detract from the overall setting or function of the airport.

Shoremaster at Kay Larkin Airport, Palatka, FL. *Lead Archaeologist.* Dr. Marks conducted a survey within the airport grounds for a new commercial building to comply with local and state permitting requirements. While the building was constructed along a former runway utilized in WWII for training, that runway had been decommissioned and now supported several commercial buildings. The new building would be part of this complex and would not detract further from the airport's setting.

T-Hanger and Apron Lighting at New Smyrna Beach Airport. New Smyrna Beach, FL. *Lead Archaeologist.* Dr. Marks conducted two separate surveys within the grounds of the New Smyrna Beach Airport. Both projects involved construction and/or expansion of existing airport buildings (T-Hanger) or facilities (Apron Lighting), which would not detract from the setting or feeling of this WWII Naval Aviation training facility. No resources were found during testing and there would be no impacts to the nearby Nationally Registered Turnbull Canal.

Cell Towers at St. Augustine, Lake City, and Flagler County Airports, FL. *Lead Archaeologist.* As lead archaeologist, Dr. Marks conducted three separate surveys involving the placement of cell/communication towers within the airport property of the three airports. Both the St. Augustine and Lake City Airports were used as WWII training facilities, while the Flagler County Airport was built after the war. The

towers were built outside the fence of the main airport, but on airport property. The towers would not affect air space and would not detract from the setting of the airports.

Descriptions of Prior Responsibilities

Environmental Services, Inc., St. Augustine, Florida, Archaeologist. Dr. Marks' responsibilities have included the identification and determination of NRHP eligibility of archaeological sites based type, age, composition, source of artifacts recovered at all levels of field investigation from reconnaissance to Phase III mitigation and data recovery for terrestrial and underwater projects in Florida and Georgia. Functioning as a Principal Investigator, he was in frequent contact with the offices of the SHPO, DHR, and BAR, as well as Tribal Historic Preservation Officers, Florida Master Site File, Georgia Division of Natural Resources, and various county, city, and municipalities. In the lab, Dr. Marks analyzed artifacts and faunal remains to determine their place within the archaeological record, as well as perform cursory conservation when needed. Dr. Marks was also responsible for the GIS data management for most of the Florida and Georgia archaeology work for ESI. Additionally, he directed, coordinated and prepared time and cost estimates for cultural resources contracts, and compile information and standards for proposal requests.

National Park Service, Southeastern Archeological Center (SEAC) Tallahassee, Florida, Document Curator and Museum Technician. Dr. Marks handled the curation of documents, maps, and photographs from archaeological projects within the National Park Service, Southeast Section. His duties involved inventorying, cataloging, creating databases, and preparing documents for preservation. Additionally, documents that were deteriorating were copied on acid free paper for curation. Other duties included analyzing and cataloging artifacts recovered from archaeological excavation that occurred within the National Park System and entering artifact information into a database.

APPENDIX B

Native American Correspondence



2600 Capitol Ave
Suite 200
Sacramento, CA 95816
916.564.4500 **phone**
916.564.4501 **fax**

www.esassoc.com

May 3, 2012

Kesner Flores
PO Box 1047
Wheatland, CA 95692

Subject: Velocity Island Project

Dear Mr. Flores:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

In an effort to address any potential impact to archaeological or ethnographic resources, we are seeking comments from Native American representatives; the Native American Heritage Commission supplied your name as a contact for this area. We would appreciate your comments identifying any concerns or issues pertinent to this project.

Thank you for your time and cooperation regarding this matter. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian S. Marks". The signature is fluid and cursive, with a large, stylized "B" and "M".

Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



2600 Capitol Ave
Suite 200
Sacramento, CA 95816
916.564.4500 [phone](tel:916.564.4500)
916.564.4501 [fax](tel:916.564.4501)

www.esassoc.com

May 3, 2012

Cortina Band of Indians
Charlie Wright, Chairperson
PO Box 1630
Williams, CA 95987

Subject: Velocity Island Project

Dear Chairperson Wright:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



2600 Capitol Ave
Suite 200
Sacramento, CA 95816
916.564.4500 **phone**
916.564.4501 **fax**

www.esassoc.com

May 3, 2012

Cortina Wintun Environmental Protection Agency
PO Box 1630
Williams, CA 95987

Subject: Velocity Island Project

To Whom it May Concern:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



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Sacramento, CA 95816
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May 3, 2012

Yocha Dehe Wintun Nation
Marshal McKay, Chairperson
PO Box 18
Brooks, CA 95606

Subject: Velocity Island Project

Dear Mr. McKay:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



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May 3, 2012

Yocha Dehe Wintun Nation
Cynthia Clarke, Native Cultural Renewal Committee
PO Box 18
Brooks, CA 95606

Subject: Velocity Island Project

Dear Ms. Clarke:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



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May 3, 2012

Yocha Dehe Wintun Nation
Leland Kinter, Native Cultural Renewal Committee
PO Box 18
Brooks, CA 95606

Subject: Velocity Island Project

Dear Mr. Kinter:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



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May 3, 2012

Yocha Dehe Wintun Nation
Reno Franklin, Native Cultural Renewal Committee
PO Box 18
Brooks, CA 95606

Subject: Velocity Island Project

Dear Mr. Franklin:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Sincerely,

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5380



May 3, 2012

Katherine Anderson
ESA
2600 Capitol Avenue, Suite 200
Sacramento, CA 95816

Sent by Fax: 916-564-4501
Number of Pages: 2

Re: Velocity Island Project, Yolo County.

Dear Ms. Anderson:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pitas-Treadway
Environmental Specialist III

**Native American Contacts
Yolo County
May 2, 2012**

Kesner Flores
PO Box 1047
Wheatland, CA 95692
calnagpra@hotmail.com
925-586-8919

Wintun / Patwin

Yocha Dehe Wintun Nation
Cynthia Clarke, Native Cultural Renewal Committee
P.O. Box 18
Brooks, CA 95606
(530) 796-3400 - office
(530) 796-2143 Fax

Wintun (Patwin)

Cortina Band of Indians
Charlie Wright, Chairperson
PO Box 1630
Williams, CA 95987
(530) 473-3274 - Voice
(530) 473-3190 - Voice
(530) 473-3301 - Fax

Wintun / Patwin

Yocha Dehe Wintun Nation
Reno Franklin, Cultural Resources Director
P.O. Box 18
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rfranklin@yochadehe-nsn.gov
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(530) 796-2143 Fax

Wintun (Patwin)

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corwepa@yahoo.com
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(530) 473-3319
(530) 473-3301 - Fax

Wintun (Patwin)

Yocha Dehe Wintun Nation
Marshall McKay, Chairperson
P.O. Box 18
Brooks, CA 95606
(530) 796-3400
(530) 796-2143 Fax

Wintun (Patwin)

Yocha Dehe Wintun Nation
Leland Kinter, Native Cultural Renewal Committee
P.O. Box 18
Brooks, CA 95606
lkinter@yochadehe-nsn.gov
(530) 979-6346
(530) 796-3400 - office
(530) 796-2143 Fax

Wintun (Patwin)

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Velocity Island project, Yolo County

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390



May 3, 2012

Brian S. Marks
ESA
2600 Capitol Avenue, Suite 200
Sacramento, CA 95816

Sent by Fax: 916-564-4501
Number of Pages: 3

Re: Pristine Solar Array, Shasta County.

Dear Mr. Marks:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

**Native American Contacts
Shasta County
May 2, 2012**

Matthew Root
16117 North St.
Keswick, CA 96001
530-247-7351

Wintu

Redding Rancheria
Tracy Edwards, Chief Executive Officer
2000 Redding Rancheria Road
Redding, CA 96001
traceye@redding-rancheria.
(530) 225-8979
Fax: (530) 241-1879

Loretta Root
5620 Kofford Lane
Redding, CA 96001

Wintu

Redding Rancheria
Jason Hart, Chairperson
2000 Redding Rancheria Road
Redding, CA 96001
(530) 225-8979
(530) 241-1879 - Fax

Pit River Tribe Environmental Office
Cultural Information Officer

36970 Park Ave
Burney, CA 96013

ajumawi@frontier.net

(530) 335-5062, Ext. 2

Pit River
Wintun

Redding Rancheria Cultural Resources
James Hayward Sr., Cultural Resources Program
2000 Redding Rancheria Road
Redding, CA 96001
jamesh@redding-rancheria.com
530-242-4543
530-410-2873 - cell
Fax: (530) 241-1879

Pit River Tribe of California
Juan Venegas, Chairperson

36970 Park Ave
Burney, CA 96013

(530) 335-5421

(530) 335-3140 Fax

Pit River
Achumawi -
Wintun

United Tribe of Northern Calif., Inc., Wintu, Wintun, Wintoon
Gloria Gomes, Chairperson
20059 Parocast
Redding, CA 96003
shastapinenut@yahoo.com
(530) 275-1915

Pit River Tribe of California
Alexis Barry, Tribal Administrator

36970 Park Ave
Burney, CA 96013

(530) 335-5421

(530) 335-3140 Fax

Pit River
Achomawi -
Wintun

United Tribe of Northern Calif., Inc., Wintu, Wintun, Wintoon
John Castro, Cultural Liaison
20059 Parocast
Redding, CA 96003
shastapinenut@yahoo.com
(530) 275-1915

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This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Pristine Solar Array @ 2113 Panther Road, Shasta County

**Native American Contacts
Shasta County
May 2, 2012**

Winnemem Wintu Tribe
Caleen Sisk-Franco, Tribal Chair
14840 Bear Mountain Road Wintu
Redding , CA 96003
winnemem@hotmail.com

(530) 275-2737
(530) 275-4193 FAX

Wintu Educational and Cultural Council
Robert Burns
PO Box 483 Wintu
Hayfork , CA 96041
(530) 628-5930

Wintu Tribe of Northern California
Kelli Hayward
PO Box 995 Wintu
Shasta Lake , CA 96019
wintu_tribe@hotmail.com

This list is current only as of the date of this document.

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**This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed
Pristine Solar Array @ 2113 Panther Road, Shasta County**

April 25, 2012

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

SUBJECT: Request for Search of Sacred Lands Files and Native American Contact List

Dear Ms. Treadway:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

In an effort to provide an adequate appraisal of all potential impacts that may result from the proposed project, ESA is requesting that a search be conducted of the sacred lands files and records of traditional cultural properties that may exist within or adjacent to the project area. I would also like to request a list of Native American individuals and organizations that should be contacted about potential sites and resources of importance to Native Americans.

Thank you for your time and cooperation regarding this matter. Please contact me at 916-564-4500 if you have any questions.

Sincerely,

Katherine Anderson
Cultural Resource Associate

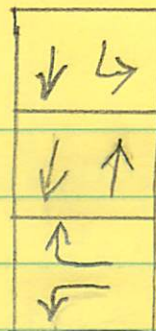
Appendix D

Traffic

12-7112-001

WOODLAND, CA

N ↑



N. EAST ST.



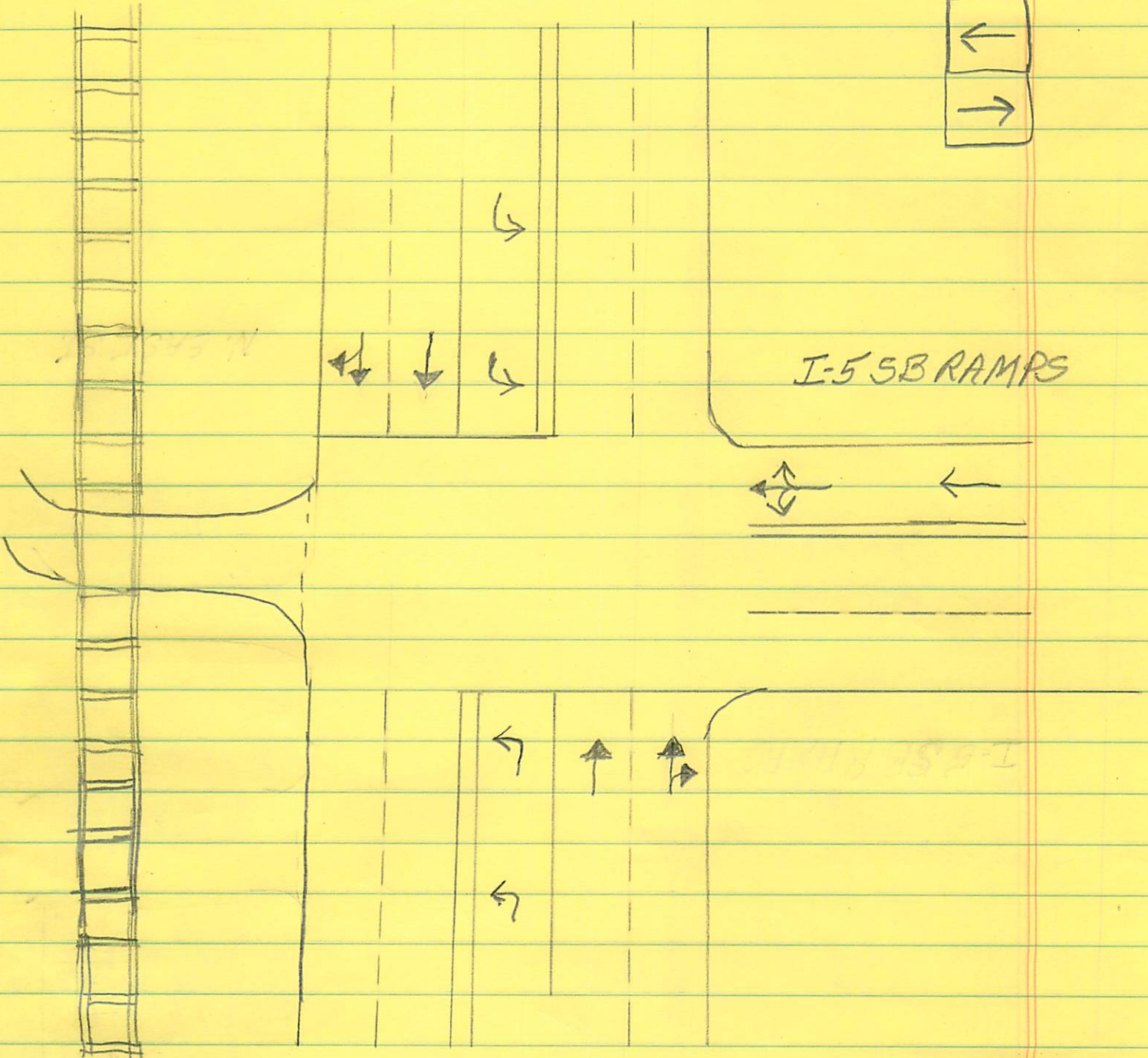
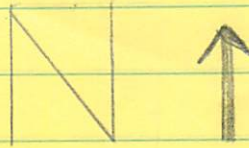
I-5 NB RAMP



Li's ROBERTSON

12-7112-002

WOODLAND, CA



I-5 SB RAMPS

his ROBERTSON

All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 1

Groups Printed- Unshifted

	N. East Street Southbound				I-5 Northbound Ramps Westbound				N. East Street Northbound				I-5 Northbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00	0	29	0	29	28	0	24	52	0	32	5	37	0	0	0	0	118
07:15	1	34	0	35	32	0	15	47	0	17	8	25	0	0	0	0	107
07:30	2	44	0	46	39	0	12	51	0	28	3	31	0	0	0	0	128
07:45	2	51	0	53	62	0	27	89	0	35	5	40	0	0	0	0	182
Total	5	158	0	163	161	0	78	239	0	112	21	133	0	0	0	0	535
08:00	2	38	0	40	37	0	13	50	0	40	6	46	0	0	0	0	136
08:15	1	36	0	37	41	0	19	60	0	22	7	29	0	0	0	0	126
08:30	0	36	0	36	34	0	16	50	0	31	11	42	0	0	0	0	128
08:45	2	33	0	35	33	0	15	48	0	39	6	45	0	0	0	0	128
Total	5	143	0	148	145	0	63	208	0	132	30	162	0	0	0	0	518
16:00	1	55	0	56	41	0	17	58	0	18	8	26	0	0	0	0	140
16:15	2	52	0	54	36	0	17	53	0	40	7	47	0	0	0	0	154
16:30	2	92	0	94	39	0	20	59	0	27	8	35	0	0	0	0	188
16:45	2	40	0	42	37	0	21	58	0	39	5	44	0	0	0	0	144
Total	7	239	0	246	153	0	75	228	0	124	28	152	0	0	0	0	626
17:00	2	52	0	54	32	0	9	41	0	44	11	55	0	0	0	0	150
17:15	0	43	0	43	30	0	10	40	0	43	6	49	0	0	0	0	132
17:30	2	54	0	56	35	0	15	50	0	36	5	41	0	0	0	0	147
17:45	0	33	0	33	26	0	13	39	0	35	4	39	0	0	0	0	111
Total	4	182	0	186	123	0	47	170	0	158	26	184	0	0	0	0	540
Grand Total	21	722	0	743	582	0	263	845	0	526	105	631	0	0	0	0	2219
Apprch %	2.8	97.2	0		68.9	0	31.1		0	83.4	16.6		0	0	0		
Total %	0.9	32.5	0	33.5	26.2	0	11.9	38.1	0	23.7	4.7	28.4	0	0	0	0	

All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 2

	N. East Street Southbound				I-5 Northbound Ramps Westbound				N. East Street Northbound				I-5 Northbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	2	44	0	46	39	0	12	51	0	28	3	31	0	0	0	0	128
07:45	2	51	0	53	62	0	27	89	0	35	5	40	0	0	0	0	182
08:00	2	38	0	40	37	0	13	50	0	40	6	46	0	0	0	0	136
08:15	1	36	0	37	41	0	19	60	0	22	7	29	0	0	0	0	126
Total Volume	7	169	0	176	179	0	71	250	0	125	21	146	0	0	0	0	572
% App. Total	4	96	0		71.6	0	28.4		0	85.6	14.4		0	0	0		
PHF	.875	.828	.000	.830	.722	.000	.657	.702	.000	.781	.750	.793	.000	.000	.000	.000	.786

All Traffic Data

(916) 771-8700

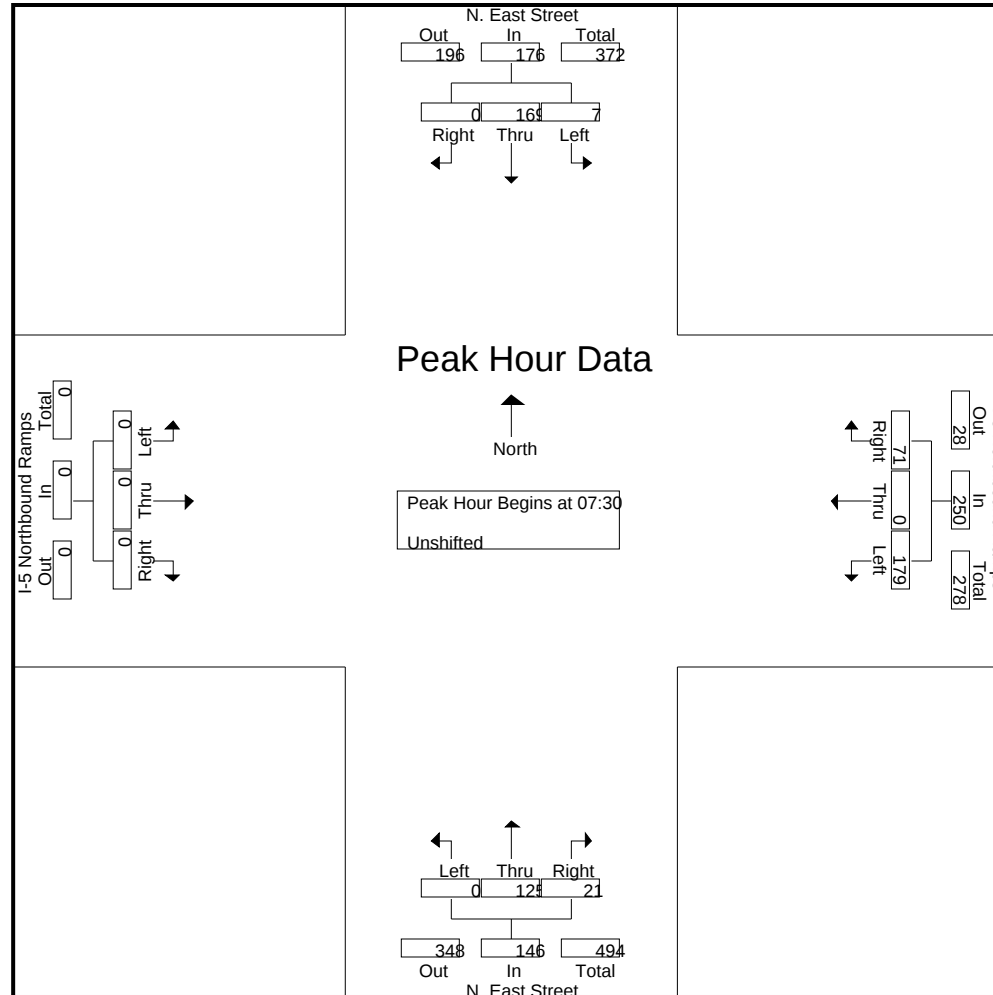
City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 3



All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 4

	N. East Street Southbound				I-5 Northbound Ramps Westbound				N. East Street Northbound				I-5 Northbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:15																	
16:15	2	52	0	54	36	0	17	53	0	40	7	47	0	0	0	0	154
16:30	2	92	0	94	39	0	20	59	0	27	8	35	0	0	0	0	188
16:45	2	40	0	42	37	0	21	58	0	39	5	44	0	0	0	0	144
17:00	2	52	0	54	32	0	9	41	0	44	11	55	0	0	0	0	150
Total Volume	8	236	0	244	144	0	67	211	0	150	31	181	0	0	0	0	636
% App. Total	3.3	96.7	0		68.2	0	31.8		0	82.9	17.1		0	0	0		
PHF	1.000	.641	.000	.649	.923	.000	.798	.894	.000	.852	.705	.823	.000	.000	.000	.000	.846

All Traffic Data

(916) 771-8700

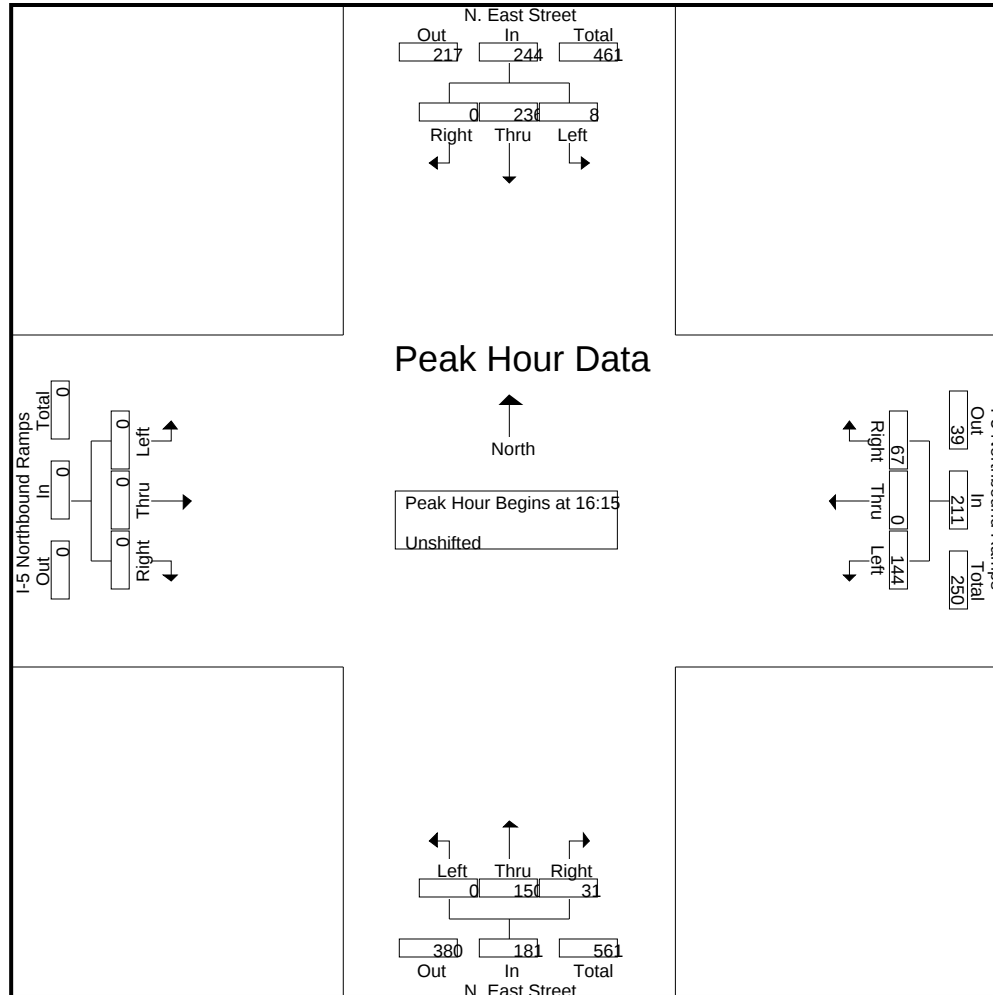
City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 5



All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 1

Groups Printed- Unshifted

	N. East Street Southbound				I-5 Southbound Ramps Westbound				N. East Street Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00	16	39	1	56	3	0	3	6	0	32	21	53	0	0	0	0	115
07:15	24	49	0	73	6	0	4	10	0	28	25	53	0	0	0	0	136
07:30	23	64	0	87	9	0	5	14	0	32	53	85	0	0	0	0	186
07:45	15	106	0	121	4	0	7	11	0	48	50	98	0	0	0	0	230
Total	78	258	1	337	22	0	19	41	0	140	149	289	0	0	0	0	667
08:00	22	69	0	91	6	0	5	11	0	52	37	89	0	0	0	0	191
08:15	25	73	0	98	4	0	6	10	0	40	39	79	0	0	0	0	187
08:30	17	71	0	88	11	0	5	16	0	44	37	81	0	0	0	0	185
08:45	14	51	0	65	7	0	3	10	0	41	24	65	0	0	0	0	140
Total	78	264	0	342	28	0	19	47	0	177	137	314	0	0	0	0	703
16:00	33	78	0	111	11	0	4	15	1	36	45	82	0	0	1	1	209
16:15	29	65	0	94	4	0	3	7	0	46	36	82	1	0	0	1	184
16:30	40	94	0	134	4	0	5	9	0	50	58	108	0	0	0	0	251
16:45	24	67	0	91	6	0	5	11	0	47	38	85	0	0	0	0	187
Total	126	304	0	430	25	0	17	42	1	179	177	357	1	0	1	2	831
17:00	20	77	0	97	6	0	3	9	0	63	60	123	0	0	0	0	229
17:15	15	63	0	78	6	0	2	8	0	50	44	94	0	0	0	0	180
17:30	19	71	0	90	2	0	7	9	0	47	21	68	0	0	0	0	167
17:45	15	51	0	66	3	0	2	5	0	47	31	78	0	0	0	0	149
Total	69	262	0	331	17	0	14	31	0	207	156	363	0	0	0	0	725
Grand Total	351	1088	1	1440	92	0	69	161	1	703	619	1323	1	0	1	2	2926
Apprch %	24.4	75.6	0.1		57.1	0	42.9		0.1	53.1	46.8		50	0	50		
Total %	12	37.2	0	49.2	3.1	0	2.4	5.5	0	24	21.2	45.2	0	0	0	0.1	

All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 2

	N. East Street Southbound				I-5 Southbound Ramps Westbound				N. East Street Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	23	64	0	87	9	0	5	14	0	32	53	85	0	0	0	0	186
07:45	15	106	0	121	4	0	7	11	0	48	50	98	0	0	0	0	230
08:00	22	69	0	91	6	0	5	11	0	52	37	89	0	0	0	0	191
08:15	25	73	0	98	4	0	6	10	0	40	39	79	0	0	0	0	187
Total Volume	85	312	0	397	23	0	23	46	0	172	179	351	0	0	0	0	794
% App. Total	21.4	78.6	0		50	0	50		0	49	51		0	0	0		
PHF	.850	.736	.000	.820	.639	.000	.821	.821	.000	.827	.844	.895	.000	.000	.000	.000	.863

All Traffic Data

(916) 771-8700

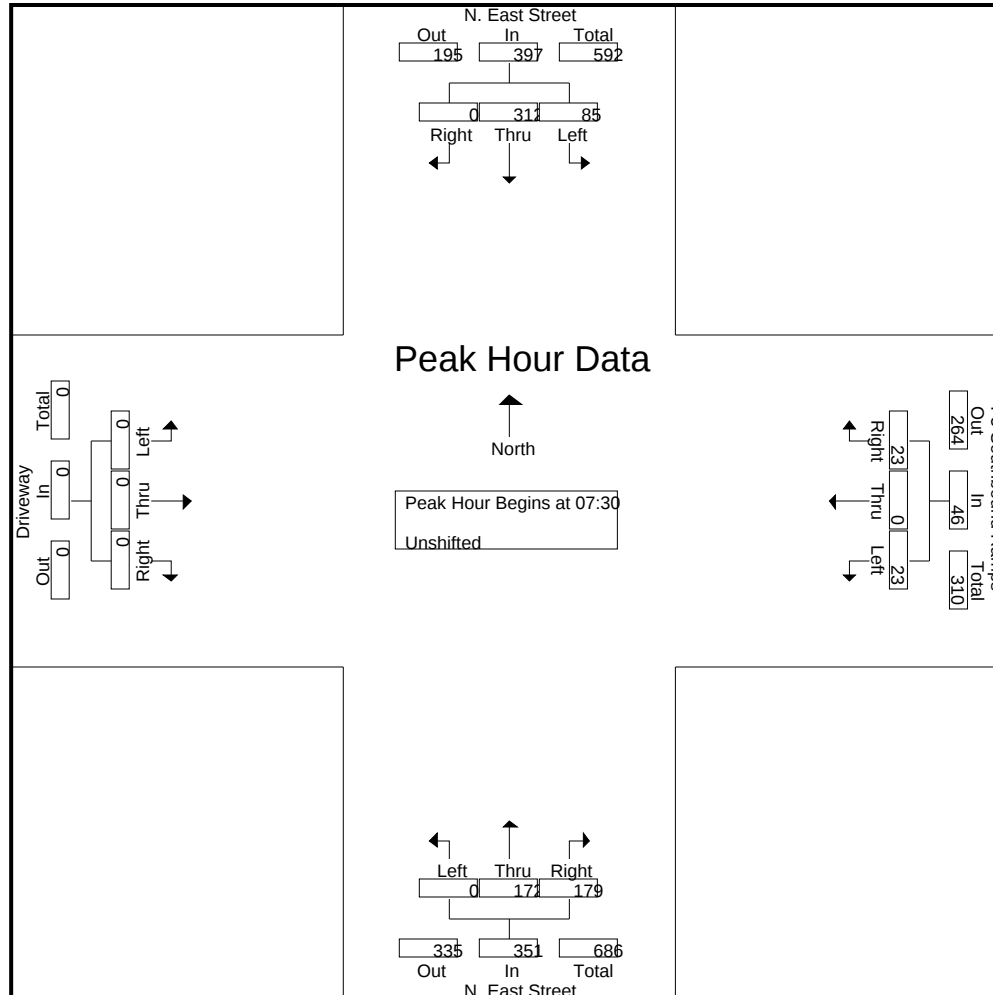
City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 3



All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 4

	N. East Street Southbound				I-5 Southbound Ramps Westbound				N. East Street Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:15																	
16:15	29	65	0	94	4	0	3	7	0	46	36	82	1	0	0	1	184
16:30	40	94	0	134	4	0	5	9	0	50	58	108	0	0	0	0	251
16:45	24	67	0	91	6	0	5	11	0	47	38	85	0	0	0	0	187
17:00	20	77	0	97	6	0	3	9	0	63	60	123	0	0	0	0	229
Total Volume	113	303	0	416	20	0	16	36	0	206	192	398	1	0	0	1	851
% App. Total	27.2	72.8	0		55.6	0	44.4		0	51.8	48.2		100	0	0		
PHF	.706	.806	.000	.776	.833	.000	.800	.818	.000	.817	.800	.809	.250	.000	.000	.250	.848

All Traffic Data

(916) 771-8700

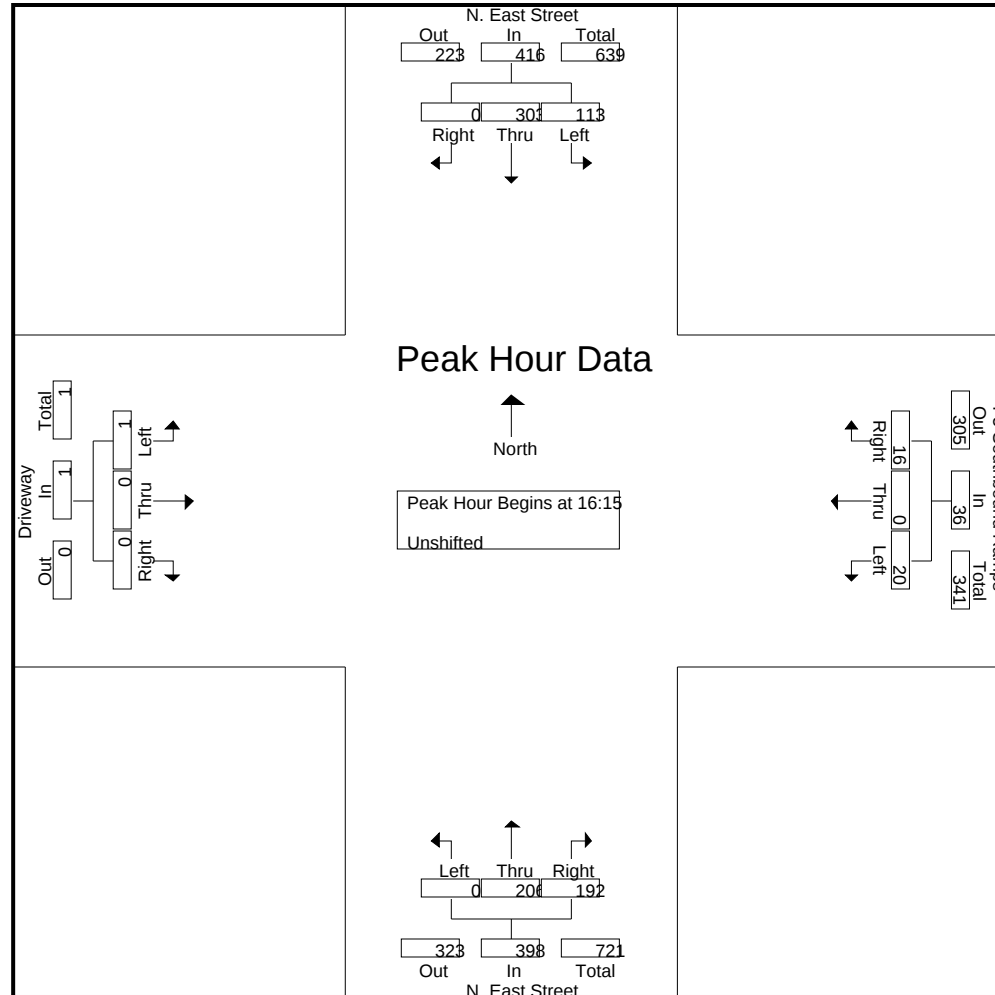
City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 5



Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.250
 Loss Time (sec): 13 Average Delay (sec/veh): 18.9
 Optimal Cycle: 31 Level Of Service: B

N East St				I-5 NB Ramps											
Approach: North Bound				Approach: South Bound				Approach: East Bound				Approach: West Bound			
Movement: L - T - R				Movement: L - T - R				Movement: L - T - R				Movement: L - T - R			
Control: Protected				Control: Protected				Control: Protected				Control: Protected			
Rights: Include				Rights: Include				Rights: Include				Rights: Include			
Min. Green:	0	8	8	5	4	0	0	0	0	3	3	3			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	0	0	1 1 0	1	0	2 0 0	0	0	0 0 0	0	0	1! 0 1			

Volume Module: >> Count Date: 29 Mar 2012 <<												
Base Vol:	0	125	21	7	169	0	0	0	0	179	0	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	125	21	7	169	0	0	0	0	179	0	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	158	27	9	214	0	0	0	0	227	0	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	158	27	9	214	0	0	0	0	227	0	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	158	27	9	214	0	0	0	0	227	0	90

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.71	0.29	1.00	2.00	0.00	0.00	0.00	0.00	0.83	0.00	1.17
Final Sat.:	0	3023	508	1805	3610	0	0	0	0	1464	0	2045

Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.15	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.20	0.20	0.06	0.26	0.00	0.00	0.00	0.00	0.59	0.00	0.59
Volume/Cap:	0.00	0.26	0.26	0.08	0.23	0.00	0.00	0.00	0.00	0.26	0.00	0.07
Uniform Del:	0.0	28.8	28.8	37.8	24.9	0.0	0.0	0.0	0.0	8.5	0.0	7.5
IncrementDel:	0.0	0.2	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	29.0	29.0	38.2	25.0	0.0	0.0	0.0	0.0	8.6	0.0	7.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	29.0	29.0	38.2	25.0	0.0	0.0	0.0	0.0	8.6	0.0	7.5
LOS by Move:	A	C	C	D	C	A	A	A	A	A	A	A
HCM2kAvgQ:	0	2	2	0	2	0	0	0	0	3	0	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.243
 Loss Time (sec): 13 Average Delay (sec/veh): 11.9
 Optimal Cycle: 39 Level Of Service: B

Street Name: N East St I-5 SB Ramps
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 3 4 0 15 4 0 0 0 0 7 0 7
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 0 0 0 0 0 1! 0 0
 -----|-----|-----|-----|

Volume Module: >> Count Date: 29 Mar 2012 <<
 Base Vol: 0 172 179 85 312 0 0 0 0 23 0 23
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 172 179 85 312 0 0 0 0 23 0 23
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86
 PHF Volume: 0 200 208 99 363 0 0 0 0 27 0 27
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 200 208 99 363 0 0 0 0 27 0 27
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 200 208 99 363 0 0 0 0 27 0 27
 -----|-----|-----|-----|

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustmet: 1.00 0.88 0.88 0.95 0.95 0.95 1.00 1.00 1.00 0.91 1.00 0.91
 Lanes: 1.00 1.00 1.00 1.00 2.00 0.00 0.00 0.00 0.00 0.50 0.00 0.50
 Final Sat.: 1900 1668 1668 1805 3610 0 0 0 0 865 0 865
 -----|-----|-----|-----|

Capacity Analysis Module:
 Vol/Sat: 0.00 0.12 0.12 0.05 0.10 0.00 0.00 0.00 0.00 0.03 0.00 0.03
 Crit Moves: ****
 Green/Cycle: 0.00 0.49 0.49 0.23 0.72 0.00 0.00 0.00 0.00 0.13 0.00 0.13
 Volume/Cap: 0.00 0.24 0.25 0.24 0.14 0.00 0.00 0.00 0.00 0.24 0.00 0.24
 Uniform Del: 0.0 12.4 12.4 27.0 3.7 0.0 0.0 0.0 0.0 33.4 0.0 33.4
 IncremntDel: 0.0 0.1 0.1 0.3 0.0 0.0 0.0 0.0 0.0 0.6 0.0 0.6
 InitQueueDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Delay Adj: 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00
 Delay/Veh: 0.0 12.4 12.5 27.3 3.7 0.0 0.0 0.0 0.0 34.0 0.0 34.0
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 12.4 12.5 27.3 3.7 0.0 0.0 0.0 0.0 34.0 0.0 34.0
 LOS by Move: A B B C A A A A A C A C
 HCM2kAvgQ: 0 3 3 2 2 0 0 0 0 1 0 1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.219
 Loss Time (sec): 13 Average Delay (sec/veh): 18.9
 Optimal Cycle: 30 Level Of Service: B

N East St				I-5 NB Ramps											
Approach: North Bound				South Bound				East Bound				West Bound			
Movement: L - T - R				L - T - R				L - T - R				L - T - R			
Control: Protected				Protected				Protected				Protected			
Rights: Include				Include				Include				Include			
Min. Green:	0	8	8	5	4	0	0	0	0	3	3	3			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	0	0	1 1 0	1	0	2 0 0	0	0	0 0 0	0	0	1! 0 1			

Volume Module: >> Count Date: 29 Mar 2012 <<

Base Vol:	0	150	31	8	236	0	0	0	0	144	0	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	150	31	8	236	0	0	0	0	144	0	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	176	36	9	278	0	0	0	0	169	0	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	176	36	9	278	0	0	0	0	169	0	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	176	36	9	278	0	0	0	0	169	0	79

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.66	0.34	1.00	2.00	0.00	0.00	0.00	0.00	0.81	0.00	1.19
Final Sat.:	0	2914	602	1805	3610	0	0	0	0	1419	0	2079

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.06	0.01	0.08	0.00	0.00	0.00	0.00	0.12	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.27	0.27	0.06	0.32	0.00	0.00	0.00	0.00	0.52	0.00	0.52
Volume/Cap:	0.00	0.23	0.23	0.09	0.24	0.00	0.00	0.00	0.00	0.23	0.00	0.07
Uniform Del:	0.0	24.4	24.4	37.8	21.0	0.0	0.0	0.0	0.0	11.0	0.0	10.1
IncrementDel:	0.0	0.1	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	24.5	24.5	38.2	21.1	0.0	0.0	0.0	0.0	11.1	0.0	10.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	24.5	24.5	38.2	21.1	0.0	0.0	0.0	0.0	11.1	0.0	10.1
LOS by Move:	A	C	C	D	C	A	A	A	A	B	A	B
HCM2kAvgQ:	0	2	2	0	3	0	0	0	0	3	0	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.281
 Loss Time (sec): 13 Average Delay (sec/veh): 11.8
 Optimal Cycle: 39 Level Of Service: B

Street Name:		N East St						I-5 SB Ramps					
Approach:		North Bound			South Bound			East Bound			West Bound		
Movement:		L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected		
Rights:		Include			Include			Include			Include		
Min. Green:		3	4	0	15	4	0	0	0	0	7	0	7
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:		1	0	1	1	0	1	0	0	0	0	0	1

Volume Module: >> Count Date: 29 Mar 2012 <<												
Base Vol:	0	206	192	113	303	0	0	0	0	20	0	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	206	192	113	303	0	0	0	0	20	0	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	242	226	133	356	0	0	0	0	24	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	242	226	133	356	0	0	0	0	24	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	242	226	133	356	0	0	0	0	24	0	19

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.04	0.96	1.00	2.00	0.00	0.00	0.00	0.00	0.56	0.00	0.44
Final Sat.:	1900	1734	1616	1805	3610	0	0	0	0	965	0	772

Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.07	0.10	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.50	0.50	0.26	0.76	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Volume/Cap:	0.00	0.28	0.28	0.28	0.13	0.00	0.00	0.00	0.00	0.28	0.00	0.28
Uniform Del:	0.0	12.5	12.5	25.0	2.7	0.0	0.0	0.0	0.0	36.3	0.0	36.3
IncrementDel:	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	12.5	12.5	25.3	2.7	0.0	0.0	0.0	0.0	37.3	0.0	37.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.5	12.5	25.3	2.7	0.0	0.0	0.0	0.0	37.3	0.0	37.3
LOS by Move:	A	B	B	C	A	A	A	A	A	D	A	D
HCM2kAvgQ:	0	4	4	3	1	0	0	0	0	1	0	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.253
 Loss Time (sec): 13 Average Delay (sec/veh): 18.9
 Optimal Cycle: 31 Level Of Service: B

Street Name:		N East St						I-5 NB Ramps													
Approach:		North Bound			South Bound			East Bound			West Bound										
Movement:		L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:		Protected						Protected						Protected							
Rights:		Include						Include						Include							
Min. Green:		0		8		8	5		4		0	0		0		0	3		3		3
Y+R:		4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0
Lanes:		0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	0	0	1	0	1

Volume Module: >> Count Date: 29 Mar 2012 <<												
Base Vol:	0	125	21	7	169	0	0	0	0	179	0	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	125	21	7	169	0	0	0	0	179	0	71
Added Vol:	0	4	0	1	4	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	129	21	8	173	0	0	0	0	179	0	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	163	27	10	219	0	0	0	0	227	0	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	163	27	10	219	0	0	0	0	227	0	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	163	27	10	219	0	0	0	0	227	0	91

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.72	0.28	1.00	2.00	0.00	0.00	0.00	0.00	0.83	0.00	1.17
Final Sat.:	0	3039	495	1805	3610	0	0	0	0	1462	0	2051

Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.05	0.01	0.06	0.00	0.00	0.00	0.00	0.15	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.20	0.20	0.06	0.26	0.00	0.00	0.00	0.00	0.59	0.00	0.59
Volume/Cap:	0.00	0.26	0.26	0.10	0.23	0.00	0.00	0.00	0.00	0.26	0.00	0.08
Uniform Del:	0.0	28.5	28.5	37.9	24.7	0.0	0.0	0.0	0.0	8.6	0.0	7.6
IncrementDel:	0.0	0.2	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	28.7	28.7	38.3	24.8	0.0	0.0	0.0	0.0	8.8	0.0	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.7	28.7	38.3	24.8	0.0	0.0	0.0	0.0	8.8	0.0	7.7
LOS by Move:	A	C	C	D	C	A	A	A	A	A	A	A
HCM2kAvgQ:	0	2	2	0	2	0	0	0	0	4	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.248
 Loss Time (sec): 13 Average Delay (sec/veh): 12.2
 Optimal Cycle: 39 Level Of Service: B

Street Name: N East St I-5 SB Ramps
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 3 4 0 15 4 0 0 0 0 7 0 7
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 0 0 0 0 0 0 1! 0 0
 -----|-----|-----|-----|

Volume Module: >> Count Date: 29 Mar 2012 <<
 Base Vol: 0 172 179 85 312 0 0 0 0 23 0 23
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 172 179 85 312 0 0 0 0 23 0 23
 Added Vol: 0 1 0 3 1 0 0 0 0 0 0 3
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 173 179 88 313 0 0 0 0 23 0 26
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86
 PHF Volume: 0 201 208 102 364 0 0 0 0 27 0 30
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 201 208 102 364 0 0 0 0 27 0 30
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 201 208 102 364 0 0 0 0 27 0 30
 -----|-----|-----|-----|

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 1.00 0.88 0.88 0.95 0.95 0.95 1.00 1.00 1.00 0.91 1.00 0.91
 Lanes: 1.00 1.00 1.00 1.00 2.00 0.00 0.00 0.00 0.00 0.47 0.00 0.53
 Final Sat.: 1900 1668 1668 1805 3610 0 0 0 0 809 0 914
 -----|-----|-----|-----|

Capacity Analysis Module:
 Vol/Sat: 0.00 0.12 0.12 0.06 0.10 0.00 0.00 0.00 0.00 0.03 0.00 0.03
 Crit Moves: **** **** ****
 Green/Cycle: 0.00 0.49 0.49 0.23 0.71 0.00 0.00 0.00 0.00 0.13 0.00 0.13
 Volume/Cap: 0.00 0.25 0.26 0.25 0.14 0.00 0.00 0.00 0.00 0.25 0.00 0.25
 Uniform Del: 0.0 12.8 12.8 26.8 3.9 0.0 0.0 0.0 0.0 33.0 0.0 33.0
 IncremntDel: 0.0 0.1 0.1 0.3 0.0 0.0 0.0 0.0 0.0 0.6 0.0 0.6
 InitQueueDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Delay Adj: 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00
 Delay/Veh: 0.0 12.9 12.9 27.2 3.9 0.0 0.0 0.0 0.0 33.6 0.0 33.6
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 12.9 12.9 27.2 3.9 0.0 0.0 0.0 0.0 33.6 0.0 33.6
 LOS by Move: A B B C A A A A A C A C
 HCM2kAvgQ: 0 3 3 2 2 0 0 0 0 2 0 2

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.221
 Loss Time (sec): 13 Average Delay (sec/veh): 18.9
 Optimal Cycle: 30 Level Of Service: B

N East St					I-5 NB Ramps														
Approach: North Bound					Approach: South Bound					Approach: East Bound					Approach: West Bound				
Movement: L - T - R					Movement: L - T - R					Movement: L - T - R					Movement: L - T - R				
Control: Protected					Control: Protected					Control: Protected					Control: Protected				
Rights: Include					Rights: Include					Rights: Include					Rights: Include				
Min. Green:	0	8	8		5	4	0		0	0	0		3	3	3				
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0				
Lanes:	0	0	1	1	0	1	0	2	0	0	0	0	0	0	1	0	1		

Volume Module: >> Count Date: 29 Mar 2012 <<

Base Vol:	0	150	31		8	236	0		0	0	0		144	0	67
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Initial Bse:	0	150	31		8	236	0		0	0	0		144	0	67
Added Vol:	0	4	0		1	4	0		0	0	0		0	0	1
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0
Initial Fut:	0	154	31		9	240	0		0	0	0		144	0	68
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85
PHF Volume:	0	181	36		11	282	0		0	0	0		169	0	80
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0
Reduced Vol:	0	181	36		11	282	0		0	0	0		169	0	80
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
FinalVolume:	0	181	36		11	282	0		0	0	0		169	0	80

Saturation Flow Module:

Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900
Adjustment:	1.00	0.93	0.93		0.95	0.95	1.00		1.00	1.00	1.00		0.92	1.00	0.92
Lanes:	0.00	1.66	0.34		1.00	2.00	0.00		0.00	0.00	0.00		0.81	0.00	1.19
Final Sat.:	0	2930	590		1805	3610	0		0	0	0		1415	0	2083

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.06		0.01	0.08	0.00		0.00	0.00	0.00		0.12	0.00	0.04
Crit Moves:	****				****				****				****		
Green/Cycle:	0.00	0.27	0.27		0.06	0.33	0.00		0.00	0.00	0.00		0.52	0.00	0.52
Volume/Cap:	0.00	0.23	0.23		0.10	0.24	0.00		0.00	0.00	0.00		0.23	0.00	0.07
Uniform Del:	0.0	24.2	24.2		37.9	20.9	0.0		0.0	0.0	0.0		11.1	0.0	10.2
IncrementDel:	0.0	0.1	0.1		0.4	0.1	0.0		0.0	0.0	0.0		0.1	0.0	0.0
InitQueueDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00		1.00	1.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00
Delay/Veh:	0.0	24.4	24.4		38.3	21.0	0.0		0.0	0.0	0.0		11.2	0.0	10.2
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
AdjDel/Veh:	0.0	24.4	24.4		38.3	21.0	0.0		0.0	0.0	0.0		11.2	0.0	10.2
LOS by Move:	A	C	C		D	C	A		A	A	A		B	A	B
HCM2kAvgQ:	0	2	2		0	3	0		0	0	0		3	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.286
 Loss Time (sec): 13 Average Delay (sec/veh): 12.1
 Optimal Cycle: 39 Level Of Service: B

N East St				I-5 SB Ramps											
Approach: North Bound				South Bound				East Bound				West Bound			
Movement: L - T - R				L - T - R				L - T - R				L - T - R			
Control: Protected				Protected				Protected				Protected			
Rights: Include				Include				Include				Include			
Min. Green:	3	4	0	15	4	0	0	0	0	7	0	7			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	1	0	1	1	0	1	1	0	0	0	0	0			

Volume Module: >> Count Date: 29 Mar 2012 <<

Base Vol:	0	206	192	113	303	0	0	0	0	20	0	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	206	192	113	303	0	0	0	0	20	0	16
Added Vol:	0	1	0	3	1	0	0	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	207	192	116	304	0	0	0	0	20	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	244	226	136	358	0	0	0	0	24	0	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	244	226	136	358	0	0	0	0	24	0	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	244	226	136	358	0	0	0	0	24	0	22

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.04	0.96	1.00	2.00	0.00	0.00	0.00	0.00	0.51	0.00	0.49
Final Sat.:	1900	1738	1612	1805	3610	0	0	0	0	887	0	843

Capacity Analysis Module:

Vol/Sat:	0.00	0.14	0.14	0.08	0.10	0.00	0.00	0.00	0.00	0.03	0.00	0.03
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.49	0.49	0.26	0.75	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Volume/Cap:	0.00	0.29	0.29	0.29	0.13	0.00	0.00	0.00	0.00	0.29	0.00	0.29
Uniform Del:	0.0	12.9	12.9	24.9	2.8	0.0	0.0	0.0	0.0	35.9	0.0	35.9
IncrementDel:	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	13.0	13.0	25.2	2.9	0.0	0.0	0.0	0.0	36.9	0.0	36.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.0	13.0	25.2	2.9	0.0	0.0	0.0	0.0	36.9	0.0	36.9
LOS by Move:	A	B	B	C	A	A	A	A	A	D	A	D
HCM2kAvgQ:	0	4	4	3	1	0	0	0	0	1	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.358
 Loss Time (sec): 13 Average Delay (sec/veh): 19.6
 Optimal Cycle: 35 Level Of Service: B

Street Name:		N East St						I-5 NB Ramps					
Approach:		North Bound			South Bound			East Bound			West Bound		
Movement:		L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected		
Rights:		Include			Include			Include			Include		
Min. Green:		0	8	8	5	4	0	0	0	0	3	3	3
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:		0	0	1	1	0	0	1	0	2	0	0	0

Volume Module:												
Base Vol:	0	179	30	10	241	0	0	0	0	256	0	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	179	30	10	241	0	0	0	0	256	0	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	179	30	10	241	0	0	0	0	256	0	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	227	38	13	305	0	0	0	0	324	0	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	227	38	13	305	0	0	0	0	324	0	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	227	38	13	305	0	0	0	0	324	0	128

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.71	0.29	1.00	2.00	0.00	0.00	0.00	0.00	0.84	0.00	1.16
Final Sat.:	0	3024	507	1805	3610	0	0	0	0	1467	0	2046

Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.01	0.08	0.00	0.00	0.00	0.00	0.22	0.00	0.06
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.20	0.20	0.06	0.26	0.00	0.00	0.00	0.00	0.59	0.00	0.59
Volume/Cap:	0.00	0.38	0.38	0.12	0.33	0.00	0.00	0.00	0.00	0.38	0.00	0.11
Uniform Del:	0.0	29.4	29.4	37.9	25.5	0.0	0.0	0.0	0.0	9.2	0.0	7.7
IncrementDel:	0.0	0.3	0.3	0.5	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	29.8	29.8	38.4	25.7	0.0	0.0	0.0	0.0	9.4	0.0	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	29.8	29.8	38.4	25.7	0.0	0.0	0.0	0.0	9.4	0.0	7.7
LOS by Move:	A	C	C	D	C	A	A	A	A	A	A	A
HCM2kAvgQ:	0	3	3	0	4	0	0	0	0	5	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.355

Loss Time (sec): 13 Average Delay (sec/veh): 12.3

Optimal Cycle: 39 Level Of Service: B

Street Name: N East St I-5 SB Ramps

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

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Control: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 3 4 0 15 4 0 0 0 0 7 0 7

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

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Volume Module:

Base Vol: 0 246 256 121 446 0 0 0 0 33 0 33

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 246 256 121 446 0 0 0 0 33 0 33

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 246 256 121 446 0 0 0 0 33 0 33

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86

PHF Volume: 0 286 298 141 519 0 0 0 0 38 0 38

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 286 298 141 519 0 0 0 0 38 0 38

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 286 298 141 519 0 0 0 0 38 0 38

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Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 1.00 0.88 0.88 0.95 0.95 0.95 1.00 1.00 1.00 0.91 1.00 0.91

Lanes: 1.00 1.00 1.00 1.00 2.00 0.00 0.00 0.00 0.00 0.50 0.00 0.50

Final Sat.: 1900 1668 1668 1805 3610 0 0 0 0 865 0 865

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Capacity Analysis Module:

Vol/Sat: 0.00 0.17 0.18 0.08 0.14 0.00 0.00 0.00 0.00 0.04 0.00 0.04

Crit Moves: **** **** ****

Green/Cycle: 0.00 0.50 0.50 0.22 0.72 0.00 0.00 0.00 0.00 0.12 0.00 0.12

Volume/Cap: 0.00 0.34 0.36 0.36 0.20 0.00 0.00 0.00 0.00 0.36 0.00 0.36

Uniform Del: 0.0 12.7 12.8 28.1 3.8 0.0 0.0 0.0 0.0 34.1 0.0 34.1

IncrementDel: 0.0 0.1 0.1 0.5 0.0 0.0 0.0 0.0 0.0 1.0 0.0 1.0

InitQueueDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

Delay Adj: 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00

Delay/Veh: 0.0 12.8 12.9 28.6 3.9 0.0 0.0 0.0 0.0 35.1 0.0 35.1

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 0.0 12.8 12.9 28.6 3.9 0.0 0.0 0.0 0.0 35.1 0.0 35.1

LOS by Move: A B B C A A A A A D A D

HCM2kAvgQ: 0 5 5 3 2 0 0 0 0 2 0 2

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.312
 Loss Time (sec): 13 Average Delay (sec/veh): 19.6
 Optimal Cycle: 33 Level Of Service: B

Street Name:		N East St						I-5 NB Ramps						
Approach:		North Bound			South Bound			East Bound			West Bound			
Movement:		L	T	R	L	T	R	L	T	R	L	T	R	
Control:		Protected			Protected			Protected			Protected			
Rights:		Include			Include			Include			Include			
Min. Green:		0	8	8	5	4	0	0	0	0	3	3	3	
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:		0	0	1	1	0	1	0	2	0	0	0	0	1

Volume Module:												
Base Vol:	0	214	44	11	337	0	0	0	0	206	0	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	214	44	11	337	0	0	0	0	206	0	96
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	214	44	11	337	0	0	0	0	206	0	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	252	52	13	396	0	0	0	0	242	0	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	252	52	13	396	0	0	0	0	242	0	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	252	52	13	396	0	0	0	0	242	0	113

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.66	0.34	1.00	2.00	0.00	0.00	0.00	0.00	0.81	0.00	1.19
Final Sat.:	0	2916	600	1805	3610	0	0	0	0	1419	0	2080

Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.09	0.01	0.11	0.00	0.00	0.00	0.00	0.17	0.00	0.05
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.26	0.26	0.06	0.32	0.00	0.00	0.00	0.00	0.52	0.00	0.52
Volume/Cap:	0.00	0.33	0.33	0.12	0.34	0.00	0.00	0.00	0.00	0.33	0.00	0.10
Uniform Del:	0.0	25.2	25.2	37.9	21.9	0.0	0.0	0.0	0.0	11.6	0.0	10.2
IncrementDel:	0.0	0.2	0.2	0.5	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	25.4	25.4	38.4	22.0	0.0	0.0	0.0	0.0	11.8	0.0	10.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.4	25.4	38.4	22.0	0.0	0.0	0.0	0.0	11.8	0.0	10.2
LOS by Move:	A	C	C	D	C	A	A	A	A	B	A	B
HCM2kAvgQ:	0	3	3	0	4	0	0	0	0	5	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.401
 Loss Time (sec): 13 Average Delay (sec/veh): 12.5
 Optimal Cycle: 39 Level Of Service: B

N East St						I-5 SB Ramps						
North Bound			South Bound			East Bound			West Bound			
Approach:												
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	3	4	0	15	4	0	0	0	0	7	0	7
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	0	0	0	0	0	1	0

Volume Module:												
Base Vol:	0	294	274	161	433	0	0	0	0	29	0	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	294	274	161	433	0	0	0	0	29	0	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	294	274	161	433	0	0	0	0	29	0	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	346	322	189	509	0	0	0	0	34	0	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	346	322	189	509	0	0	0	0	34	0	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	346	322	189	509	0	0	0	0	34	0	27

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.04	0.96	1.00	2.00	0.00	0.00	0.00	0.00	0.56	0.00	0.44
Final Sat.:	1900	1734	1616	1805	3610	0	0	0	0	969	0	769

Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.10	0.14	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.50	0.50	0.26	0.76	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Volume/Cap:	0.00	0.40	0.40	0.40	0.19	0.00	0.00	0.00	0.00	0.40	0.00	0.40
Uniform Del:	0.0	13.4	13.4	25.9	2.9	0.0	0.0	0.0	0.0	36.7	0.0	36.7
IncrementDel:	0.0	0.2	0.2	0.6	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	13.6	13.6	26.4	2.9	0.0	0.0	0.0	0.0	38.4	0.0	38.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.6	13.6	26.4	2.9	0.0	0.0	0.0	0.0	38.4	0.0	38.4
LOS by Move:	A	B	B	C	A	A	A	A	A	D	A	D
HCM2kAvgQ:	0	6	6	4	2	0	0	0	0	2	0	2

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.361
 Loss Time (sec): 13 Average Delay (sec/veh): 19.6
 Optimal Cycle: 35 Level Of Service: B

Street Name:		N East St						I-5 NB Ramps								
Approach:		North Bound			South Bound			East Bound			West Bound					
Movement:		L	T	R	L	T	R	L	T	R	L	T	R			
Control:		Protected			Protected			Protected			Protected					
Rights:		Include			Include			Include			Include					
Min. Green:		0	8	8	5	4	0	0	0	0	3	3	3			
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:		0	0	1	1	0	1	0	2	0	0	0	0	1	0	1

Volume Module:

Base Vol:	0	179	30	10	241	0	0	0	0	256	0	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	179	30	10	241	0	0	0	0	256	0	101
Added Vol:	0	4	0	1	4	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	183	30	11	245	0	0	0	0	256	0	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	232	38	14	310	0	0	0	0	324	0	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	232	38	14	310	0	0	0	0	324	0	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	232	38	14	310	0	0	0	0	324	0	129

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.72	0.28	1.00	2.00	0.00	0.00	0.00	0.00	0.83	0.00	1.17
Final Sat.:	0	3036	498	1805	3610	0	0	0	0	1463	0	2046

Capacity Analysis Module:

Vol/Sat:	0.00	0.08	0.08	0.01	0.09	0.00	0.00	0.00	0.00	0.22	0.00	0.06
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.20	0.20	0.06	0.26	0.00	0.00	0.00	0.00	0.59	0.00	0.59
Volume/Cap:	0.00	0.38	0.38	0.13	0.33	0.00	0.00	0.00	0.00	0.38	0.00	0.11
Uniform Del:	0.0	29.3	29.3	37.9	25.4	0.0	0.0	0.0	0.0	9.3	0.0	7.8
IncrementDel:	0.0	0.3	0.3	0.6	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	29.6	29.6	38.5	25.6	0.0	0.0	0.0	0.0	9.5	0.0	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	29.6	29.6	38.5	25.6	0.0	0.0	0.0	0.0	9.5	0.0	7.8
LOS by Move:	A	C	C	D	C	A	A	A	A	A	A	A
HCM2kAvgQ:	0	3	3	0	4	0	0	0	0	5	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.360
 Loss Time (sec): 13 Average Delay (sec/veh): 12.6
 Optimal Cycle: 39 Level Of Service: B

Street Name: N East St I-5 SB Ramps
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 3 4 0 15 4 0 0 0 0 7 0 7
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 -----|-----|-----|-----|

Volume Module:
 Base Vol: 0 246 256 121 446 0 0 0 0 33 0 33
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 246 256 121 446 0 0 0 0 33 0 33
 Added Vol: 0 1 0 3 1 0 0 0 0 0 0 3
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 247 256 124 447 0 0 0 0 33 0 36
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86
 PHF Volume: 0 287 298 144 520 0 0 0 0 38 0 42
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 287 298 144 520 0 0 0 0 38 0 42
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 287 298 144 520 0 0 0 0 38 0 42
 -----|-----|-----|-----|

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 1.00 0.88 0.88 0.95 0.95 0.95 1.00 1.00 1.00 0.91 1.00 0.91
 Lanes: 1.00 1.00 1.00 1.00 2.00 0.00 0.00 0.00 0.00 0.48 0.00 0.52
 Final Sat.: 1900 1668 1668 1805 3610 0 0 0 0 826 0 901
 -----|-----|-----|-----|

Capacity Analysis Module:
 Vol/Sat: 0.00 0.17 0.18 0.08 0.14 0.00 0.00 0.00 0.00 0.05 0.00 0.05
 Crit Moves: **** **** ****
 Green/Cycle: 0.00 0.50 0.50 0.22 0.72 0.00 0.00 0.00 0.00 0.13 0.00 0.13
 Volume/Cap: 0.00 0.35 0.36 0.36 0.20 0.00 0.00 0.00 0.00 0.36 0.00 0.36
 Uniform Del: 0.0 13.0 13.1 28.0 4.0 0.0 0.0 0.0 0.0 33.8 0.0 33.8
 IncremntDel: 0.0 0.1 0.1 0.6 0.0 0.0 0.0 0.0 0.0 1.0 0.0 1.0
 InitQueueDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Delay Adj: 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00
 Delay/Veh: 0.0 13.2 13.3 28.5 4.0 0.0 0.0 0.0 0.0 34.8 0.0 34.8
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 13.2 13.3 28.5 4.0 0.0 0.0 0.0 0.0 34.8 0.0 34.8
 LOS by Move: A B B C A A A A A C A C
 HCM2kAvgQ: 0 5 5 3 2 0 0 0 0 2 0 2

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.315
 Loss Time (sec): 13 Average Delay (sec/veh): 19.6
 Optimal Cycle: 33 Level Of Service: B

Street Name:		N East St						I-5 NB Ramps								
Approach:		North Bound			South Bound			East Bound			West Bound					
Movement:		L	T	R	L	T	R	L	T	R	L	T	R			
Control:		Protected			Protected			Protected			Protected					
Rights:		Include			Include			Include			Include					
Min. Green:		0	8	8	5	4	0	0	0	0	3	3	3			
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:		0	0	1	1	0	1	0	2	0	0	0	0	1	0	1

Volume Module:												
Base Vol:	0	214	44	11	337	0	0	0	0	206	0	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	214	44	11	337	0	0	0	0	206	0	96
Added Vol:	0	4	0	1	4	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	218	44	12	341	0	0	0	0	206	0	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	256	52	14	401	0	0	0	0	242	0	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	256	52	14	401	0	0	0	0	242	0	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	256	52	14	401	0	0	0	0	242	0	114

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.66	0.34	1.00	2.00	0.00	0.00	0.00	0.00	0.81	0.00	1.19
Final Sat.:	0	2929	591	1805	3610	0	0	0	0	1416	0	2082

Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.09	0.01	0.11	0.00	0.00	0.00	0.00	0.17	0.00	0.05
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.27	0.27	0.06	0.33	0.00	0.00	0.00	0.00	0.52	0.00	0.52
Volume/Cap:	0.00	0.33	0.33	0.13	0.34	0.00	0.00	0.00	0.00	0.33	0.00	0.11
Uniform Del:	0.0	25.0	25.0	37.9	21.7	0.0	0.0	0.0	0.0	11.7	0.0	10.3
IncrementDel:	0.0	0.2	0.2	0.6	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	25.2	25.2	38.5	21.9	0.0	0.0	0.0	0.0	11.9	0.0	10.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.2	25.2	38.5	21.9	0.0	0.0	0.0	0.0	11.9	0.0	10.3
LOS by Move:	A	C	C	D	C	A	A	A	A	B	A	B
HCM2kAvgQ:	0	3	3	0	4	0	0	0	0	5	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.406
 Loss Time (sec): 13 Average Delay (sec/veh): 12.8
 Optimal Cycle: 39 Level Of Service: B

N East St						I-5 SB Ramps						
North Bound			South Bound			East Bound			West Bound			
Approach:												
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	3	4	0	15	4	0	0	0	0	7	0	7
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	0	0	0	0	0	1	0

Volume Module:												
Base Vol:	0	294	274	161	433	0	0	0	0	29	0	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	294	274	161	433	0	0	0	0	29	0	23
Added Vol:	0	1	0	3	1	0	0	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	295	274	164	434	0	0	0	0	29	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	347	322	193	511	0	0	0	0	34	0	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	347	322	193	511	0	0	0	0	34	0	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	347	322	193	511	0	0	0	0	34	0	31

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.04	0.96	1.00	2.00	0.00	0.00	0.00	0.00	0.53	0.00	0.47
Final Sat.:	1900	1737	1613	1805	3610	0	0	0	0	913	0	819

Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.11	0.14	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.49	0.49	0.26	0.76	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Volume/Cap:	0.00	0.41	0.41	0.41	0.19	0.00	0.00	0.00	0.00	0.41	0.00	0.41
Uniform Del:	0.0	13.7	13.7	25.8	3.0	0.0	0.0	0.0	0.0	36.4	0.0	36.4
IncrementDel:	0.0	0.2	0.2	0.6	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	13.9	13.9	26.4	3.0	0.0	0.0	0.0	0.0	38.1	0.0	38.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.9	13.9	26.4	3.0	0.0	0.0	0.0	0.0	38.1	0.0	38.1
LOS by Move:	A	B	B	C	A	A	A	A	A	D	A	D
HCM2kAvgQ:	0	6	6	4	2	0	0	0	0	2	0	2

ATTACHMENT G

MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Timing
Air Quality Construction activities may result in cumulative air quality impacts.	AIR-1: During active construction, the City shall require construction contractors to implement applicable YSAMD construction dust control measures, including: 1. Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure. 2. Haul trucks shall maintain at least 2 feet of freeboard; or cover all trucks hauling dirt, sand, or loose materials. 3. Plant vegetative ground cover in disturbed areas as soon as possible. 4. Cover inactive storage piles. 5. Sweep access road if visible soil material is carried out from the construction site.	Incorporate into condition of approval. City Inspectors to confirm implementation.	During construction.
Biological Resources Project construction may impact nesting raptors during the breeding season.	BIO-1: Potential Swainson's hawk or other raptor nests shall be protected as follows: a) The applicant shall make every effort to conduct any tree and shrub removal activities that are required for project construction outside of the migratory bird and raptor breeding season (February 15 through August 31). In addition, all trees slated for removal during the nesting season shall be surveyed by a qualified biologist no more than 48-hours before removal to ensure that no nesting birds are occupying the tree. b) If construction-related activities are to occur prior to tree removal during the nesting bird season (February 15 through August 31), a qualified biologist shall conduct a preconstruction survey of all potential nesting habitats within 15 days prior to the start of activities (grubbing, dirt-moving, mobilization, or other construction-related activities) and within 500 feet of construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be resurveyed. The results of these surveys shall be documented in a technical memorandum that shall be submitted to the California Department of Fish and Game (DFG) (if nesting birds are documented) and the City of Woodland. A qualified biologist is one that has been approved by DFG as having the appropriate education background and experience to conduct nesting bird surveys.	City shall confirm necessary pre-construction surveys prior to any construction activities on the site. Monitor shall be selected with the approval of the City, and paid for by the applicant. Prior to any construction activities from February 15 through August 31.	

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

- c) If an active nest is found during the preconstruction survey, a no-work buffer of 500 feet will be established unless otherwise approved by the DFG. The qualified biologist will coordinate with DFG to determine the appropriate nest avoidance, monitoring, and protective measures appropriate for the species and site conditions. In addition to establishment of a no-work buffer, these measures may include daily or spot-check monitoring of the nesting activity as deemed appropriate by DFG.
- d) If the preconstruction survey indicates that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by birds or that are located more than 500 feet from active nests may be removed (500 feet is the distance regularly recommended by DFG to prevent impacts to active avian nests).

The project would involve the removal of several trees.

BIO-2: Loss of tree resources on the project site will be mitigated as follows:

- a) The City of Woodland (City) shall ensure that the project applicant will comply with the City of Woodland's Municipal Code, Chapter 20A. Prior to construction, the applicant shall have a Certified Arborist conduct a tree survey of the trees located within the project boundaries and submit a Tree Plan to the Community Development Department.
- b) Removed trees will be replaced at a ratio of 2:1. Replacement trees shall be planted on the project site. All trees planted shall be purchased from a locally adapted genetic stock obtained within 50 miles and 1,000 feet in elevation of a project site. If the site does not have adequate room for replanting trees, the City may require payment to a tree replacement fund. Replacement trees shall be guaranteed for a period of one year from the date of final acceptance of the development project by the City. Any tree which does not survive for one year from that date shall be replaced by the developer and the replacement tree shall be guaranteed for one year.

Prior to issuance of a grading or building permit for any phase of the project.

Applicant shall prepare a tree plan identifying proposed removals, protection measures for sensitive trees during construction, and mitigation plantings.

BIO-3: Tree resources on the project site will be protected as follows:

Sensitive tree resources adjacent to construction activities may require additional protection. Buffer zones should include a minimum one-foot-wide buffer zone outside the drip line. The locations of these resources would be clearly identified on the construction drawings and marked in the field. Fencing or other barriers would remain in place until all construction and restoration work that involves heavy equipment is complete. Construction vehicles, equipment, or materials would not be parked or stored within the fenced area. No signs, ropes, cables, or other items would be attached to the protected trees. Grading, filling, trenching, paving, irrigation, and landscaping within the drip lines of oak trees would be limited. Grading within the drip lines of oak trees would not be permitted unless specifically authorized by a Certified Arborist.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Cultural Resources

Project may result in accidental discovery of archaeological resources.

CUL-1: If cultural resources are encountered, all activity in the vicinity of the find shall cease until it can be evaluated by a qualified archaeologist and a Native American representative. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the archaeologist and Native American representative determine that the resources may be significant, they will notify the City of Woodland. An appropriate treatment plan for the resources should be developed. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources.

Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.

Ongoing during any ground-disturbing construction activities in any phase of the project.

In considering any suggested mitigation proposed by the archaeologist and Native American representative, the City will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the project area while mitigation for cultural resources is being carried out.

Project may result in accidental discovery of human remains.

CUL-2: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendant, who will help determine what course of action should be taken in dealing with the remains.

Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.

Ongoing during any ground-disturbing construction activities in any phase of the project.

Hazards and Hazardous Materials

Project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

HAZ-1: If soil contaminated by potentially hazardous materials is exposed during construction, the local responsible agency shall be notified. A work plan to characterize and possibly remove contaminated soil may be required by the local responsible agency or other regulatory agency.

Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.

Ongoing during any ground-disturbing construction activities in any phase of the project.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Project may be the site of previously unidentified contamination.	HAZ-2: The applicant shall ensure all contractors and employees immediately control the source of any leak and contain any spill using appropriate spill containment and countermeasures. If required by any regulatory agency, contaminated media shall be collected and disposed of at an offsite facility approved to accept such media. In addition, all precautions required by the RWQCB for the NPDES construction activity storm water permits would be taken to ensure that no hazardous materials enter any nearby waterways.	Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.	Ongoing during any ground-disturbing construction activities in any phase of the project.
Hydrology and Water Quality Project could result in unintended changes in discharge or runoff patterns, such that increases in flows, erosion, or sedimentation could occur on site or downstream.	HAZ-3: A Phase I Environmental Assessment must be completed by a qualified professional for the project before any ground disturbing activity begins.	Submit prior to issuance of grading or building permit.	Prior to approval of grading or building permit.
Project could result in unintended changes in discharge or runoff patterns, such that increases in flows, erosion, or sedimentation could occur on site or downstream.	Mitigation Measure HYD-1: Prior to the initiation of Project construction, a comprehensive drainage plan shall be prepared by the Applicant, reviewed by the City engineer, and implemented for the installation of all proposed facilities that would require or result in grading or installation of new facilities on site. The drainage plan shall include measures to retain on site, infiltrate, or otherwise channel runoff away from areas of open soil and other features subject to erosion or flooding. As relevant, stormwater from the project site shall be channeled into receiving drainage ditches or canals that are sized appropriately to contain anticipated stormwater flows. Runoff waters shall be discharged in a manner to prevent downstream or offsite erosion, sedimentation, or flooding.	Plan shall be submitted to the City for approval prior to issuance of grading or building permits. Plan shall be circulated by the City to Caltrans District 3 for review.	Prior to issuance of grading or building permit.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Noise

Construction noise could affect sensitive land uses in the vicinity of the project.

NOI-1: The project sponsor shall require construction contractors to implement the following mitigation measures:

- Consistent with the City of Woodland Municipal Code, all noise generating construction activities shall be limited to Monday through Saturday from 7:00 AM to 6:00 PM, and Sundays from 9:00 AM to 6:00 PM.
- All construction vehicles and equipment, fixed and mobile, shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- Construction staging areas shall be located as far as practicable from dwellings and the Inn so as to cause minimal disruption to these activities.
- Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.
- Prohibit unnecessary idling of internal combustion engines.
- Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a day and evening contact number for the City in the event of problems.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Transportation and Traffic

Project construction may affect traffic in the project vicinity.

TR-1: The City will require its construction contractor(s) to develop a construction management plan for review and approval. The plan will include at least the following items and requirements to reduce, to the maximum extent feasible, traffic congestion during construction:

- A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, signs, cones for drivers, and designated construction access routes;
- Identification of haul routes for movement of construction vehicles that would minimize impacts on motor vehicular, bicycle and pedestrian traffic, circulation and safety, and specifically to minimize impacts to the greatest extent possible on streets in the project area;
- Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur; and
- Provisions for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the City.

Applicant shall submit traffic plan to Public Works Department prior to start of construction.

Ongoing during construction.



October 17, 2012

Woodland City Council
300 First Street
Woodland, CA 95695

Re: Velocity Island Cable Park

Dear Sirs,

I am writing on behalf of the Yolo County Visitors Bureau in support of the proposal to build Velocity Island Cable Park. This project offers an excellent opportunity for Woodland to create a top-flight year-round attraction that would serve residents and visitors alike. It would give the YCVB a new and exciting asset to promote Woodland as a destination, and reap economic benefits for many other business and the City as well.

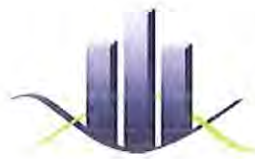
Yolo County is a significant draw for sports-minded people, attracting all manner of events catering to all age groups, and thus Velocity Island would cater to this kind of endemic clientele. It would be a welcome refuge from Central Valley's usual summertime heat. Velocity Island makes use of ground formerly used for recreational purposes, effectively reclaiming it for a similar but highly creative use. It also appears to be a well-planned operation with more than adequate public safety measures taken into account.

To our knowledge, water parks like this have been built elsewhere in the country and have proven to be successful enterprises. Water parks in the Sacramento region (Cal Expo, Roseville) have clearly been popular, steady businesses. We believe Velocity Island would be successful as well. The YCVB would actively promote it as a major attraction to our area, not only as a regular resource but moreover when it would have competitive events. Competition bringing people from out of town would, in fact, offer a ripe opportunity to pitch Woodland's hotels, restaurants, art venues, museums, and other assets to visitors.

In short, we believe Velocity Island would be a valuable addition to Woodland and Yolo County for many reasons, and we strongly urge the City Council to allow the project to move forward.

Sincerely,

Alan Humason
Executive Director



CENTER *for* STRATEGIC
ECONOMIC RESEARCH

October 15, 2012

Wendy Ross
Economic Development Manager
City of Woodland
300 First St.
Woodland, CA 95695

Dear Ms. Ross:

I am writing to demonstrate the Center for Strategic Economic Research's support for the proposed cable park in Woodland. CSER regularly studies the economic benefits associated with specific companies, development projects, and tourism activities.

The most basic benefit of any local business is its contribution to the economy in the form of jobs, wages, output, and tax revenue. In most cases, businesses also generate a "ripple effect" as a result of their demand on local suppliers of goods and services and employee spending in the economy. The "ripple effect" generates additional jobs, wages, output, and tax revenues on an ongoing basis. In addition to these benefits, information from the World Wakeboard Association indicates that this type of facility has the potential to draw a notable number of visitors. During their stay, these visitors often spend locally on a wide variety of goods and services. This spending directly supports local business activities, produces incremental tax revenue, and generates its own "ripple effect" leading to additional economic activity. While CSER has not studied this specific project to derive a quantitative estimate, we have no reason to believe that it will not support the types of economic benefits mentioned above within the Woodland and Sacramento Region economies.

We are excited to hear about the potential for new business investment in Woodland and the Sacramento Region. If you have any questions about this letter of support, please feel free to contact me directly. Thank you for assisting with this project.

Sincerely,

Ryan Sharp
Director



GOVERNOR'S OFFICE OF BUSINESS AND ECONOMIC DEVELOPMENT

STATE OF CALIFORNIA • OFFICE OF GOVERNOR EDMUND G. BROWN JR.

March 7, 2012

Love Ride Inc. DBA Velocity Island Park
Attn: Scott Hartmann & David Major
1240 Alice St.
Woodland, Ca 95776

Dear Scott and David,

I'm writing you to demonstrate the state of California's support for your proposed cable park in Woodland. My office understands the economic benefit that this project will have on the greater Sacramento region. Yolo County currently has an unemployment rate of 14.3% and the California economy is roughly 95% small business.

This project will help local small business and be an innovative and exciting tourist destination for the Sacramento region. My office is excited about this project and look forward to having the first cable park in the western US. Please do not hesitate to contact me with any questions.

I'm looking forward to the grand opening.

Sincerely,

Mather Kearney
Deputy Director



November 26, 2012

Dear Industry Partner:

On behalf of the California Travel and Tourism Commission, California's official tourism bureau, it is my pleasure to endorse Velocity Island Park.

In 2010, visitors spent \$269 million in Yolo County and generated \$3.9 million in local taxes. Tourism supported 2.8% of the jobs in the county, employing more than 3,200 people. As the first wakeboard cable park west of Texas, Velocity Island Park would be a big draw to visit the City of Woodland and would further impact the county in a positive way.

We look forward to adding Velocity Island Park to Visit California's repertoire of outdoor and adventure activities, drawing people from all over the country and world.

If you have any questions, please contact me at 916.319.5430.

Sincerely,

Caroline Beteta
President & CEO, Visit California

CHAIR
Brian P. Kelly

*Acting Secretary, Business,
Transportation and Housing Agency*

VICE CHAIR OF MARKETING
Ed Fuller

*President and Managing Director,
Marriott Lodging International*

VICE CHAIR OF OPERATIONS
Kathy Turner

*Vice President - Legislative and
Government Affairs, Enterprise
Holdings*

CHIEF FISCAL OFFICER
Rusty Gregory

*Chairman & CEO, Mammoth
Mountain Ski Area, LLC*

PRESIDENT & CEO
Caroline Beteta

*Deputy Secretary of Tourism,
Business, Transportation and
Housing Agency*

VISIT CALIFORNIA

California Travel and Tourism Commission

A: 555 Capitol Mall, Suite 1100 Sacramento, CA 95814

T: 916.444.4429 F: 916.444.0410 W: industry.visitcalifornia.com



November 29, 2011

To Whom It May Concern:

Re: Velocity Island Park

I am the chief executive officer for the Wake Park Project. The Wake Park Project is the industries leading provider of cable water park systems.

The Wake Park Project has extensive experience with cable watersports parks in the US and in Europe. We have built or managed over 60 cable water parks throughout the world, including parks in Orlando Florida, Hamburg Germany, Copenhagen Germany, Camsur Philippines, Penrith Australia, Batam South Korea and Singapore. Our senior staff members have also designed ramps and other obstacles for virtually all the cable water parks in the world including events like the X-Games and the Red Bull Wake Lab. We are regular contributors to Wakeboarding Magazine and Alliance Wakeboarding magazine, the two most widely distributed wakeboard magazines.

We have seen the plans for the Velocity Island Park in Woodland, CA. We have visited with Scott Hartman about the proposed complex on several occasions. We have partnered with the Velocity Island Park to provide support for their plans.

Based on the location of the proposed cable park, the Woodland's temperate climate and the size of the greater Sacramento outdoor recreational sports market, we are confident that the Velocity Island Park will be very successful and has the potential for being one of the most popular cable water parks in the world.

We are excited about the prospects for this project and what it means for the Woodland's and California. Please let me know if you have any questions or comments.

Sincerely,

Patrick W. Panakos
CEO, The Wake Park Project



June 14, 2011

Mather Kearney
Deputy Director, CalBIS
Governor's Office of Economic Development
1400 10th St., Second Floor
Sacramento, CA 95814

Re: Wakeboard Cable Park in Woodland

Mather,

I wanted to thank you for introducing me to Scott Hartman and his partner Dave Major. I was able to meet them in Woodland and walk the grounds of the proposed project. The great part about our business is the passion so many enthusiasts share for the sport of Wakeboarding, Scott and Dave are no exception. I can tell by their preparation and extensive schematics they've put some serious time into thinking this through and making the park a reality.

After my time on site with Scott and Dave I fully understand and grasp their vision for their Cable Park. On behalf of Hyperlite Wakeboards I'd like to lend my support to see this project through. The Wakeboard industry views Cable Parks as the best way to grow its participant base and invite new enthusiasts to the sport.

I'm not an expert on the impact a cable park will have on a local economy like Woodland, but from experience I can testify that if the cable park receives hosting rites to major events the influx can be significant. I can assure you Hyperlite will lobby hard for this to happen once the park is up and running. It's also fact that cable parks can increase the sales for wake industry brands such as Hyperlite. Another major bonus in my opinion is providing enthusiasts of all ages a place to be active and enjoy a healthy activity.

You've received Hyperlites Cable Commitment which speaks to level of economic support Hyperlite would be willing to provide to this project. I believe our sister companies such as Liquid Force and CWB Wakeboards would also be willing to supply similar support.

Hyperlite would also be willing to lend marketing support to the project. This could include national press releases to all major wake industry media outlets, inclusion in Hyperlites newsletter campaigns, exposure via our social network outlets and possibly mention in our print advertising campaigns and on our factory website.

If Hyperlite can be of further service to the state or this project, named Velocity Island Park (VIP) please don't hesitate to ask.

Sincerely,

Greg Nelson
Marketing Manager
Hyperlite Wakeboards

Mather –

Thanks for the email and reaching out. I'd love to help assist however I can. Northern California, and the greater Sacramento area specifically, would be an EXCELLENT spot for a potential cable park. There are currently no full size cable parks in operation on the west coast. There are a few parks in various stages of the approval/development process, but the closest park to CA currently is in Texas. You are correct, there are a significant amount of boaters, water lovers, and action sports enthusiasts within your proposed area. We've found that boating and cable parks go hand in hand, as people that enjoy riding behind the boat also enjoy riding the cable park. The cable park is an opportunity for them to hit rails and obstacles that they most likely don't have access to otherwise. The cable park makes wakeboarding that much more affordable/accessible to individuals that don't currently own or can't afford boats.

We've also found that there is a huge cross-over with cable parks for athletes that haven't had access to boats in the past. Snowboarders, Skateboarders, Surfers, etc. that typically wouldn't just go out and buy a boat, have been showing up in droves at new cable parks once they've found out how fun/reasonable it is. We've also seen quite a few parks incorporate training programs with local high schools, colleges, etc. to bring out local kids get them involved.

Please let me know what other information I can help provide. There are over 75 cable parks in Germany right now, and Germany is roughly the size of Texas. There is so much potential for cable here in the US!

Best,
Matt

Matthew Gleason
Director of Marketing
Liquid Force
364 2nd Street, Suite 7
Encinitas, CA 92024