

**AGENDA
REGULAR MEETING
CITY OF BANNING
BANNING, CALIFORNIA**

February 9, 2016
5:00 p.m.

Banning Civic Center
Council Chambers
99 E. Ramsey St.

The following information comprises the agenda for a regular meeting of the City Council; and a Joint Meeting of the City Council and the City Council Sitting in Its Capacity of a Successor Agency.

Per City Council Resolution No. 2010-38 matters taken up by the Council before 9:00 p.m. may be concluded, but no new matters shall be taken up after 9:00 p.m. except upon a unanimous vote of the council members present and voting, but such extension shall only be valid for one hour and each hour thereafter shall require a renewed action for the meeting to continue.

I. CALL TO ORDER

- Invocation – Pastor Steve Braun, Banning Foursquare Church
- Pledge of Allegiance
- Roll Call – Councilmembers Franklin, Miller, Moyer, Peterson, Mayor Welch

II. REPORT ON CLOSED SESSION

III. PUBLIC COMMENTS/CORRESPONDENCE/PRESENTATIONS

PUBLIC COMMENTS – *On Items Not on the Agenda*

A five-minute limitation shall apply to each member of the public who wishes to address the Mayor and Council on a matter not on the agenda. No member of the public shall be permitted to “share” his/her five minutes with any other member of the public. (Usually, any items received under this heading are referred to staff or future study, research, completion and/or future Council Action.) (See last page. PLEASE STATE YOUR NAME AND ADDRESS FOR THE RECORD.

CORRESPONDENCE: Items received under this category may be received and filed or referred to staff for future research or a future agenda.

The City of Banning promotes and supports a high quality of life that ensures a safe and friendly environment, fosters new opportunities and provides responsive, fair treatment to all and is the pride of its citizens.

IV. ANNOUNCEMENTS/REPORTS (Upcoming Events/Other Items if any)

- City Council
- City Committee Reports
- Report by City Attorney
- Report by City Manager

V. CONSENT ITEMS

(The following items have been recommended for approval and will be acted upon simultaneously, unless a member of the City Council wishes to remove an item for separate consideration.)

Motion: To approve Consent Items 1 through 10

Items to be pulled _____, _____, _____, _____ for discussion.

(Resolutions require a recorded majority vote of the total membership of the City Council)

1.	Approval of Minutes – Special Meeting – 01/26/16 (Workshop)	1
2.	Approval of Minutes – Special Meeting – 01/26/16 (Closed Session)	15
3.	Approval of Minutes – Regular Meeting – 01/26/16	17
4.	Approval of Accounts Payable and Payroll Warrants for Month of November 2015.	47
5.	Approval of Accounts Payable and Payroll Warrants for Month of December 2015.	51
6.	Report of Investments for October 2015	55
7.	Report of Investments for November 2015	63
8.	Report of Investments for December 2015	71
9.	Resolution No. 2016-12, Authorizing the Annual Submittal of CalRecycle Payment Program Applications	79

- Open for Public Comments
- Make Motion

VI. REPORTS OF OFFICERS

1. Resolution No. 2016-04, Awarding the Custodial Services Agreement to Merchants Building Maintenance, LLC of Pomona, CA for Civic Center and Municipal Facilities Maintenance in the amount of \$79,243.10 83
Staff Report – Art Vela, Acting Public Works Director
Recommendations: **1) Adopt Resolution No. 2016-04, Awarding the Custodial Services Agreement to Merchants Building Maintenance, LLC of Pomona, CA for Civic Center and Municipal Facilities Maintenance; 2) Authorizing the Administrative Services Director to make necessary budget adjustments, appropriations and transfer related to the Custodian Services Agreement; and 3) Authorizing the City Manager to Execute the Custodian Services Agreement with Merchants Building Maintenance, LLC in the amount of \$79,243.10.**

VII. PUBLIC HEARINGS

(The Mayor will ask for the staff report from the appropriate staff member. The City Council will comment, if necessary on the item. The Mayor will open the public hearing for comments from the public. The Mayor will close the public hearing. The matter will then be discussed by members of the City Council prior to taking action on the item.)

- 1. Tentative Tract Map No. 15-4501 (TTM 36939)
 Zone Change No. 15-3501 103
 Staff Report – Brian Guillot, Acting Community Development Director
 Recommendation: Conduct the public hearing an introduce Ordinance No. 1495.

Mayor asks the City Clerk to read the title of Ordinance No. 1495

“An Ordinance of the City Council of the City of Banning, California, Adopting a Mitigated Negative Declaration and Mitigation, Monitoring, and Reporting Program; Approving Tentative Tract Map No. 15-4501 (TTM 36939) to Subdivide A 34.6 Acre Site to Create 98 Numbered Lots for Single-Family Residential Development and Three (3) lettered Lots; and, Zone Change No. 15-3501 Amending the Zoning Map to Eliminate the RL-10,000 Overlay Affecting the Western Portion of the Site to Low Density Residential (LDR, 0 to 5 Units per Acre).”

Motion: I move to waive further reading of Ordinance No. 1495.
(Requires a majority vote of Council)

Motion: I move that Ordinance No. 1495 pass its first reading.

RECESS REGULAR CITY COUNCIL MEETING AND CALL TO ORDER A JOINT MEETING OF THE BANNING CITY COUNCIL AND THE BANNING UTILITY AUTHORITY

SCHEDULED MEETINGS

VIII. BANNING UTILITY AUTHORITY (BUA)

Call to Order: Chairperson Welch

Roll Call: Boardmembers Franklin, Miller, Moyer, Peterson, Chairperson Welch

CONSENT ITEM

- 1. Resolution No. 2016-01UA, Awarding the Services Agreement to Prominent Systems, Inc. of Industry, California for Project No. 2016-01WW, Iron Sponge Media Replacement in the Amount of \$32,245.00 and Establishing a Total Project Budget of \$35,469.50661

BUA ADJOURNMENT - Next regular meeting: Tuesday, February 23, 2016 at 5:00 p.m., Banning City Hall Council Chambers.

BANNING FINANCING AUTHORITY (BFA) – no meeting.

RECONVENE regular City Council Meeting.

IX. ITEMS FOR FUTURE AGENDAS

New Items –

Pending Items – City Council

1. Discussion of vacant properties on Ramsey Street where people are discarding furniture.
2. Housing Element (2016)
3. Strategic Planning Workshop (Goal Setting) - March 29, 2016

(Note: Dates attached to pending items are the dates anticipated when it will be on an agenda. The item(s) will be removed when completed.)

X. ADJOURNMENT

Pursuant to amended Government Code Section 54957.5(b) staff reports and other public records related to open session agenda items are available at City Hall, 99 E. Ramsey St., at the office of the City Clerk during regular business hours, Monday through Friday, 8 a.m. to 5 p.m.

NOTICE: Any member of the public may address this meeting of the Mayor and Council on any item appearing on the agenda by approaching the microphone in the Council Chambers and asking to be recognized, either before the item about which the member desires to speak is called, or at any time during consideration of the item. A five-minute limitation shall apply to each member of the public, unless such time is extended by the Mayor. No member of the public shall be permitted to “share” his/her five minutes with any other member of the public.

Any member of the public may address this meeting of the Mayor and Council on any item which does not appear on the agenda, but is of interest to the general public and is an item upon which the Mayor and Council may act. A five-minute limitation shall apply to each member of the public, unless such time is extended by the Mayor. No member of the public shall be permitted to “share” his/her five minutes with any other member of the public. The Mayor and Council will in most instances refer items of discussion which do not appear on the agenda to staff for appropriate action or direct that the item be placed on a future agenda of the Mayor and Council. However, no other action shall be taken, nor discussion held by the Mayor and Council on any item which does not appear on the agenda, unless the action is otherwise authorized in accordance with the provisions of subdivision (b) of Section 54954.2 of the Government Code.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk's Office (951) 922-3102. **Notification 48 hours prior to the meeting** will enable the City to make reasonable arrangements to ensure accessibility to this meeting. [28 CFR 35.02-35.104 ADA Tile II]

A special meeting of the Banning City Council was called to order by Mayor Welch on January 26, 2016 at 3:00 p.m. at the Banning Civic Council Chambers, 99 E. Ramsey Street, Banning, California.

COUNCIL MEMBERS PRESENT: Councilmember Franklin
Councilmember Miller
Councilmember Moyer
Councilmember Peterson
Mayor Welch

COUNCIL MEMBERS ABSENT: None

OTHERS PRESENT: Michael Rock, City Manager
Anthony R. Taylor, City Attorney
Rochelle Clayton, Administrative Services Dir./Deputy City Manager
Art Vela, Acting Public Works Director
Brian Guillot, Acting Community Development Director
Sonja De La Fuente, Office Specialist
Marie A. Calderon, City Clerk

PUBLIC COMMENTS – *On Items Not on the Agenda*

Susan Savolainen, resident addressed the Council stating that her purpose in approaching the microphone is two-fold. First, she applauded the Council for convening this workshop. It would be difficult to overstate the importance of the need for economic development for the future of our community. Second, she wanted to admonish the Council to see that this meeting is a beginning and not an end in itself knowing that there will be a lot of hard work to make economic growth a reality for Banning. Make sure that you include input from citizens as well as consultants. Have for your goal a living document that is a blueprint for specific actions and not just general principles. Understand that situations change and actions often produce consequences that are not foreseen which will require adjustments as the plan moves from paper to reality. She is excited to see this Council take this step at this time and looks forward to seeing more in the future and seeing Banning move ahead economically.

WORKSHOP REPORT

1. Economic Development Workshop - Presentation by Barry Forster, HdL
(Staff Report – Brian Guillot, Acting Community Development Director)

Acting Director Guillot presented Barry Foster with HdL Solutions which are the gurus of the economic world and appreciates that he presenting this item to the Council this evening.

Mr. Foster said in regards to his background he worked for 23 years for four cities in California. His work started out for Loma Linda and then for the City of Monrovia. For 8 years he was in

the Coachella Valley with the City of Rancho Mirage as their Economic Development Director and did a lot of the projects out there such as The River Project and Monterey Market Place and did a lot of development along Highway 111. He then worked 8 years for the City of Moreno Valley as the Community and Economic Development Director so he had all of the development services under him. For the last 3 years he has worked in the private sector and worked for about four different developers doing consulting and ultimately went to work for HdL almost two years ago. He started up a new division of that company called ECONsolutions and they have done work for about 20 cities in California and currently they have 12 that they are doing on-going and regular work with in just trying to help tailor a program to what the needs are that their community wants in terms of economic development because as the previous speaker mentioned it is really an important part of the community and the economic growth and having a plan and an idea, a road map of what they want to do from an economic development perspective. He is happy to be working with Banning.

Mr. Foster said today what he wants to do is kind of go through and just talk to the Council and share and get some thoughts and ideas. One of the things they are charged with in regards to the scope of work here in Banning is to do an economic development action plan so this is really a chance to set the stage and present some of his ideas and he has done this for a number of cities in developing economic development action plans. An economic development action plan really isn't a grandiose big strategy that is several hundred pages that you put up on a shelf and it kind of sits there. It is really meant to be more of a three-year snapshot or a plan, an action in looking at things that can fit into your marketplace, fit into the development, and the environment that is happening currently in what can really be accomplished during kind of a short, mid-term, time period up to three years.

Mr. Foster at this time started his power-point presentation (attached Exhibit "A"). He went over the agenda of items that they will be talking about this evening and they include: 1) What is Economic Development? 2) Banning's Community Profile; Banning; 3) Banning's Strengths/Opportunities & Weaknesses/Challenges; 4) Consumer Demand/Market Supply as to what your residents are looking to purchase and what they are not able to purchase here and have to go somewhere else outside your community; that is lost sales tax dollars; 5) Void Analysis to see what kind of opportunities might be available in terms of users here that are not representing your marketplace but that would fit the demographics that you have in community and the opportunity that you might have to try to attract something like that here; 6) Opportunity Areas; 7) Development Services; 8) Infrastructure; 9) Brand Development & Marketing; 10) Formulate a 3-Year Economic Development Action Plan; and then talk about some next steps. He went over each slide giving more detail.

Councilmember Franklin thanked Mr. Foster for the presentation and she does have a couple of questions. One has to do with e-commerce and when he talked about the Void Analysis how does that tie in with the changing face of e-commerce.

Mr. Foster said e-commerce is a growing area and more and more people are using apps. It is growing but there still is a need to have shopping centers and to have restaurants. It is taking what you do have for shopping and creating the kind of environment that people want to come to; that need to come to. Some people still like to touch and feel things before they make that purchase. It is creating that kind of environment that you want to go to. So he thinks shopping centers some of those folks on that Void list and those potential users their footprints change and so some of the retailers have gone to smaller footprints and Best Buy is a great example. Best

Buy used to be 30,000 square feet and then they went to 45,000 square feet and now they prefer to be in 8,000 to 10,000 square feet. They haven't gone away but they do a lot of e-commerce too. Those footprints are changing so when you are building shopping centers you want to make sure that you are always thinking about the future and how things can be re-used and revitalized and repositioned and all those kinds of things. Those users are all active and looking for opportunities in the Inland Region and he feels that they are a good fit for this marketplace, for this trade area and for Banning. E-commerce is growing but it's never going to be just that and nothing else.

Councilmember Franklin said you had on the list of different businesses the "99 Cents Only Store" and given that we have several 99 Cents stores here in town how do you determine when we are saturated in a particular area.

Mr. Foster said he would have "99 Cents Only Store" make that determination but he thinks that there are still opportunities for that. He said that "99" is a national credit tenant and very active at looking at opening new stores and other than that name they really are a mainstream retailer and he thinks that they are going to be different than the 99 Cent stores that you already have here. They are one of the dominate players here now.

Councilmember Franklin said because we have the TUMF fees here and our neighbor does not how much is that going to impact businesses wanting to come here if you are looking at that 5 mile radius versus going next door.

Mr. Foster said it has an impact. Almost anywhere else they are going in Riverside County is looking at TUMF and they have found ways and have to be creative as to how you put your plans together and part of it is working with those shopping centers to come up with cost effective ways that you can still do a deal.

Councilmember Peterson said that you mentioned Kmart and Sears. He read that Sears may be going out of business and that they may be going into the e-trade as well and so Sears as we know it as the big store is no more. Are they looking for places like Amazon; big warehouses.

Mr. Foster said that Sears has never acknowledged that they are going to go away and Sears owns Kmart. This is the third straight year where Sears has had pretty massive sales declines and they are apparently going the wrong way. They still do not acknowledge that they still think that they have been able to restructure and that they are committed to going forward and he doesn't think until they announce that they are going to close or go into bankruptcy or something that there probably wouldn't be any kind of an announcement but it is looking at those opportunities to reposition. E-commerce is certainly something that is evolving and is here to stay. In regards to Amazon he did two facilities in Moreno Valley when he was in Moreno Valley for Amazon for 2 million square feet total. They have a facility in San Bernardino and one in Redlands. They are building one in Rialto and have a couple up North. They are not going to build to continue to do everything through those million square foot facilities out in the Inland Region. Now they are doing same day delivery and talking about doing deliveries in a couple of hours if you want to pay for it. They are not going to be able to bring something from Moreno Valley or San Bernardino into LA County with the traffic that we have so they are going to have to have other facilities so they are already looking at those kinds of models and opportunities to do smaller facilities in LA and Orange counties. A lot of e-commerce are

having physical locations. Amazon actually has a store that they are trying in New York City, Apple is looking at some stores.

Councilmember Peterson said he is going to touch on a controversial sales and retail and that is the approval of marijuana. He said that 23 states have already approved it and how is it that states are looking at the economic growth and development with cultivation and retail sales considering that the state of Washington is expecting a billion dollars in sales tax revenue over the next four years, \$67.5 million in related taxes. With this large industry coming into play as far as economic development you are looking at Colorado, Washington that went from the medicinal use into the recreation use. El Chapo and Pablo Escobar is not going to have a handle on this anymore and it is going to go to R.J. Reynolds, Phillip Morris and probably some of the other big makers to where they are going to be doing these big in-house grows. In your business have you looked at any of this?

Mr. Foster said he is not an expert at that but his company just actually hired a principal that has a background in that and he worked for the City of Oakland and just actually retired from municipal services but he is actually working with 20 cities in California where he can come in if you want to schedule a time with your attorney and the Council on some ways that he may be able to counsel you on that and he is working with cities kind on both sides of that issue.

Councilmember Peterson said the thing is that there are states and cities already regulating land usage etc. for such a thing but he would think in your business you would have some projection as far as what would the economic benefits be to this.

Mr. Foster said that David McPherson with their company may be a better resource. Councilmember Peterson said maybe he could contact our City Manager and we could set up another workshop or something.

Councilmember Moyer thanked Mr. Foster for his presentation and asked do potential and pending housing projects come into consideration with these different retailers.

Mr. Foster said they are certainly going to look at them but they are also going to want to know that they are coming. He said that he knows that the City has a number of master planned and master scaled projects that you are looking at and those are all really important to continue to bump up your density, your population, your marketplace and your trade area because they still want to have as many people here as possible and you want to make sure what you are building makes some sense too and that it is the right kind of fit and the right kind of market for your demographic.

Councilmember Moyer said that you briefly mentioned the airport and there is a lot of consideration going back and forth whether to keep it open or to close it and you mentioned that it was prime real estate for maybe light industry and so forth. Have you really looked into that heavily and can you give us any advice or idea whether you think we should keep it open or close it.

Mr. Foster said that they talked a little bit to Acting Director Vela and actually his company is putting together a proposal for the City to consider if you wanted to look at retaining somebody and not just them but with a company called Urban Futures and maybe do it together. He said their specialty really is not so much on what you do with the airport but more what are those

highest and best land uses for that property and what can go around it and so he thinks they are getting close and he thinks that Urban Futures has taken the lead on designing something that the Council can take a look at.

Councilmember Moyer asked how long once the Council gets the proposal and approves it do you think it would take to get a report.

Mr. Foster said he thinks the timeframe in there is about 3 to 4 months.

Councilmember Moyer said that you mentioned the Ramsey Street Corridor and many people consider the Ramsey Street Corridor everything from here west. There is a lot of interest as to how we are going to improve the east end town and is that included in the Ramsey Street Corridor.

Mr. Foster said yes he would include everything.

Councilmember Moyer said you said that the developers have to get creative when it comes to TUMF fees and so forth and he is sure that some of the other cities have gotten creative too and can he give some ideas as to how cities get creative.

Mr. Foster said a lot have and he has worked with some cities that have done it too but you need to be careful about having that right kind of balance. You can't do gifts of public funds in terms of fee reduction and those kinds of things but there are opportunities for sales tax sharing agreements and he has done two for car dealerships in Upland and one for J. C. Penny for a mall location in San Bernardino. The State just has a new law that went into effect January 1st that makes it a little bit more challenging but you can still do those kinds of things if you do it right.

Councilmember Miller said that he has lived in Banning for 16 years and when he first came here he talked to the Mayor at that time and said that Beaumont is going to take all the businesses that are starting now and the answer then was that we are not interested in that, we are interested in planned development. Well things have completely changed and we are very, very anxious to get improvements and increased sales tax so we are perfectly willing to walk the walk and he appreciated the presentation. He was wondering if he was going to give the Council specific points as to exactly how we can walk the walk, how we can specifically attract the businesses, and how specifically can we go ahead and get them more interested in our city.

Mr. Foster said that there will be very specific things, goals and objectives that will be part of the action plan in the draft that will be presented back to the Council.

Councilmember Miller said we have the development Sun Lakes and there is always some friction between Sun Lakes and the rest of the community because Sun Lakes is considered to be a private area with wealthy people in it and to some extent that is true. There are some very wealthy people living in Sun Lakes that go down to Palm Springs and La Quinta and so on to find the restaurants and the high-end stores down there. He wondered if that might also be something that could be mentioned to prospective businesses that there is a cluster of people here that could support high-end types of businesses.

Mr. Foster said that they will certainly mention that in terms of what they are going after but again you have to have enough of that critical mass of that kind of income level for it to make

sense and he is sure that it does not yet. Again, the ground-up, sit-down restaurants, the quick-service, and the fast-casual that is pretty hot right now. The sit-down restaurants even the casual sit-down restaurants are just starting to come back. Sit-down restaurants are still a little bit challenging.

Mayor Welch said when you are putting together the recommendations to come to the Council are we talking here about the whole package. We are talking about increased employment, increase in store level retailing and manufacturing and also people to fill the jobs.

Mr. Foster said that was correct.

Mayor Welch asked if there were any comments from the public; there were none. He asked City Manager where we go in the future for this item.

City Manager Rock said he thinks that this is step one of laying out the blueprint for how we want to proceed so the next step will be the report that we get from HdL and then there will be another step when we go through the budget process and do some goal setting a lot of which will include economic development and how we achieve the goals will then be in the budget in terms of what it is the Council would like to do to achieve those goals which maybe require a staff position and just sticking to what ultimately the plan is and how do we implement that plan is how we get into the nuts and bolts of the budget so that will be a good step also. So once we get to June we will have done all of those things and feels we will be in pretty good shape at that point to move forward.

Mayor Welch asked in the process of putting all that together should this body be included in another workshop or input towards the progress of that or wait until this comes back.

City Manager Rock said he thinks that when we go to present the final report we could do that as a workshop here.

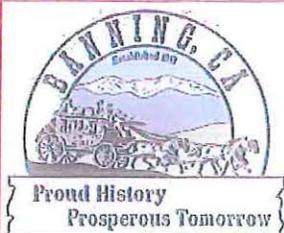
Mr. Foster suggested and what he has done in a lot of other communities is once we have the draft document, the Economic Development Action Plan, he would like to avail that to the City Council and then he would like the Council to provide some direction and some comments but then go out into the community to the stakeholders with a series of three or four meetings and provide them with our thoughts on the draft action plan and get their thoughts, tweak it and then bring it back to the Council for final consideration.

ADJOURNMENT

By common consent the meeting adjourned at 3:59 p.m.

Marie A. Calderon, City Clerk

THE ACTION MINUTES REFLECT ACTIONS TAKEN BY THE CITY COUNCIL. A COPY OF THE MEETING IS AVAILABLE IN DVD FORMAT AND CAN BE REQUESTED IN WRITING TO THE CITY CLERK'S OFFICE.



BANNING

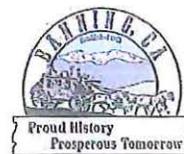
ECONOMIC DEVELOPMENT STUDY SESSION

ECONSolutions
By HdL

AGENDA

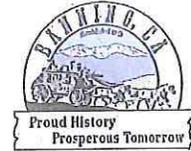
ECONSolutions
By HdL

- ❖ What is Economic Development?
- ❖ Banning's Community Profile
- ❖ Banning's Strengths/Opportunities & Weaknesses/Challenges
- ❖ Consumer Demand/Market Supply
- ❖ Void Analysis
- ❖ Opportunity Areas
- ❖ Development Services
- ❖ Infrastructure
- ❖ Brand Development & Marketing
- ❖ Formulate a 3-Year Economic Development Action Plan
- ❖ Next Steps



WHAT IS ECONOMIC DEVELOPMENT?

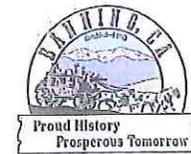
- ❖ Efforts to increase economic activity by strengthening existing business areas, attracting new businesses and creating employment opportunities, along with promoting an effective climate for businesses to succeed and flourish.
- ❖ Factors include:
 - ❖ *Jobs created*
 - ❖ *Income generated*
 - ❖ *Marketplace growth*
 - ❖ *Increased sales*
 - ❖ *Increased local revenues*



BANNING – COMMUNITY PROFILE

	City of Banning	Trade Area (5-Miles)
❖ Population	30,698	43,294
❖ Households	11,287	15,544
❖ Average Household Income	\$49,051	\$56,965
❖ Owners/Renters	69/33%	71/29%
❖ White Collar/Blue Collar	51/49%	55/45%
❖ Hispanic	41%	39%
❖ White	44%	43%
❖ Asian	5%	6%
❖ Black	7%	7%

*trade area refers to Village at Paseo San Geronimo Site



BANNING

ECONSolutions
By HdL

Strengths/Opportunities

- ❖ Community with history
- ❖ Safe environment
- ❖ Downtown area
- ❖ Growth opportunities for housing and retail
- ❖ Diversified & affordable housing stock

Weaknesses/Challenges

- ❖ Trade area is 'light' with population density & income levels
- ❖ Competition from Beaumont
- ❖ Development services process can be improved
- ❖ Identify development standards for Downtown Banning
- ❖ Infrastructure needs
- ❖ Needs a vision



Consumer Demand & Market Supply Assessment
For Market: Village at Paseo San Geronimo
Market Definition: Store Parkway and San Geronimo, 5 Miles
Date Report Created: 10/21/2015

ECONSolutions
By HdL

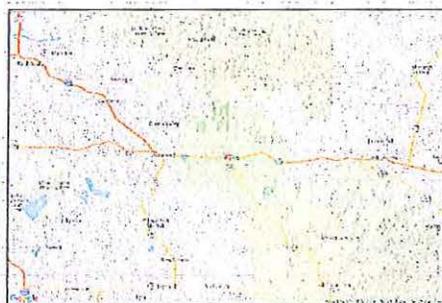
Demographics

Population	43,208
5-Year Population estimate	45,528
Population Households	11,610
Group Quarters Population	1,475
Households	10,544
5-Year Households estimate	11,905
Workplace Establishments	500
Workplace Employees	9,616
Median Household Income	\$44,658

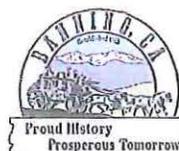
By Establishments

Other General Merchandise Stores	\$65,698,234
Automotive Dealer	\$309,635,852
Building Material/Supply/Pet Stores	\$19,191,819
Health/Personal Care Stores	\$37,195,376
Grocery Stores	\$87,061,392
Full-Service Restaurants	\$12,204,815
Sporting Goods/Hobby/Musical Instrument	\$9,178,035
Umbrella Service Existing Places	\$25,678,382
Furniture Stores	\$16,403,302
Electronics/Appliances	\$8,518,505
Automotive Parts/Accessories/Tire	\$11,325,557
Direct Selling Establishments	\$9,316,537
Department Stores	\$17,001,550
Beer/Wine/Liquor Stores	\$5,630,500
Book/Periodical/Music Stores	\$3,143,382
Specialty Food Stores	\$4,322,460
Truck/Trailer Equipment/Supply Stores	\$4,618,178
Office Supplies/Stationery/Gift	\$4,411,502
Specialty Food Services	\$4,072,350
Vending Machine Operators (Non-Store)	\$4,793,335
Event/Party Places (Alcoholic Beverages)	\$1,427,560
Florist/Misc. Store Retailers	\$993,439
Grocery Stores	\$10,563,644
Used Merchandise Stores	\$1,918,820
Health/Supplies/Healthier Goods	\$4,728,819
Home/Furnishing Stores	\$6,268,117
Other Motor Vehicle Dealers	\$6,698,355
Other Misc. Store Retailers	\$7,542,457
Shoe Stores	\$4,478,510
Clothing Stores	\$4,425,194

Consumer Demand	Market Supply	Opportunity Gap/Surplus
\$65,698,234	\$39,408,479	(\$26,289,755)
\$309,635,852	\$91,524,135	(\$217,511,717)
\$19,191,819	\$14,279,701	(\$4,912,118)
\$37,195,376	\$23,245,956	(\$13,949,420)
\$87,061,392	\$58,127,459	(\$28,933,933)
\$12,204,815	\$12,826,897	(\$612,082)
\$9,178,035	\$1,681,547	(\$7,496,488)
\$25,678,382	\$16,887,497	(\$8,790,885)
\$16,403,302	\$0	(\$16,403,302)
\$8,518,505	\$2,789,691	(\$5,728,814)
\$11,325,557	\$9,919,075	(\$1,406,482)
\$9,316,537	\$1,052,172	(\$8,264,365)
\$17,001,550	\$13,450,904	(\$3,550,646)
\$5,630,500	\$2,316,565	(\$3,313,935)
\$3,143,382	\$0	(\$3,143,382)
\$4,322,460	\$1,478,715	(\$2,843,745)
\$4,618,178	\$2,482,047	(\$2,136,131)
\$4,411,502	\$2,308,272	(\$2,103,230)
\$4,072,350	\$3,248,009	(\$824,341)
\$4,793,335	\$2,141,211	(\$2,652,124)
\$1,427,560	\$384,892	(\$1,042,668)
\$993,439	\$268,248	(\$725,191)
\$10,563,644	\$10,418,710	(\$144,934)
\$1,918,820	\$3,505,150	\$1,586,330
\$4,728,819	\$5,974,429	\$1,245,610
\$6,268,117	\$5,032,257	(\$1,235,860)
\$6,698,355	\$10,043,233	\$3,344,878
\$7,542,457	\$11,127,599	\$3,585,142
\$4,478,510	\$12,002,260	\$7,523,750
\$4,425,194	\$92,113,601	\$87,688,407



- Opportunities**
- General Merchandise Stores
 - Furniture Stores
 - Full Service Restaurants
 - Lumber/Building Material & Hardware Stores



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VOID ANALYSIS

ECONSolutions
By HdL

24 Hour Fitness	CVS	Jersey Mike's	Shakey's Pizza
99 Cents Only Stores	DD's Discounts	Jimmy John's	Sit 'n Sleep
Anna's Linens	Discount Tire	Kirkland's	Sleep Train
Baker's Drive Thru	Dressbarn	Krikorian Theatres	Smashburger
Big O Tires	Dunkin' Donuts	LA Fitness	Sonic
Blaze Pizza	Fallas Discount Stores	Les Schwab Tire Centers	The Flame Broiler
Boot Barn	Firehouse Subs	Massage Envy	The Habit Burger Grill
Burlington Coat Factory	Fitness 19	Massage Green	The Original Pancake House
Capriotti's Sandwich Shop	Five Guys	Menchie's	Tractor Supply Co
Charming Charlie	Freddy's Frozen Custard	Olive Garden	Tuesday Morning
Chipotle Mexican Grill	Golden Corral	Pieology Pizzeria	ULTA Beauty
CiCi's Pizza	Grocery Outlet	Planet Fitness	WaBa Grill
Corly's Kitchen Bakery	Hancock Fabrics	Regency Theatres	WSS
Corner Bakery Café	Harbor Freight Tools	Round Table Pizza	Yogurtland
Crunch	HomeTown Buffet		



OPPORTUNITY AREAS

ECONSolutions
By HdL

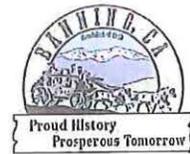
- ❖ Downtown Banning
- ❖ Highland Springs
- ❖ Ramsey Street Corridor
- ❖ Light Industrial/Distribution/Logistics
- ❖ Medical/Healthcare
- ❖ Other areas?



DEVELOPMENT SERVICES

ECONSolutions
By HdL

- ❖ Consistent standards and excellence in customer service
- ❖ Shared vision with City Council & City staff, along with understanding of roles/responsibilities
- ❖ Walk the walk NOT just talk the talk...
- ❖ Make Banning a **BEST PLACE TO DO BUSINESS**



INFRASTRUCTURE

ECONSolutions
By HdL

- ❖ Roads
- ❖ Utilities (water, sewer, power, high-speed internet)
- ❖ Pedestrian Links
- ❖ Signage (way finding)

Coordinate CIP with Economic Development



BRAND DEVELOPMENT & MARKETING

- ❖ Development Standards – SET THE STAGE
- ❖ Recognition of who we are and what we can do
- ❖ Create a VISION FOR BANNING
- ❖ Team effort – Roles & Responsibilities
- ❖ Brand & Logo Development – Consistent use in marketing



ECONOMIC DEVELOPMENT ACTION PLAN

- ❖ Recognize the marketplace
- ❖ Identify near-term opportunities
- ❖ Establish goals & objectives to be accomplished within a 3-Year timeframe



NEXT STEPS

ECONSolutions
By HdL

- ❖ Feedback from City Council members
- ❖ Draft 3-Year Economic Development Action Plan
- ❖ Solicit input from Chamber of Commerce, business leaders & key stakeholders
- ❖ City Council to consider adoption of Economic Development Action Plan



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MINUTES
CITY COUNCIL
BANNING, CALIFORNIA

01/26/16
SPECIAL MEETING

A special meeting of the Banning City Council was called to order by Mayor Welch on January 26, 2016 at 4:00 p.m. at the Banning Civic Center Large Council Chambers, 99 E. Ramsey Street, Banning, California.

COUNCIL MEMBERS PRESENT: Councilmember Miller
 Councilmember Moyer
 Councilmember Peterson
 Councilmember Welch
 Mayor Franklin

COUNCIL MEMBERS ABSENT: None

OTHERS PRESENT: Michael Rock, City Manager
 Anthony R. Taylor, City Attorney
 Rochelle Clayton, Administrative Services Dir./Deputy City Manager
 Sonja De La Fuente, Executive Assistant/Deputy City Clerk
 Marie A. Calderon, City Clerk

Mayor Welch opened the item for public comments on the closed session items. There were none so public comments was closed.

CLOSED SESSION

City Attorney Taylor announced that there are three items for closed session as follows: Existing litigation pursuant to Government Code Section 54956.9 (d)(1): Robertson's Ready Mix v. City of Banning and the Banning City Council; conference with legal counsel anticipated litigation – significant exposure to litigation pursuant to paragraph (2) and (3) of subdivision (d) of Section 54956.9; and labor negotiations pursuant to Government Code Section 54957.6 with City represented by City Manager Michael Rock and negotiations are with the Banning Police Offices Association (BPOA).

Meeting went into closed session at 4:04 p.m. and recessed at 4:56 p.m.

ADJOURNMENT

By common consent the meeting adjourned at 4:56 p.m.

Marie A. Calderon, City Clerk

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A regular meeting of the Banning City Council and a Joint Meeting of the Banning City Council and the City Council Sitting in its Capacity of a Successor Agency was called to order by Mayor Welch on January 26, 2016 at 5:02 p.m. at the Banning Civic Center Council Chambers, 99 E. Ramsey Street, Banning, California.

COUNCIL MEMBERS PRESENT: Councilmember Franklin
Councilmember Miller
Councilmember Moyer
Councilmember Peterson
Mayor Welch

COUNCIL MEMBERS ABSENT: None

OTHERS PRESENT: Michael Rock, City Manager
Anthony R. Taylor, City Attorney
Rochelle Clayton, Administrative Services Dir./Deputy City Manager
Alex Diaz, Police Chief
Arturo Vela, Acting Public Works Director
Fred Mason, Electric Utility Director
Brian Guillot, Acting Community Development Director
Heidi Meraz, Community Services Director
Michelle Green, Deputy Finance Director
Steve Dukett, Consultant, Urban Futures
Sonja De La Fuente, Deputy City Clerk
Marie A. Calderon, City Clerk

The invocation was given by Pastor Tate Crenshaw, Lifepoint Church. Councilmember Peterson led the audience in the Pledge of Allegiance to the Flag.

REPORT ON CLOSED SESSION

City Attorney Taylor said that there were three items on for Closed Session as he previously reported and there is no reportable action on those items.

PUBLIC COMMENTS/CORRESPONSE/PRESENTATIONS

PUBLIC COMMENTS – *On Items Not on the Agenda*

Anita Worthen, addressed the Council regarding the 7th Annual Veterans Expo that will be held on Saturday, January 30th at the Beaumont Civic Center from 10 a.m. to 2 p.m. It is an information and resource event for the Pass Area. They will be honoring all veterans that have served but will honor especially those that have served in the Gulf War. All veterans, military

family and friends are invited to attend. They will have people from Loma Linda, people there to answer questions about their benefits, ROTC, Interact from Beaumont and Hemet, Key Club members.

James Mildren, 1811 N. San Gorgonio addressed the Council regarding his neighbor at 49 W. Repplier. He said he was here over two years ago in regards to the same situation and at that time he gave a criteria of what had to be done and during that time they have gone to court and the neighbor was charged with felony code enforcement violations and was found guilty and nothing was done. He has also been sentenced and nothing was done. He applied for an appeal and was given it and his appeal failed other than a couple of minor ones; still nothing has been done. He has been violating probation multiple times and they still do not enforce. There are still people living all over the property including in the garages and they also have sexual predators living on the property. This was told to them by the County probation officers but yet they cannot find any registration of them on the State and they have all lived there for well over two years. Now they have a situation with dogs. Now he has five big Rottweiler's and Rottweiler-crosses and they have made numerous attempts at different people. A dog was shredded in the front yard and the kids and the old lady that saw it happen were quite petrified. Later a little girl got torn up in the street and nothing was done over that because the little girl's grandparent was living in the garage and you can't prosecute him because he will be thrown out so all the charges were dropped yet animal control gave him back his dog. They were told that three dogs was the maximum but he still has five dogs as of this morning. The dogs are still out every single day and night. Mr. Mildren said they are trying just trying to find out what is being done because they have tried everything they can think of and it seems that the owner gets away with it. He would appreciate it if he could hear something back on what is being done. Original it was said that this was a neighbor complaint and this is not a neighbor on neighbor; this is a neighborhood on a neighbor. There has been a lot of people who have been threatened and people now won't even walk in the neighborhood because they are afraid that they are going to get attacked.

Diane Box, resident said that we are all here about quite a few things and we have been here before and expressed concerns bit to no avail. She displayed a picture of a dead dog starved and frozen to death in the yard next door to Mr. Mildren's house. They heard it yelping all night long but they stopped calling to complain because nothing happens. Animal control actually called the owners and brought the dogs back to them without citations. This death could have been prevented if code enforcement and animal control followed through. There have been numerous complaints on this certain house because of roosters, chickens, dogs killing the chickens, crowing, feces smelling up the neighborhood, and abandoned non-registered vehicles full of trash on this property and this is also causing blight. We need code enforcement to be pro-active and alleviate the blighted conditions as per Ordinance 10.28.010(a) which explains everything that is happening in their neighborhood and she read a portion of that Chapter. She mentioned that an auto repair shop has opened on their street with commercial tow trucks dropping off broken cars for repair all at the illegal repair shop in a residential neighborhood. She said that Indian School Lane has become a racetrack and suggested putting the PD's radar trailer there for a week or so to help warn speeders to slow down. There is a halfway house on the corner of Alessandro and Repplier with too many residents that they now house in garden sheds out back. Mr. Thomas at 49 W. Repplier his dogs escape from his yard and kill and mane

our neighbor's animals and have bitten people. These vicious dogs should be taken away; he is obviously an irresponsible pet owner. What will it take, a dead child for animal control or code enforcement to do something? Again, all of these issues are preventable and we shouldn't have to keep coming here begging for things to get done. In regards to the streets where is all the money going that every citizen in Banning pays for street sweeping. For the past four years nothing has been done to their streets as far as cleaning. She hopes that something can be done and all the complaints handled. Also, she sees code enforcement driving around in the same vehicle often. We have two code enforcement vehicles as far as she knows and they can both be in different cars and both be doing more productive things than riding together in her opinion.

Jerry Westholder, resident said he understands now Mayor Franklin's comments when she said that people are afraid to come and talk especially the way he was treated the last time he brought an issue to this Council and judging from what he reads in the Banning Informer. He said what he has here tonight is from the Sun Lakes Newspaper (see attached Exhibit "A") of again the \$227,000 dollars that Sun Lakes owes the City of Banning. From what he understands Mr. Moyer doesn't know what the idea is to recuse himself. He cannot recuse himself and talk about the issue either at Sun Lakes as a representative or as a representative of this City Council. Recuse means to back off. It is also interesting to note that in this same paper they boast of a \$700,000.00 dollar surplus so truly the money is in there to pay the City. He has talked to so many people who have water issues and their water gets turned off immediately when their bill is one day late. His son went through something like that when he served on the City Council; there was no mercy. If they wanted it back on the same day there was a hefty fine to pay. If he wanted to wait a couple of days it would be a little bit cheaper. He gets the feeling sometimes that Mr. Moyer feels that there is one set of rules for Banning and the rest for the great city Camelot and he feels this is wrong. He feels the City needs to address this issue, come to a conclusion and have Sun Lakes pay their bill. He also feels that we need to have a forensic audit of our utility company so we know what is going on in our city.

Ruth Cannon, resident of West Replier Road addressed the Council in regards to the dog issue. She said on the morning of December 27, 2015 she was walking three dogs west bound on Replier past San Gorgonio when three Rottweiler's belonging to Wesley Thomas at 49 W. Replier surrounded them on the street and began a terrifying concerted attack. It resulted in the death of one of the dogs in her care and life-threatening injuries to the other. She is here to make the following complaints. She charges that Mr. Thomas knows that he cannot control his dogs because they are bigger than he is. He stood on his property watching the attack and offered no assistance while she was screaming across the street from him. Banning Police and Beaumont Animal Control responded to the scene and the incident is logged under Beaumont PD Animal Control Case No. 1512B-3110. They cited Mr. Thomas for two of the three loose dogs and fined him a \$1000 dollars. Being unsatisfied with the fact that his dangerous dogs were not impounded but returned to him she sought the City's intervention by submitting a code enforcement complaint. As was pointed out earlier W. Replier Road is in a low-density residential area with a limit by Municipal Code Title 17, Chapter 17.40 limiting dogs to 3 per lot and not 5 that can out-run you and out-weigh you. This leads to her second accusation in which she charges that the City of Banning through inconsistent and lax enforcement of municipal codes allow this threat to public safety to persist and to grow in scope and hazard. This code enforcement complaint has been referred to the City Attorney's office under Docket No. CE16-

12. She understands that her complain is one of many varied code enforcement complaints against this resident. Mr. Thomas seems to laugh and maintain a well-nourished disregard for the idea that he is bound by any social contract or city code. Not only is she angry and frustrated with her neighbor as an individual but thanks to the absence of consequences for his recklessness she now lives in fear on her own street. You should see their level of arousal and aggression; it is off the charts and it is really terrifying to behold. When they are off his property which is frequently they terrorize the neighborhood and she understands from her neighbors accounts that this is not the first time they menaced someone; they injured at least one child. She also mentioned an incident that she experienced first-hand experience with his dogs. She is asking for the Council's attention to this matter and continued diligence. She has asked her neighbors to please don't let these incidents of his dogs being off his property go unreported. Make a nuisance of yourself, call and get it logged under those case numbers and please keep the public officials attention on this. Please don't let this persist through indifference.

James Payne addressed the Council stating that he is frustrated at the continuance of issues like his neighbors were demonstrating to the Council tonight. They have already taken exhaustive measures of what they believe to have been the proper course of action and because those actions have not been remedied they are here tonight. The blight that has taken place specifically on Lombardy Lane and the surrounding streets is of concern. There are numerous code violations of several residents and property owners on Lombardy Lane that are having a direct and negative impact on the quality of life as well as on property values. Despite having brought these concerns to City Council and code enforcement certain residents continue to neglect their property resulting in out of control weeds which is a fire danger, continue to park vehicles on their front lawn, accumulate equipment such as rusted out air compressors as well as junk and trash and also store multiple inoperable vehicles causing blight and eyesores in their neighborhood. He and his wife and his neighbors have made numerous and repeated phone calls to code enforcement and have taken time to report these issues in person and have done this as a continuance for at least 11 months. The code officer provides excuses for the code violators lack and maintenance and inaction rather than providing results of corrective action. Also, when they have contracted code enforcement they have been made to feel that we were in the wrong for reporting their concerns. Banning's code enforcement website clearly states that codes are implemented to regulate property maintenance and health and safety for the resident's quality of life. He is a proud home owner and simply asks that the proper actions be taken to maintain sanitary conditions within their neighborhood and for the welfare of the residents there. He came to the City Council over half a year ago and made phone calls to code, to police, and to fire regarding the vacant field east of Durward Avenue which lines up at the end of Lombardy Lane between Meadowlark and Santa Rita. One of the reasons for bringing the issue to Council was for weed abatement because the property owner failed to control the weeds and also because of the consistent trespassing into this vacant field by people who park, litter, party and dump that takes place on a consistent basis. Their neighborhood watch group asked that the property owner take place "no trespassing signs" on the outlining of the field and take measures to eliminate dumping and fire hazards that are present there but no action has been taken by the property owner to do that. He wants the Council to understand that their neighborhood is frustrated with the lack of action from code enforcement in not regulating these ordinances on the streets of Lombardy, Santa Rita, Meadowlark and the surrounding streets. Many of our neighbors have become discouraged and have expressed interest in selling their homes and feel that the

neighborhood is in decline and that code is not protecting the homeowner's investment and their properties and ask for code enforcement to uphold the ordinances that are in place. They are bringing these matters to Council's attention because they feel they have exhausted every effort to report their concerns to no avail. They appreciate the action that the City officials will take following the presentation of these issues.

Deborah Ferrell, resident addressed the Council reading from a prepared letter regarding her issue with her utility bill (see attached Exhibit "B").

Inge Schuler, resident addressed the Council stating that this goes to show that there are two measures of measuring. If your bill is over \$200,000.00 dollars it's disputable and can be discussed but if it is only \$800.00 dollars you are plum out of luck. She said that she can't believe how many times that she has been up here asking for a forensic audit of the utility company and nothing is being done. She said that she is very pleased to know that the staff reports now have an actual person listed that makes the report so now when we have some questions later on we can contact the right person so that is very much appreciated. She said that she has an issue with the Pending Items, page 3 of the agenda. She has said this before that you have a list of things that you are going to bring forward and then they fall off the radar. Now we have no pending items. What happened to all the bills, all the issues that were going to being discussed like animal control, code enforcement, the Jim Smith issue, the various bills owned to the City from the Chamber of Commerce and Sun Lakes? How do they disappear when they are not being discussed in public and added on to the agenda at some future time? You can go through previous agendas and just do your own checking and see what has fallen off and now we are very good and have nothing which is going to probably keep a lot of people happy.

Heather Rhoades addressed the Council representing Banning Family Community Health Center which is a newer clinic located at 1070 W. Ramsey open from 8 a.m. to 5 p.m. They have doctors, dental and pharmacy Monday through Friday. They are also trying to expand their behavioral health department as well which is not fully functioning yet however they do have their psychologist coming out on Wednesdays and Thursday also from 8 a.m. to 5 p.m. She said that Covered California is one of the services and that will be coming to an end soon, January 31st and they are there to help everyone get signed up for health insurance whatever it may be and they also help the community with Cal-Fresh applications, SSI and unemployment.

Bob Botts addressed the Council as the Chairman of the Citizens Bond Oversight Committee for Mt. San Jacinto College. He is sure that some of you are familiar with State law that requires when a school district community or K-12 passes a bond issue that the Trustees must appoint a citizens oversight committee. Citizens made up of senior citizens, taxpayers groups of which there are nine of them that meet periodically throughout the year. The charge that is given under the law is that we oversee or look over the shoulders of the Board of Trustees to make sure on behalf of the taxpayer that the tax bonds, the money that they have spent relates to what was in fact set in the bonds. He is here tonight to do a couple of things: 1) They represent you and all the taxpayers; and 2) they are meeting tomorrow at 4 p.m. at the campus here in Banning. He invited all of you and particularly Councilmembers Peterson and Miller because they were appointed to the 2 + 2 for Mt. San Jacinto College and although this is the Oversight Board they would certainly like to have them there as well as any other citizens that are interested. He is

sure that he doesn't have to tell you the importance of this college to the Pass. He was able to attend the Economic Development Workshop at 3 p.m. and obviously you need to move forward with that and have a plan for the city but what is so critical it doesn't matter what you develop in that is that we have an undereducated workforce and it is not unique to Banning. It is not unique to the Inland Empire – Riverside, San Bernardino counties when we try to recruit high-tech industry and not just warehouse and distribution they say we would love to come but you have an undereducated workforce and we are all working to change that. One other additional thought is that we have a new Board of Trustees for Mt. San Jacinto College and Dr. Sherrie Guerrero is from Cherry Valley and represents all of the Pass Area and a lot of us are very excited and she is going to be very pro-active in saying we want to work with the City of Banning and Beaumont and the school district and develop a Mt. San Jacinto plan for the Pass and a plan that we can get behind with her and take over the hill to the rest of the Board Members. One last thought, in that \$300 million bond issue that we over-whelmingly passed in the Pass here about \$25 to \$30 million of that is earmarked for our campus here to build a building of some type and that is under discussion. Of the about \$300 million that we have locally through that bond issues the State has matching funds, right now they don't, but they have a program that will match those funds for what we call "self-help counties" meaning that we have voted to tax ourselves to build buildings for that school. Once there is a bond issue in November and none of us really likes to vote more taxes but a \$9 billion dollars bond issue that would build, if it was approved, money for the State then to match. The District would really like to take that \$300 million and leverage it against what they can get from the State and maybe spending \$600 to \$700 million dollars on Mt. San Jacinto College.

Rick Pippenger addressed the Council regarding the Sunset Grade Separation. He said that they have dug up the streets six times that he can count to do the wiring for the street lights and why they still keep blinking red constantly is beyond him. When it was first started everybody was nice and took their turn and now it is suicidal down there. The people that work for Riverside construction there are as many days that they don't, as they do work. It is really annoying and somebody is going to get hurt at that intersection. He can't see any reason in the world why they can't get it working properly and it sure would be nice if they got it done.

Umberto Bagnara, business owner addressed the Council as an advocate for medical marijuana. He knows that it has negative connotations but he is going to try to alleviate those as he speaks tonight. A friend of his a couple of years ago died of cancer and at the end of his life he started taking medical marijuana with a prescription from the doctor and it seemed to help him tremendously and at that point he didn't understand what the big problem was and he was never into it before but saw that there was a need for it. A customer of his recently died of prostate cancer and the doctor recommended marijuana and the customer had to go all the way to Palm Desert to get his medication and it was hard on him and he couldn't do it and tough on his wife to go and get it. So he is here asking tonight as of March if the Council hasn't changed their outlook on this the state government is going to come in after March and dictate to the City what you can and cannot do as far as these businesses go. He said he just went before the City Council in Desert Hot Springs and he is opening a 3,000 square foot facility over there right across the street from Mission Lakes and he would like to do the same in this town. As he spoke to them and in speaking to Cathedral City you are either going to get illegal ones which you

already have one operating in this town already and he bets the Council doesn't even know that or you are going to get legal ones which the City can control. So it is up to the Council.

Chief Diaz addressed some of the issues that the citizens brought up this evening. He said that there are some projects around the City that they have not had the opportunity to really focus on. Their code enforcement team up until about a year ago consisted of one Code Enforcement Officer. For a city of 30,000 residents that is not enough and it was more of a reactive code enforcement team as opposed to a proactive team. They were lucky to add an additional position to the code enforcement team and it is still not enough. He said that Sgt. Fisher is in charge of the code enforcement team and he can attest to the fact that they get numerous calls and they unfortunately have to spread the team throughout the city. Someone brought up why are two code enforcement officers assigned to a vehicle. That doesn't happen very often but wherever they are going out to address issues in areas of concern they are looking at the safety aspect of it; just for protection. There are issues with the resident, Wesley Thomas, that were brought up and it is his understanding that is currently going back to court for violations to the terms that were originally reached in the court. He cannot discuss those items at this time but they are actively looking at what can be done. There are concerns and he wanted the citizens to know that they are addressing them and are doing what they can with the staff that they have and at the same time keeping in mind that there are other areas around the city that need the attention of code enforcement such as the Banning Business Center. He said that Sgt. Fisher contacted some of the people who brought some of their concerns today and will be working on them. We are committed to the city and to a better code enforcement team and he only asks for the patience of our citizens to allow them to get the team going and be little bit more proactive.

CORRESPONDENCE - None

PRESENTATIONS:

1. Riverside County Fair & National Dave Festival Queen & Court

Don Smith said as citizen of Banning he would like to say something positive about code enforcement. About two weeks ago he told the Chief about a code enforcement problem he was having that dealt with the homeless and what he considered public safety and a fire hazard and the Chief spoke to Sgt. Fisher and when he drove by yesterday the problem was gone. So in two weeks the problem was solved so they do try and in some cases, if they don't get cooperation from the owner, it is probably harder than when they do get cooperation from the owner.

Mr. Smith said as the City's representative to the Fair Board and as the treasurer of the Friends of the Date Festival every year it is his privilege to be involved in picking Riverside County's Court and our representatives and this year they have managed again to pick an amazing court.

The Queen and Court introduced themselves at this time Queen Scheherazade-Tyler Kelleher from Beaumont High School, Princess Dunyazade-Vanessa Gaytán from Desert Mirage High School, and Princess Jasmine-Selena Andrews from Indio High School speaking about their education and future goals and that there were proud to represent Riverside County. They each gave information about the fair going over the many events, attractions, exhibits and

performances that will be happening and invited everyone to attend the fair that will open on February 12th through the 21st.

Frank Burgess addressed the Council stating that he understood you asked the City Clerk if there were any written letters to be read at the meeting and his was not read. He turned in a letter yesterday and he is asking the City Clerk to read that letter to the public here and now; are we going to do it.

City Clerk said that she spoke to the City Manager and the City Attorney and was told not to read the letter at this time.

Mr. Burgess said to the City Manager and City Attorney when a letter is addressed to the citizens of Banning he doesn't see where we are breaking the law when he turned in a letter and asked for it to be read. He said why you folks have made that decision is why we have been in such trouble for the last five to six years of \$230,000.00 dollars, Chamber of Commerce of \$30,000.00, and \$70,000 not collected so let's get our heads together and listen to the citizens that come to the meeting and pay attention to what they are saying. He wanted it noted that he asked for the letter to be read here this evening. He wants to know why the letter is not being read.

Don Smith said he wanted to remind the citizens of Banning High School that this competition will be open again next year and it is a scholarship program in which these three young girls received scholarship of \$3,500 so please apply.

2. Annual Stagecoach Days Update – Presented by Amy Pippenger

Councilmember Peterson said before starting this item he would really like to know why the letter wasn't read and why the City Attorney doesn't respond.

City Manager said that Mr. Burgess was out of order; we were on presentations and it wasn't a public comment period.

Councilmember Peterson said if the correspondence wasn't read and the question was why it wasn't read can we at least get an answer as to why it wasn't read. Whether we read it or not is irrelevant but he would like to know why it wasn't read.

City Attorney Taylor said his standard protocol in his 15 years of practice has been to respond when directed by the Mayor and the Council; not when directed by a member of the public and that is consistent with the Brown Act so he takes direction if the Council has a question he will respond to that. He acknowledges that the speaker was out of order and it is certainly within the right of the Council not to take the speakers comments out of order. Speakers have the opportunity during the public comment item to present what they like during the five-minutes and this speaker did not do that and he was out of order. He said in response to the letter the letter as he understood it involves a liability matter and that is what he understood it to be. Any letter that deals with a legal or liability matter the Brown Act does not required public comment on that.

Ms. Pippenger addressed the Council stating that she wanted to update the Council as to what went on last year and bring the Council up to date as to what is going on this year. At this time Ms. Pippenger started her power-point presentation (see Exhibit "C" attached). For information regarding the 2016 Stagecoach Days events it is available at www.stagecoahdays.net and Stagecoach Days 2016 will be held September 9–11. She said for 2016 they will be bringing back the wristbands for the carnival and changing the gate prices. There has always been a \$5.00 dollar gate fee and this year children 10 and under will get in free with a paid adult so more families can attend and support Stagecoach Days. She went over the profit and loss statement going over each of the events held last year in detail that were held to help them pay for Stagecoach Days but also to provide activities for the residents of Banning and the surround areas. The total for the entire year they came out positive \$13,718.95 as of December 31, 2015 which for them as a non-profit is fabulous. They are looking forward to this year growing and being even a better year. She said that the logo on the announcer's booth was hand-painted by the 2015 Rodeo Queen Jennifer Hall. When they did the State Competition BBQ there were 80 judges that came out to judge the meat and they came from across the country and were not from California and they really loved our city. Harmony Latham the 2014 Rodeo Queen was just crowned the 2016 Miss USA Rodeo so we do have a celebrity from our city. They had a booth at the Cherry Festival for the first time. Had many volunteers to put on this event for which they are grateful. We are "Stagecoach town USA" and they pay for a stagecoach to be at Stagecoach Days every year so that the citizens can have free rides so look for it again if you want a free ride on a stagecoach. She invited everyone to come out to Stagecoach Days in September.

ANNOUNCEMENTS/REPORTS *(Upcoming Events/Other Items if any)*

City Council

Mayor Welch –

- A week ago he attended the League of California Cities Mayor's Meeting for all the cities in the county and at that meeting the Board of Directors and league leaders set out the 2016 Strategic Goals for the California cities and he wanted to share it with the rest of the Council (he passed out information to each of the Council Members). He thinks that this could give them some thoughts and ideas for their planning cycle with our City and the upcoming workshop.
- He said that Anita Worthen spoke about the Veteran's Expo and this being the 7th Year. When they started this seven years ago there were about 75 veterans that showed up and they haven't been under 300 since that time. The importance of this is just not to have an expo but to help veterans. He was a little surprised when they started this seven years ago on the number of people who have served our country and are entitled to benefits that really didn't know what their benefits were and they are able to get the Veterans Administration come to this event and enroll veterans in the benefits program. This will be held on January 30th from 10 a.m. to 2 p.m. at the Beaumont Civic Center.

Councilmember Peterson –

- He has to go back to what just transpired in the chambers a few minutes ago and the more he gets to thinking about it the more it upsets him over what happened with Frank Burgess. He

said he didn't know what the letter said, has no clue as to what the letter said and for that matter he really doesn't care. At first when the City Manager said it had to do with potential litigation well, he is still a citizen and whatever he says it makes no difference as to what comes out of the Council's mouth. For us to discuss potential litigation he understands that it is not good and it is a violation for us and we can't do it and it is a closed session act. If the citizen wants to come up and talk whatever his thought is, is his thought. Whether he has information on whatever topic it is, it is the citizen who wants to talk and he really believes the citizen had the right to speak whether or not it pertained to potential litigation as far as the City goes because he is not privy to what is going on anyway and he doesn't have our closed session memos from the City Attorney, at least he shouldn't have and if he does then somebody up here needs to be censured for passing such items out. Councilmember Peterson said he doesn't like the suppression, the lack of transparency to where all of a sudden we are going to be like the Soviet Union and we are going to tell people when they can talk and when they can't when they have the right to come to that podium and face their government and say what is on their mind. For him, he thinks it was a great injustice what we did in this chamber today and he doesn't care what the letter said. He could have been talking about whatever litigation the city is in but he is a citizen of the community and he has a right to speak. If he wants to talk badly about us, then you talk badly about us. If we don't have skin thick enough to put up with the criticism, with the complaints, with the verbal abuse or anything else, then we need to walk off or resign. But we did an injustice and that was wrong what happened to Frank Burgess here today.

Councilmember Franklin –

- Going back to last Friday she sits on the State League of Cities Policy Committee for Community Services and they did talk about the homelessness issue and this is an issue throughout the state. They actually did craft some policy wording that they asked go to the State Legislature about how they can address this problem through the state. Along with that they did their "Point in Time" count this morning and had 13 volunteers that showed up at 5:30 a.m. to go out and try to do a count of the homeless they knew about here in town. She thanked the police department, the police chief, his sergeants who helped by making sure those who did the count were safe. One of things she found very interesting as they were doing the count they went to some of the locations that they have seen homeless in before and they are gone. The reason the count is done is because it is a federally mandated requirement every two years. Our county had decided to do it every year and it is done at the same time throughout the county and this is part of the information that is put forward for getting federal funds into our area.
- In regards to Southern California Association of Governments (SCAG) there is a Regional Transportation Plan that is being worked on now. The time for public comment is through February 1st and there is a seven minute video anybody can watch if they are interested on their website at www.scagrtp/scs and anybody in the public can make public comments on it and she would encourage anybody who is interested in long-term regional transportation planning for our area to watch the video and make comments.
- Tomorrow night the Regional Water Alliance Meeting will be held at 6:00 p.m. and is open to the public.

Councilmember Miller –

- He has several comments about what happened at the meeting today. He was really very upset at the fact that people came and complained about their neighbors and what was happening and the lack of code enforcement and he recognizes that the City is doing what it can but he thinks that it is very difficult for people to come here and have us sit here and act as if we don't care. He wants everyone to know that he and he is sure that the rest of the Council has not ignored the statements that have been made and we are going to do whatever we can to improve those situations. The other thing that was mentioned was the fact that Sun Lakes owes \$227,000 in back payments on water. He said what he just said is incorrect; they do not owe them. We generated \$227,000 dollars' worth of waier and the City neglected to read the meter. That happened over a period of 25 years. Just imagine, 25 years in which our City government did not read the meter; now that has been changed. We have an entirely new set of people of running this government. There was a tremendous outcry when we changed the people in this government. We have a new city manager, we have a new chief of police, and we have a new director of public works. When each one of these changes was made there was this tremendous outcry and one of people in the audience came forward and said you are making a big mistake; but we didn't make a big mistake. Mistakes like the \$227,000 will not occur again. The fact that we had a \$1.8 million dollar oil spill which was not paid for will not happen again, and so on. This City has changed and mistakes that were made in the past will not be made again. When it comes to the bill that Sun Lakes has not paid because we did not charge them the City Manager is negotiating with Sun Lakes and hopefully that problem will be resolved. In regards to the relationship between Sun Lakes and this community Sun Lakes is a part of Banning. When people ask him where he lives he says he lives in Banning; everybody lives in Banning. The people in Sun Lakes lives in Banning. The people in Sun Lakes pay their electric bill to Banning, they pay their water bill to Banning, they pay the requirements for the police to Banning; they are part of Banning. The rest of Banning resents Sun Lakes and the reason they resent Sun Lakes is because there is a wall around it. The fact that Sun Lakes has its wall is no difference than anyone else. If somebody has a swimming pool, they obviously put a wall round it and they are required to put a wall around it. So the fact that Sun Lakes has a wall around it does not mean that it is not part of Banning. The taxes that the people in Sun Lakes pay go into our General Fund and he would like our city to recognize that Banning and Sun Lakes are all part of one. And at the meeting today someone called Sun Lakes Camelot and it is not Camelot; it is part of Banning and we should all recognize that.

Councilmember Moyer –

- In adding to what Councilmember Miller said it was the Sun Lakes residents who voted to leave the Beaumont School District which is where they originally were so they could put their money and their taxes and so forth and support the Banning schools.
- Several months ago one of his biggest supporters brought up a question about the release of prisoners from our jail and that it wasn't being done properly and they were just being left here and he followed-up on that with the County and with Chief Diaz and so forth and that started the ball rolling and now that we have a new City Manager and he is happy to say that both him and Alex are working with County officials and the courts and so forth to make sure that the County does right by us on where and how they are releasing the inmates and he thanks both of them for that.

City Committee Reports - None

Report by City Attorney - None

Report by City Manager Rock –

- The Loft Project is moving forward and should be actively engaged in a month or two and you will be seeing more activity.
- Vanir is moving forward. They had a little glitch with their grading permit and their plans and they are resolving that and should be moving along pretty quickly.
- So the Council understands he did meet with Frank Burgess yesterday morning and Frank Burgess handed him a letter that is potential litigation and he knows that and it was from his attorney. His other point was that Frank Burgess was simply out of order as far as the Council meeting. He understands the Council's comments very well but so you know Frank Burgess was fully aware that he wasn't going to bring this up tonight.

Councilmember Peterson asked if he would have walked to the podium and began to read the letter would he have been stopped or would he have been allowed to read the letter.

City Attorney Taylor said he would have been allowed to read the letter but that is during the public comment period. Also, he believes 100% in transparency but during the public comment period the speakers can read the letters and can make the statements but the City of Banning, and it is a little bit unusual, they have this item as well on our agenda that allows for certain documents to be received and filed. The concern is that there are certain documents like letters from lawyers that should not be read by the City because they might be giving the wrong message. It is different if it is presented by a speaker versus statements that are then made by the City Clerk or by a member of the staff.

Councilmember Peterson said that this was a letter written by an attorney.

City Attorney Taylor said that is what was presented to us. A letter written by a lawyer threatening litigation and giving a response deadline of February 15th so staff thought that they had time to present this to Council in closed session.

Councilmember Peterson said that even clears even more. Nothing was said that it was a letter written by an attorney regarding potential litigation and that certainly makes sense that we wouldn't have that read out loud but the public doesn't know that. The public sees this bizarre behavior that is going on here and even the Council did not have an idea about the letter or what the letter was going to be so maybe the Council should be briefed so that we don't interject and have a conversation like this.

City Attorney Taylor said he thinks it is also helpful for the public to know too that this City as every city throughout the state as required by the Brown Act has a public comment period so members of the public that want to read something, as many of the speakers did today, that opportunity is on that portion of the agenda. The other portion of the agenda what it says specifically, "Items received under this category may be received and filed..." doesn't

necessarily mean read. So there are certain items that can pop up that would not be read because of the nature that would be of a closed session or litigation type proceeding so that is a distinction. He understands that it is complicated but he thinks it is important for the people to know that if they want to speak on an item, the City of Banning embraces transparency and allows that during the public comment period and that is the opportunity for those comments to be made. What a speaker should not do is to interrupt another speaker on an agenda item and he thinks that is what the public saw.

Councilmember Peterson said he thinks that Mr. Burgess just had a question as to why his letter wasn't read. But he thinks a lot of this could have been alleviated had just a little bit more information gone out and it would have never happened but thank you for the explanation.

Councilmember Moyer said a resident did bring up what happened to all of the pending items so he was kind of wondering that himself.

City Manager Rock said that they are keeping track of the items and haven't lost track of the items; they are doing this internally. He is happy to put those items on there if the Council would like that. They are not hiding anything at all. He made some changes and one of the changes he made was to put the names of the staff persons who are writing the staff report on the agenda. It is not a problem and he is happy to put the pending items back on.

CONSENT ITEMS

1. Approval of Minutes – Special Meeting – 01/12/16 (*Workshop*)

Recommendation: That the minutes of the special meeting of January 12, 2016 be approved.

2. Approval of Minutes – Special Meeting – 01/12/16 (*Closed Session*)

Recommendation: That the minutes of the special meeting of January 12, 2016 be approved.

3. Approval of Minutes – Regular Meeting – 01/12/16

Recommendation: That the minutes of the regular meeting of January 12, 2016 be approved.

Motion Peterson/Franklin to approve Consent Items 1, 2 and 3. Mayor Welch opened the item for public comments; there were none. **Motion carried, all in favor.**

Mayor Welch recessed the regular City Council Meeting and called to order a Joint Meeting of the Banning City Council and the Banning City Council Sitting in Its Capacity of a Successor Agency.

CONSENT ITEM

1. Resolution No. 2016- 01SA, Approving the Establishment of Recognized Obligation Payment Schedule 16-17 A & B for the Period of July 2016 through June 2017 and Approving Certain Related Actions.

Motion Miller/Moyer to approve Consent Item 1. Mayor Welch opened the item for public comments; there were none. **Motion carried, all in favor.**

REPORTS

1. Resolution No. 2016-13 and Resolution No. 2016-02 SA, Approving a Bond Expenditure Agreement between the Successor Agency to the Dissolved Community Redevelopment Agency of the City of Banning and the City of Banning, and approving related actions.
(Staff Report – Rochelle Clayton, Administrative Services Dir./Deputy Manager)

Director Clayton gave the staff report on this item as contained in the agenda packet. She stated that Steve Dukett is in attendance if the Council has any questions.

Councilmember Miller said the \$8 million would then be appropriated by the Council in accordance with the requirements of the covenant and that would be done in the future.

Mr. Dukett said that is exactly the case and he explained further the usage of such bond funds and recommended that the Council move forward in this fashion.

Mayor Welch opened the item for public comments; there were none.

Motion Moyer/Miler that the City Council adopt Resolution No. 2016-13, approving a Bond Expenditure Agreement between the Successor Agency to the Dissolved Community Redevelopment Agency of the City of Banning and the City of Banning, and approving related actions. Motion carried, all in favor.

Motion Franklin/Moyer that the Successor Agency adopt Resolution No. 2016-02 SA, approving a Bond Expenditure Agreement between the Successor Agency to the Dissolved Community Redevelopment Agency of the City of Banning and the City of Banning, and approving related actions. Mayor Welch opened the item for comments from the public; there were none. **Motion carried, all in favor.**

Mayor Welch reconvened the regular City Council Meeting.

REPORTS OF OFFICERS

1. Resolution No. 2016-09, Initiating Proceeding to Update Landscape Maintenance District No. 1 for Fiscal Year 2016/2017.
(Staff Report – Art Vela, Acting Public Works Director)

Acting Director Vela gave the staff report on this item as contained in the agenda packet.

Councilmember Franklin said for clarification all we are approving tonight is just the approval for the report to be completed and not assessment at this time. Acting Director Vela said that was correct.

Councilmember Miller emphasized that the fee is simply equal to the cost of the maintenance of the landscape. Acting Director Vela said that was correct.

Mayor Welch opened the item for public comments; there were none.

Motion Peterson/Moyer that the City Council adopt Resolution No. 2016-09, Initiating Proceedings to Update Landscape Maintenance District No. 1 for Fiscal Year 2016/2017.

2. Resolution No. 2016-06, Approving an Amendment to the Professional Services Agreement with Albert A. Webb Associates.
(Staff Report – Art Vela, Acting Public Works Director)

Acting Director Vela gave the staff report on this item as contained in the agenda packet.

Mayor Welch opened the item for public comments; there were none.

Councilmember Moyer asked if the original contract had a contingency fund and if it did, we've already used it up and is that what you are saying.

Acting Director Vela said no and neither the original agreement nor the First Amendment included a contingency.

Councilmember Peterson asked when it would be finished.

Acting Director Vela said that Phase 1 is substantially completed so the first phase contractor is wrapping up some minor punch items. The Phase 2 contractor that is going to be responsible for the erection of the steel building and the siding he is on site and staff is being told that originally his contract was for six months and he could probably with no unforeseen delays complete that within four months. Then the Phase 3 contractor will start working in the middle of the Phase 2 contractors works and probably have about four months.

Councilmember Peterson asked about the Sunset Grade Separation project. Acting Director Vela said the Sunset Grade Separation Project is nearing completion.

Motion Franklin/Moyer that the City Council adopt Resolution No. 2016-06, Approving an Amendment to the Professional Services Agreement with Albert A. Webb Associates. Motion carried, all in favor.

SCHEDULED MEETINGS

BANNING UTILITY AUTHORITY (BUA) – no meeting

BANNING FINANCING AUTHORITY (BFA) – no meeting.

ANNOUNCEMENTS/REPORTS (*Upcoming Events/Other Items if any*)

ITEMS FOR FUTURE AGENDAS

New Items –

1. Schedule Strategic Planning Workshop (Goal Setting) for March 29, 2016.

Mayor Welch asked the Council to mark their calendars for this meeting.

Councilmember Franklin said she has a new item if the Council is in agreement in regards to talking about e-cigarettes. She doesn't believe that we have any position about that and thinks it is something that we need to either look at and agree that we don't want to take a position or look at and talk about what policy we may want to have but at least have the discussion about e-cigarettes.

Mayor Welch said that today we had a very sad thing happen and all of you know Rita Chapparosa; her husband passed away today so he would like to close the Council meeting in honor of him this evening.

ADJOURNMENT

Mayor Welch adjourned this meeting in honor of Donovan Chapparosa. By common consent the meeting adjourned at 6:53 p.m.

Marie A. Calderon, City Clerk

THE ACTION MINUTES REFLECT ACTIONS TAKEN BY THE CITY COUNCIL. A COPY OF THE MEETING IS AVAILABLE IN DVD FORMAT AND CAN BE REQUESTED IN WRITING TO THE CITY CLERK'S OFFICE.

Violation of DWP No 1

Recurred 1/16 was

FROM THE PRESIDENT'S DESK

By George Moyer, SLCC HOA President

Welcome to the year 2016! Are you ready for all of the challenges and new adventures that await you? The Board has been working to address ongoing issues and prepare Sun Lakes to meet future concerns. The following is a brief review of one important current issue. In coming issues I will attempt to bring you up to date on other ones.

During the past year three major issues dealing with water have had a tremendous impact on Sun Lakes. Initially it was the California drought that led to State mandated cutbacks in water usage and new landscape legislation affected us in many ways. We were forced to reduce our water consumption by 32 percent. Staff was directed to develop a plan and put it into action. At first we were very concerned about the affect this would have on our common areas and golf courses. However, we found that most common areas, although stressed, were maintaining their appearance. Additionally, the golf courses lost some of their turf in the rough areas, but the tees, fairways, and greens have remained in excellent shape. One very important side effect of the cut backs is the tremendous amount of money saved. It would appear that by the time we see year end numbers the association will have saved over \$400,000.

In addition to the mandated usage cuts the State passed a number of pieces of legislation dealing with landscape conversions and artificial turf. The Planning and Compliance Department along with the Master Architectural Committee worked tirelessly to adopt our rules and regulations to the new State requirements. Their recommendations have been approved by the Board and are now being used throughout the community.

About mid-year the state passed another piece of legislation relating to the amount of Chromium 6 that was allowable in drinking water. The new State mandated maximum allowable level for Chromium 6 is 10 parts per billion. They passed this even though the national Environmental Protection Agency has a standard of 100 parts per billion. The city has 21 wells of which 7 are over the maximum acceptable level. The city has two wells that are over the limit within a short distance from Sun Lakes. To help them meet their 32 percent mandated reduction in the use of potable water they designated these two wells as non-potable and diverted all of their production to irrigate our golf courses. This was a win for the city and the community. Up until this happened a 55 acre turf conversion project was being developed to help reduce our consumption of

water. This project was estimated to cost approximately 4 million dollars. Although some feel we should continue with the project, the use of non-potable water for the golf courses relieves the pressure of rushing it to completion.

Finally, some time ago the city advised us that three of our meters had not been recording properly for several years, and therefore Sun Lakes owed them a significant sum for previously unbilled water usage. Based on the available data they estimated that we owed them \$227,077.36. In addition, we were told that another meter had somehow been forgotten and gone unread for about 25 years. Prior to being elected to the City Council I was aware of the issue and took part in discussions relating to it. During those discussions I was told that over the time period in question City management sent staff out twice to inspect the meters and both times the report came back that they were working properly. Once I became a city council person as well as a Sun Lakes Board member, I immediately recused myself from both. I have not taken part in any discussions and/or decision making regarding this issue. Where are we with this matter? The city and Sun Lakes are in negotiations. One councilperson has publicly called for the city to immediately turn off Sun Lakes' water, but that is the extent of my knowledge of its current status. I can only assume that the city and Sun Lakes will come to some sort of agreement and the matter will be resolved.

One previous councilman has tried to accuse the leadership of Sun Lakes for not charging enough in the assessment to cover the water costs. It is obvious that this person has little, if any, knowledge about building a budget for a community our size. If he did, he would know that our budgets are built on a reasonable expectation of what rates will be and our projected consumptions. The facts are, over the time period at issue the city raised water rates significantly. At the same time the Board initiated many programs to conserve water. These two situations skewed the numbers, therefore making it unapparent to the city or Sun Lakes' leadership that a problem existed. The bottom line is that the city's failing equipment created the problem and it was compounded by the inadequate inspections done by the city's metering staff.

The Board and I want to wish everyone in Sun Lakes a healthy and happy New Year.



COFFEE WITH THE EXECUTIVE GENERAL MANAGER

Have you had the opportunity to meet Jeremy Wilson, Executive General Manager? This is your chance! Please join us for coffee on Thurs., Jan. 14, at 9 am in the Main Clubhouse Multipurpose Room. This month our topic of discussion will be the election process. Please RSVP by 5 pm Tues., Jan. 12, to the Main Clubhouse receptionist either in person or by calling 845-2191.

Exhibit "A"

17

reg.mtg.-0126/16

District Delegate:
Bob Allbaugh 846-3129
carbobo6@gmail.com

Alternate Delegate:
Leon Fikse 909-831-3809
lfikse@msn.com

Social Committee
Chairperson:
Carol Munnely 769-1787
jermunnely2@gmail.com

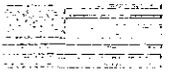
Welcome Chairperson:
Carol Martin 769-2032
martinwasnun@aol.com

Phone Directory:
Pat Scott 769-9061
tuneintuneup@hotmail.com

Treasurer:
Alice Sobel 769-6283
asobel@dc.rr.com

Emergency
Preparedness:
Dennis Anderson 769-7021
Dennis.anderson@djanderson.net

District 23 Happy New Year!

January 2016 

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Important News and Events Mark Your Calendars

- Jan. 2 - District Breakfast @ 9 am in SLCC Restaurant
- Jan. 14 - Coffee with Jeremy Wilson (SLCC Exec. General Manager) @ 9 am in MCH Multipurpose Room
- Jan. 14 - Delegate Meeting @ 2 pm in South Clubhouse
- Jan. 16 - Activities Day - showcase of clubs from 9am-12 in MCH Ballroom
- Jan. 21 - Master Board Meeting @ 6:30 pm in MCH
- Jan. 31 - "Illusion of Elvis Show" @ 4:00 pm
(See page 13 of January's *Lifestyles*.)

Right from Bob

With the apparent defeat of the solar panel project at hand and a budget surplus of over \$700,000, many residents will probably be questioning the increase in the HOA dues. Joe Formino sent the delegates an email which said that this topic would be on the January agenda of the Delegate Meeting to be held at 2:00 pm on January 14 in the South Clubhouse. He stated, "The law governing HOA's surpluses at the end of the fiscal year, states the surplus funds must be applied to the next year's assessment." If you want your voice heard, please attend the meeting. The delegates will then probably present a proposal which will be presented to the Master Board. Applying this excess of funds in order to reduce the HOA dues may be more complicated than meets the eye. If you read George Moyer's "From the President's Desk" in this month's *Lifestyle*, you will discover that Banning is asking for over \$227,000 in water fees that were miscalculated due to faulty water meters...and... they discovered that one meter has not been read for 25 years!!! So now they are demanding that we pay for their mistake. (To be continued on next page under "Solar Panel Project Vote".)

Exhibit "A"

18

reg.mtg.-0126/16

Received 1/16/16 med

Robert ferrell

To: Robert ferrell
Subject: CITY OF BANNING DISPUTE

HELLO MY NAME IS DEBORAH FERRELL AND I AM A CUSTOMER WITH CITY OF BANNING UTILITIES. MY HUSBAND AND I HAVE LIVED IN BANNING FOR OVER 30 YEARS.

I HAVE KEPT MY BILL CURRENT PRIOR TO DISPUTE WITH CITY OF BANNING as of NOVEMBER 2015.

IN NOVEMBER I DISCOVERED THAT MY ACCOUNT HAD BEEN BILLED IN THE AMOUNT OF \$879.00 FOR A TOTAL DUE. AS YOU CAN IMAGINE MY SURPRISE AND I HAD NO IDEA WHY THIS HAD OCCURRED.

I CALLED THE CITY OF BANNING AND SPOKE WITH SEVERAL EMPLOYEES: STACEY BAVAL AND MICHELLE GREEN. BOTH EMPLOYEES WERE VERY ACCOMODATING IN TRYING TO EXPLAIN.

WHAT I WAS TOLD WAS THE FOLLOWING:

DUE TO ~~EXTENSIVE~~ *EXTENSIVE* CIRCUMSTANCES RELATING TO THE CITY OF BANNING, SHORT STAFF, DEATH, LONG TERM DISABILITY THAT MY METER HAD NOT BEEN READ CORRECTLY AND THAT THE CITY OF BANNING HAS A PROTOCOL TO MEET BETWEEN 28-34 DAYS BEFORE THEY ARE PENALIZED SO THEREFORE ALL CORRECTIONS TO MY ACCOUNT OCCURRED AFTER THE FACT.

HAD I BEEN BILLED FROM THE INCEPTION OF THE ~~EXTENSIVE~~ *EXTENSIVE* CIRCUMSTANCES WHICH WOULD HAVE BEEN IN THE MONTH OF MARCH BECAUSE THE ERROR WAS DISCOVERED IN FEBRUARY 2015 NOT NOVEMBER THIS WOULD HAVE BEEN ACCEPTABLE. (SINCE THIS TIME OUR METER HAS BEEN REPLACED AND PER MICHELLE GREEN ALL CHARGES HAVE BEEN CORRECTED) WHICH NOW SHOWS THAT THE CITY OF BANNING WAS NEVER IN ERROR) WOW.

NOW I AM RESPONSIBLE FOR PAYING THESE CHARGES OR MY SERVICES WILL BE DISCONNECTED BY CITY OF BANNING.

I HAVE NO PROBLEM IN PAYING FOR WHAT I AM RESPONSIBLE FOR AND IF YOU REVIEW MY BILL AND PAYMENTS YOU WILL SEE THAT I HAVE NEVER MISSED A PAYMENT AND HAD I BEEN BILLED CORRECTLY AFTER THE CITY OF BANNING HAD MADE THEIR MISTAKE WE WOULD NOT BE IN THIS SITUATION TODAY.

I SPOKE WITH MICHELLE GREEN AND WE DECIDED UPON A PAYMENT PLAN AND THIS WAS ONLY BECAUSE I HAVE DEALT WITH THE CITY OF BANNING IN THE PAST AND I KNOW IF I DID NOT SET UP A PAYMENT PLAN MY SERVICES WOULD HAVE BEEN DISCONNECTED IMMEDIATELY.

NOW, I HAVE ~~EXTENSIVE~~ *EXTENSIVE* CIRCUMSTANCES OF MY OWN, MY HUSBAND AND I ARE BOTH RETIRED, WITH HEALTH ISSUES AND WE ARE ON A BUDGET WHICH DOES NOT ALLOW US TO BE IN THE POSITION TO PAY FOR ADDITIONAL CHARGES TO OUR BILL AT ONE TIME.

WHAT WE ARE REQUESTING AT THIS TIME IS FOR THE CITY OF BANNING TO TAKE RESPONSIBILITY FOR THEIR ERRORS AND NOT TRY TO PLACE THE BLAME ON US. MY HUSBAND AND I ARE NOT RESPONSIBLE FOR YOUR ~~EXTENSIVE~~ *EXTENSIVE* CIRCUMSTANCES THAT DID NOT ALLOW YOU TO PERFORM YOUR JOB CORRECTLY AND IT IS JUST UNACCEPTABLE TO PLACE THAT ~~EXTENSIVE~~ *EXTENSIVE* RESPONSIBILITY ON US. IF WE REVERSE THE SITUATION AND WE WERE TO TELL THE CITY OF BANNING THAT PREVIOUS BILLS COULD NOT BE PAID BECAUSE OF OUR ~~EXTENSIVE~~ *EXTENSIVE* CIRCUMSTANCE (WE ARE BOTH RETIRED, ILL, HAVE NO ADDITIONAL MONIES AND ARE ON A BUDGET, WE NEED TO PAY SOUTHERN CALIFORNIA GAS, VERIZON BEFORE WE PAY FOR THE CITY OF BANNING, WE CAN MAKE PAYMENTS FOR THE NEXT 6 MONTHS) HOW FAR

Exhibit B

DO YOU THINK WE WOULD HAVE GOTTOM (THE TRUTH IS OUR ~~REASON~~ CIRCUSTANCES WOULD NOT EVEN BE ACCEPTABLE FOR CONSIDERATION. WE WOULD HAVE HAD NO SERVICES EXTENED TO US BY THE CITY OF BANNING.

OUR REQUEST AT THIS TIME TO THE CITY OF BANNING IS FOR ONCE:

PLEASE DO THE RIGHT THING WHICH WOULD BE TO WRITE OFF ALL CHARGES OF \$879.00 TO OUR ACCOUNT. (all charges and payments CAN reviewed with Michelle Green FOR THIS ACCOUNT)

THANK YOU.

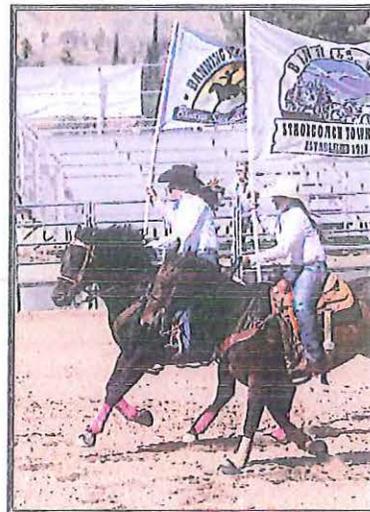
RESPECTFULLY SUBMITTED.
ROBERT AND DEBORAH FERRELL
Acct #6435-11050

Stagecoach Days 2015



This is a brief synopsis of what occurred during Stagecoach Days 2015, a detailed financial report, and upcoming 2016 events.

- VIP
- Tribute
- Rodeo Queen Competition
- Rodeo
- New Gate
- Junior Rodeo
- Stage Performances
- Carnival
- Parade
- Profit/Loss Statement
- Upcoming Events



VIP Section for Sponsors



A tribute to longtime Banning resident and Stagecoach Days supporter Linda Escandel

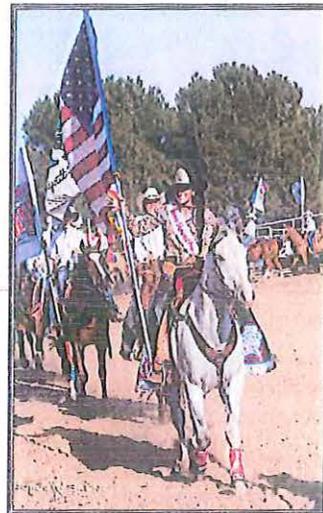


2015 Stagecoach Days Rodeo Queens



Stagecoach Days Rodeo Queen

- Jennifer Hall, 2015 Miss Stagecoach Days Rodeo Queen has been attending rodeos throughout California, Arizona, and Nevada representing Banning and bringing recognition to our city.
- The three younger queens Morgan Quayle, Kaylie Capetillo, & Sammi Jo Stuart represent our city on a local level at events throughout our city, Beaumont, Yucaipa, & Calimesa.
- 2016 Rodeo Queen applications will be available March 15 at: stagecoachdays.net
- 2016 Stagecoach Days Kick off Dance and Rodeo Queen Coronation will be held September 8, 2016. Details coming soon and will be available at the above website



Professional rodeo brought back with over 300 contestants participating!



Parking lot was full and we were able to keep the line moving at the gate with the help of the City of Banning Community Center staff. We believe by adding the new ticket booth we solved a lot of the gate entry/exit problems. We still had to turn people away Saturday night because we did not have enough seats and we are still acquiring donations to add additional bleachers.



Junior Rodeo ages 4-17 held on Saturday.

Goat Tying, Pole Bending,
Barrel Racing, bull riding, just a
few of the Junior rodeo events.



Friday &
Saturday Live
Band

Stage Performances all
weekend

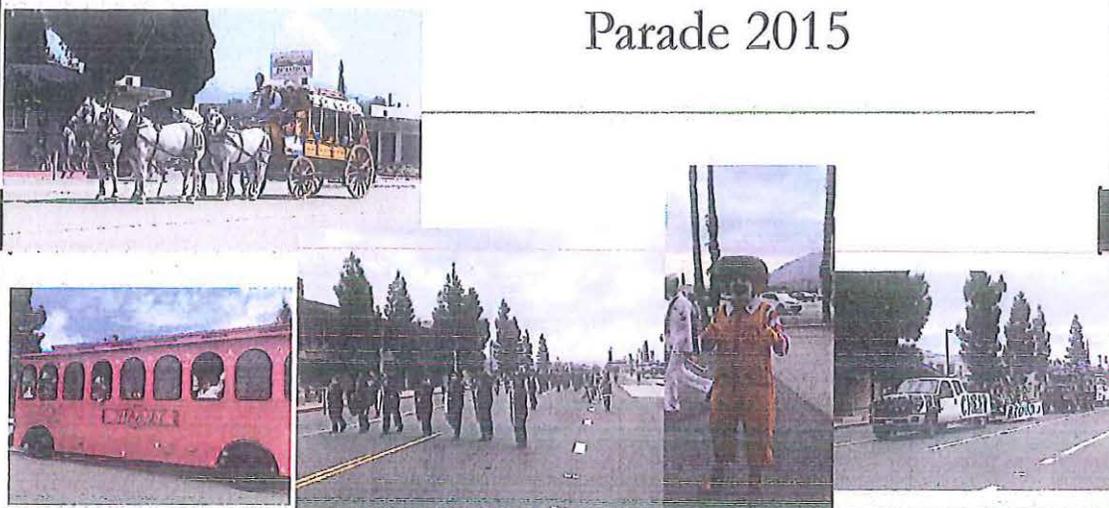
Sunday Night
Battle of the
Bands



Carnival and Vendors



Parade 2015

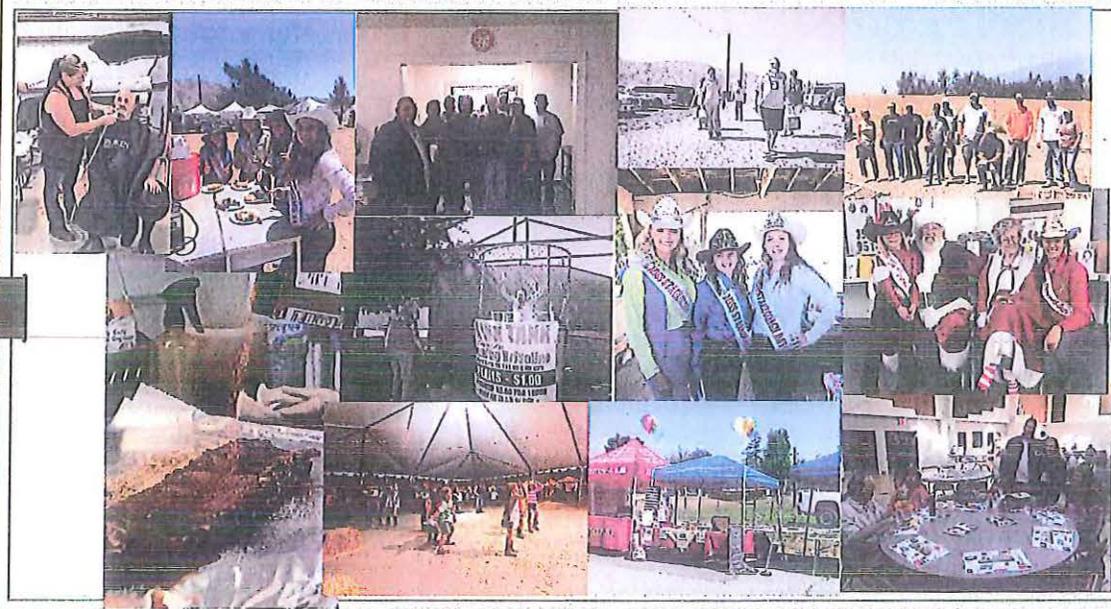
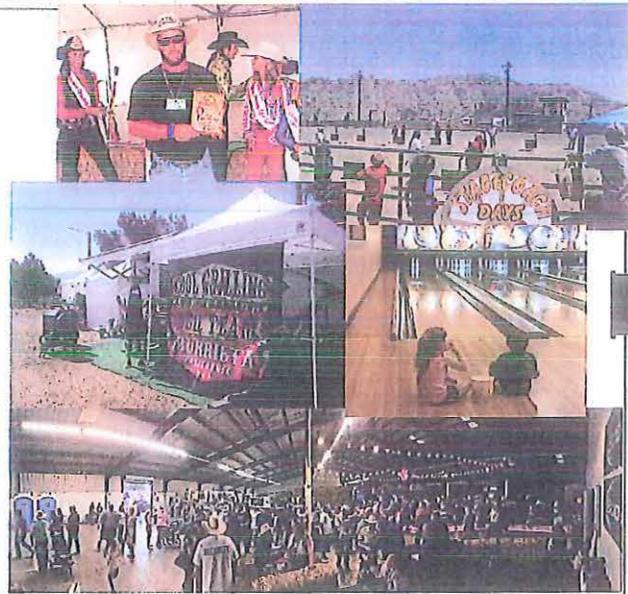


<h1 style="text-align: center;">Profit and Loss</h1> <h2 style="text-align: center;">2015</h2>	Event	Income	Expense	Net
	Trapshoot	\$739.00	0	\$739.00
	Bowling	\$1909.00	\$513.00	\$1396.00
	BBQ/Horsehoes	\$22,722.00	\$24,026.33	\$1304.33
	Queen Contest	\$18,970.50	\$8,911.85	\$10,058.65
	Whiskering	\$1373.00	\$280.55	\$1092.45
	JF Rodeo	\$12,219.00	\$4,927.68	\$7,291.32
	Stagecoach Days	\$99,174.00	\$99,427.93	\$253.93
	Pancake Breakfast	\$2,228.21	\$332.63	\$1,895.58
	High School Rodeo	\$1,594.00	\$999.23	\$594.77
	Hay Day	\$1,756.75	\$1,564.13	\$192.62
	Administration	\$773.79	\$2,716.97	\$1,943.18
	Corcals	\$2,500.00	\$8,540.00	\$6,040.00
	Totals	\$165,959.25	\$152,240.30	\$13,718.95



Community Events

- Pancake Breakfast
- Pot Shoot
- Bowling
- California Junior Rodeo
- BBQ/Horseshoe Tournament
- Whiskerino
- Rodeo Queen Coronation Dance
- California High School Rodeo
- Play Days
- stagecoachdays.net



Stagecoach Town U.S.A.



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CITY COUNCIL AGENDA

TO: City Council

FROM: Michael Rock, City Manager

PREPARED BY: Michelle Green, Deputy Finance Director
Melissa Elizondo, Accountant

MEETING DATE: February 9, 2016

SUBJECT: Approval of Accounts Payable and Payroll Warrants for Month of November 2015

RECOMMENDATION: The City Council review and ratify the following reports per the California Government Code.

FISCAL DATA: The reports in your agenda packet cover "Expenditure Disbursements" and "Payroll Expenses" for the month of November 2015.

The reports are:

Expenditure approval lists	
November 5, 2015	283,848.23
November 13, 2015	477,174.49
November 19, 2015	995,020.83
November 25, 2015	224,600.61
November 30, 2015	12,502.14
February 2, 2016	3,968,362.54 (November Month End)
Payroll check registers	
November 13, 2015	3,738.90
November 27, 2015	3,119.47
Payroll direct deposits*	
November 13, 2015	251,545.73
November 27, 2015	299,717.27

*Included in Month End total

As you review the reports, if you have any questions please contact the Finance Department so that we can gather the information from the source documents and provide a response.

Report Prepared by: Melissa Elizondo, Accountant

APPROVED BY:



FOR CITY MANAGER
Michael Rock
City Manager

CITY OF BANNING

Fund/Department Legend

Fund/Department Legend

001 General Fund Departments

- 0001 - General
- 1000 - City Council
- 1200 - City Manager
- 1300 - Human Resources
- 1400 - City Clerk
- 1500 - Elections
- 1800 - City Attorney
- 1900 - Fiscal Services
- 1910 - Purchasing & A/P
- 2060 - TV Government Access
- 2200 - Police
- 2210 - Dispatch
- 2279 - TASIN - SB621 (Police)
- 2300 - Animal Control
- 2400 - Fire
- 2479 - TASIN - SB621 (Fire)
- 2700 - Building Safety
- 2740 - Code Enforcement
- 2800 - Planning
- 3000 - Engineering
- 3200 - Building Maintenance
- 3600 - Parks
- 4000 - Recreation
- 4010 - Aquatics
- 4050 - Senior Center
- 4060 - Sr. Center Advisory Board
- 4500 - Central Services
- 4800 - Debt Service
- 5400 - Community Enhancement

All Other Funds

- 002 - Developer Deposit Fund
- 003 - Riverside County MOU
- 100 - Gas Tax Street Fund
- 101 - Measure A Street Fund
- 103 - SB 300 Street Fund
- 104 - Article 3 Sidewalk Fund
- 110 - CDBG Fund
- 111 - Landscape Maintenance
- 132 - Air Quality Improvement Fund
- 140 - Asset Forfeiture/Police Fund
- 148 - Supplemental Law Enforcement
- 149 - Public Safety Sales Tax Fund
- 150 - State Park Bond Fund
- 190 - Housing Authority Fund
- 200 - Special Donation Fund
- 201 - Sr. Center Activities Fund
- 202 - Animal Control Reserve Fund

- 203 - Police Volunteer Fund
- 204 - D.A.R.E. Donation Fund
- 300 - City Administration COP Debt Service
- 360 - Sun Lakes CFD #86-1
- 365 - Wilson Street #91-1 Assessment Debt
- 370 - Area Police Computer Fund
- 375 - Fair Oaks #2004-01 Assessment Debt
- 376 - Cameo Homes
- 400 - Police Facilities Development
- 410 - Fire Facilities Development
- 420 - Traffic Control Facility Fund
- 421 - Ramsey/Highland Home Road Signal
- 430 - General Facilities Fund
- 441 - Sunset Grade Separation Fund
- 444 - Wilson Median Fund
- 451 - Park Development Fund
- 470 - Capital Improvement Fund
- 475 - Fair Oaks #2004-01 Assessment District
- 600 - Airport Fund
- 610 - Transit Fund
- 660 - Water Fund
- 661 - Water Capital Facilities
- 662 - Irrigation Water Fund
- 663 - BUA Water Capital Project Fund
- 669 - BUA Water Debt Service Fund
- 670 - Electric Fund
- 672 - Rate Stability Fund
- 673 - Electric Improvement Fund
- 674 - '07 Electric Revenue Bond Project Fund
- 675 - Public Benefit Fund
- 678 - '07 Electric Revenue Bond Debt Service Fund
- 680 - Wastewater Fund
- 681 - Wastewater Capital Facility Fund
- 682 - Wastewater Tertiary
- 683 - BUA Wastewater Capital Project Fund
- 685 - State Revolving Loan Fund
- 689 - BUA Wastewater Debt Service Fund
- 690 - Refuse Fund
- 700 - Risk Management Fund
- 702 - Fleet Maintenance
- 703 - Information Systems Services
- 761 - Utility Billing Administration
- 805 - Redevelopment Obligation Retirement Fund
- 810 - Successor Housing Agency
- 830 - Debt Service Fund
- 850 - Successor Agency
- 855 - 2007 TABS Bond Proceeds
- 856 - 2003 TABS Bond Proceeds
- 857 - 2003 TABS Bond Proceeds Low/Mod

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CITY COUNCIL AGENDA

TO: City Council
FROM: Michael Rock, City Manager
PREPARED BY: Michelle Green, Deputy Finance Director
Melissa Elizondo, Accountant
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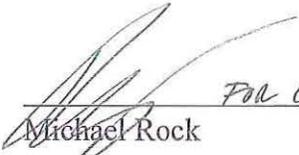
Expenditure approval lists	
December 3, 2015	736,021.15
December 10, 2015	502,994.04
December 18, 2015	253,498.98
December 23, 2015	539,481.73
December 28, 2015	7,283.69
February 2, 2016	2,125,330.16 (December Month End)
Payroll check registers	
December 11, 2015	2,934.82
December 24, 2015	8,297.71
Payroll direct deposits*	
December 11, 2015	317,038.06
December 24, 2015	261,405.88

*Included in Month End total

As you review the reports, if you have any questions please contact the Finance Department so that we can gather the information from the source documents and provide a response.

Report Prepared by: Melissa Elizondo, Accountant

APPROVED BY:


FOR CITY MANAGER
Michael Rock
City Manager

CITY OF BANNING

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 690 – Refuse Fund
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CITY COUNCIL AGENDA

TO: City Council

FROM: Michael Rock, City Manager

PREPARED BY: Michelle Green, Deputy Finance Director
Melissa Elizondo, Accountant

MEETING DATE: February 9, 2016

SUBJECT: Report of Investments for October 2015

RECOMMENDATION: The City Council receive and file the monthly *Report of Investments*.

JUSTIFICATION: State law requires that a monthly report of investments be submitted to the Governing Legislative Body.

BACKGROUND/ANALYSIS: This report includes investments on hand at the end of October 2015. As of October 31, 2015, the City's operating funds totaled \$77,419,254. Included in Successor Agency operating funds is \$857,866 of restricted CRA bond proceeds that are on deposit with LAIF and reflected separately on the Summary Schedule.

As of October 31, 2015 approximately 38% of the City's unrestricted cash balances were invested in investments other than LAIF.

The October Investment Report includes the following documents:

- Summary Schedule of Cash and Investments
- Operational Portfolio Individual Investments
- Individual Investments with Fiscal Agent
- Investment Report Supplemental Information

The attached Summary Schedule of Cash and Investments has been updated to show the rate of earnings allowance received from Wells Fargo Bank. The amount earned reduces the total amount of bank fees charged.

FISCAL DATA: The latest reports from the State indicate that the average interest achieved by the Local Agency Investment Fund (LAIF) was increased to 0.357% in October. The average rate for all investments in October was 0.368%.

RECOMMENDED AND APPROVED BY:



Michael Rock
City Manager

Summary Schedule of Cash and Investments

<u>Operating Funds</u>				<u>Amount</u>
<u>Petty Cash</u>				4,205
<u>Bank Accounts</u>		Interest		
		Rate	Amount	
Wells Fargo Bank		0.180% *	1,650,847	
Bank of America-Airport		0.020%	5,321	
Bank of America-Parking Citations		0.020%	3,326	
Bank of America-CNG Station		0.020%	<u>3,884</u>	
<i>Money Market and Bank Account Sub-Total</i>				1,663,379
 <u>Government Pools</u>				
Account #1 Operating Amount	45,973,119			
Account #1 CRA Bond Cash Bal.	857,866			
Local Agency Investment Fund: Account #1		0.357%	46,830,985	
Account #2 Successor Agency Cash Bal	0			
Local Agency Investment Fund: Account #2		0.357%	<u>0</u>	
<i>Government Pool Sub-Total</i>				<u>46,830,985</u>
Operating Cash Balance				48,498,569
 <u>Restricted Operating Funds</u>				
Riverside Public Utilities- Highmark U.S. Government Money Market Fund		0.040%		926,889
California ISO Corp- Union Bank				109,545
Worker's Compensation Program- (PERMA)				1,864,265
 <u>Other Investments</u>				
Investments-US Bank/Piper Jaffray - See Page 2		0.399%		26,019,987
 <i>Operating Funds Total</i>				 <u><u>77,419,254</u></u>
<hr/>				
<u>Fiscal Agent</u>				
US Bank				<u>29,184,847</u>
<i>Fiscal Agent Total</i>				<u><u>29,184,847</u></u>

* Rate of earnings allowance received, offsets analyzed bank charges.

Operational Portfolio Individual Investments

Par Value	Investment Description	Coupon Rate	Interest Rate	Maturity Date	Purchase Date	Date	Discount or (Premium) Amortization	Market Value
<u>Bank Accounts</u>								
1,650,847	Wells Fargo Bank-Operating	n/a	0.18%	daily	varies	1,650,847	n/a	1,650,847
5,321	Bank of America-Airport	n/a	0.02%	daily	varies	5,321	n/a	5,321
3,326	Bank of America-Parking Citations	n/a	0.02%	daily	varies	3,326	n/a	3,326
3,884	Bank of America-Parking Citations	n/a	0.02%	daily	varies	3,884	n/a	3,884
	Sub-total							1,663,379
<u>Government Pools</u>								
46,830,985	L.A.I.F. account #1	n/a	0.357%	daily	varies	46,830,985	n/a	46,830,985
0	L.A.I.F. account #2	n/a	0.357%	daily	varies	0	n/a	0
								46,830,985
<u>Investments-US Bank/Piper Jaffray</u>								
2,000,000	Federal Home Loan Bks	n/a	0.500%	7/15/2016	4/15/2014	2,000,000		2,001,260
1,700,000	FHLMC Mtn	n/a	0.700%	12/30/2016	6/30/2014	1,700,000		1,700,289
1,000,000	FNMA	n/a	1.250%	11/27/2018	5/27/2015	1,000,000		1,003,430
2,000,000	Federal Home Loan Bks	n/a	1.100%	3/29/2018	7/1/2015	2,000,000		2,003,540
2,000,000	FHLMC Mtn	n/a	1.250%	7/27/2018	7/27/2015	2,000,000		2,002,920
2,000,000	Federal Home Loan Bks	n/a	1.050%	10/5/2018	10/5/2015	2,000,000		1,991,080
15,317,468	Money Market	n/a	0.010%	daily	varies	15,317,468	0	15,317,468
	US Bank/Piper Jaffray Average Rate=		0.399%					26,019,987

Average Rate All= 0.368%

It has been verified that this investment portfolio is in conformity with the City of Banning's investment policy which was approved by the City Council on January 13, 2015. The Treasurer's cash management program provides sufficient liquidity to meet estimated future expenditures for a period of six months. The weighted average maturity of the pooled investment portfolio is 112 days and does not include Bond Reserve Fund Investments.

City of Banning Investment Report
Individual Investments with Fiscal Agent

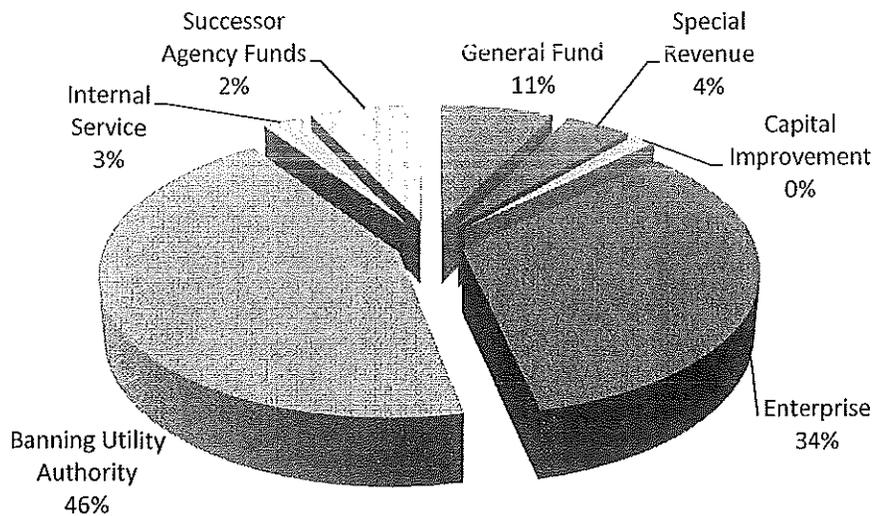
October 31, 2015

TRUSTEE	Bond Maturity Date	Investment Description	Current Yield	Bond Reserve Bond Maturity Date	Minimum Reserve Requirement	Oct-15	10/31/2015 Market Value
COB IMPROVEMENT DISTRICT LIMITED OBLIGATION BONDS SERIES 2005A							
2005 Fair Oaks Ranch Estates	2035	US Bank Mmkt 5-Ct	0.020%	daily	188,024	3.17	188,021
COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF BANNING TAX ALLOCATION, SERIES 2003							
2003 CRA Tax Allocation Bonds	2028	U S Treasury Bill	4.61%	1/29/2015	971,250		991,802
		US Bank Mmkt 5-Ct	0.020%	daily		0.35	21,263
		US Bank Mmkt 5-Ct	0.000%	daily			7
		US Bank Mmkt 5-Ct	0.000%	daily			10
Surplus Fund		US Bank Mmkt 5-Ct	0.000%	daily			12
COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF BANNING TAX ALLOCATION PARITY BONDS, SERIES 2007							
Redevelop Fund	2037	US Bank Mmkt 5-Ct	0.020%	daily		137.00	8,334,468
		US Bank Mmkt 5-Ct	0.000%	daily			13
Reserve Fund		US Bank Mmkt 5-Ct	0.020%	daily	1,875,100	30.83	1,875,225
Special Fund		US Bank Mmkt 5-Ct	0.000%	daily			16
Surplus Fund		US Bank Mmkt 5-Ct	0.000%	daily			11
BUA - WASTEWATER ENTERPRISE REVENUE BONDS REFUNDING AND IMPROVEMENT PROJECTS 2005 SERIES							
Interest Account		US Bank Mmkt 5-Ct	0.020%	daily			198,137
Principal Account		US Bank Mmkt 5-Ct	0.020%	daily		1.32	80,011
		US Bank Mmkt 5-Ct	0.020%	daily		53.70	3,266,639
BUA - WATER ENTERPRISE REVENUE BONDS REFUNDING AND IMPROVEMENT PROJECTS 2005 SERIES							
Principal Account		US Bank Mmkt 5-Ct	0.000%	daily		1.84	9
Reserve Fund		US Bank Mmkt 5-Ct	0.020%	daily	2,310,738	10.13	49
Project Fund		US Bank Mmkt 5-Ct	0.030%	daily		7.79	35
BUA - WATER ENTERPRISE REVENUE BONDS REFUNDING AND IMPROVEMENT PROJECTS 2015 SERIES							
Project Fund		First Amer Treas Oblig Fd Cl D	0.000%	daily			3,007,562
Cost of Issuance Fund		First Amer Treas Oblig Fd Cl D	0.000%	daily			29,605
BFA - ELECTRIC SYSTEM REVENUE BONDS 2007 SERIES							
Acquisition & Construction		US Bank Mmkt 5-Ct	0.020%	daily	2,672,050	11.71	57
		US Bank Mmkt 5-Ct	0.020%	daily		48.92	238
BFA - ELECTRIC SYSTEM REVENUE BONDS 2015 SERIES							
Acquisition & Construction		First Amer Treas Oblig Fd Cl D	0.000%	daily			11,158,581
Cost of Issuance		First Amer Treas Oblig Fd Cl D	0.000%	daily			33,043
*Paid Semi-Annually-Deposited into Money Mkt Account					Total	306.76	29,134,847

City of Banning
Investment Report Supplemental Information

Pooled Cash Distribution

Investment reports for cities typically do not include the cash balance of the individual funds that make up the total pooled cash. This is primarily due to timing differences between when investment reports are prepared and when month end accounting entries are posted. Investment reports are usually prepared first. However, the pie chart below provides an understanding of the percentage distribution of the investments by fund type. The percentages were calculated using the average cash balances from the twelve month period of October 2014 to September 2015. *(The percentages will be updated quarterly.)*



The Table below describes the funds that are included within the Fund Types used for the pie chart.

Fund Type	Description of Funds
Governmental	General Fund
Special Revenue	Restricted Funds (i.e. CFDs, grants)
Capital Improvement	Development Impact Fee funds
Enterprise	Airport, Transit, Refuse, Electric
Banning Utility Authority	Water, Wastewater, Reclaimed water
Internal Service	Risk Management, Fleet, IT, Utility Services
Successor Agency Funds	Previously called Redevelopment Agency

Summary Schedule – Line item descriptions

Petty Cash –

The City maintains petty cash in various departments for incidental purchases. This line item includes the cash drawers for cashiering in utility billing.

Bank Accounts –

When reviewing the *Report of Investments*, please keep in mind that the balances shown on the *Summary Schedule of Cash and Investments* for bank accounts are “statement” balances. They reflect what the financial institution has on hand as of particular date and lists on their statement. They are not “general ledger” balances. General ledger balances reflect all activity through a particular date (i.e. all checks that have been written and all deposits that have been made) and is what we show on our books (the general ledger). The general ledger balance more accurately reflects the amount of cash we have available.

It should be noted that statement balances and general ledger balances can differ significantly. For example – on June 30th the statement balance for Wells Fargo Bank could show \$1,000,000, however, staff may have prepared a check run in the amount of \$750,000 on the same day. Our general ledger balance would show \$250,000, as the Wells Fargo statement does not recognize the checks that have been issued until they clear the bank.

For investment decisions and cash handling purposes staff relies on the balance in the general ledger. Staff does not invest funds that are not available. Sufficient funds must be kept in the bank accounts to cover all checks issued.

- Wells Fargo Bank – This is the City checking account. All cash receipts, payroll and accounts payables checks are processed through this account. Balances fluctuate based on activity and cash flow needs. As excess funds accumulate, they are transferred to LAIF to increase earnings. The Summary Schedule of Cash and Investments shows the rate of earnings allowance received from the bank. The amount earned reduces the total amount of bank fees charged.
- Bank of America – Airport – The City maintains a Trust account for credit card purchases made at the airport. When the account balance exceeds \$3000, excess funds are transferred to the Wells Fargo Bank account.
- Bank of America – Parking Citations – The City maintains a Trust account for the processing of parking citations through Turbo Data. When the account balance exceeds \$3000, excess funds are transferred to the Wells Fargo Bank account.
- Bank of America – CNG – The City maintains a Trust account for credit card purchases of CNG fuel made at the City yards. When the account balance exceeds \$3000, excess funds are transferred to the Wells Fargo Bank account.

Summary Schedule – Line item descriptions – Cont.

Government Pools --

- Local Agency Investment Fund – Account #1
 - This account includes both City pooled funds and a restricted cash balance related to the CRA bonds. Investments in LAIF are limited to \$50M.
- Local Agency Investment Fund – Account #2
 - There is currently no balance in this account.
 - Note: When the State established the cutoff date of January 31, 2012 for the elimination of the Redevelopment Agency, LAIF staff recommended a transfer of the available balance from the CRA account to the City account to protect the funds from a rumored State raid or freezing of the funds.

Restricted Operating Funds at Riverside Public Utilities –

The City Electric operation has an agreement with Riverside Public Utilities (RPU) to purchase power for the City. Part of the agreement requires that the City maintain a balance in the trust account used by RPU. The City does not control the investments or earnings of the trust account.

Restricted Operating Funds at California ISO-

The California ISO facilitates the purchase and sale of the City's electricity. The City participates in periodic Congestion Revenue Rights (CRR) auctions to acquire financial hedges for transmission congestion. In order to participate in the CRR auctions the City was required to have a secured form of financial security. A cash deposit in the amount of \$100,000 was placed with Union bank in March, 2012 to meet the requirements. An additional \$9,297 was deposited in May 2015 to meet revised requirements. The account is an interest bearing collateral account.

Restricted Operating Funds at PERMA-

The City participates in a JPA with the Public Entity Risk Management Authority (PERMA), who provides administration for the City's worker's compensation insurance program. PERMA requires the City to deposit funds into an account used by PERMA for the payment of worker's compensation claims. The City does not control the investments or earnings of this account.

Other Investments –

Currently the City works with a Piper Jaffray broker to make various investments per the City policy and in accordance with State guidelines. The Broker is not on retainer, nor do they receive a City paid fee with each investment. Funds in the Money Market fluctuate as securities mature or get called. Staff is in the process of investing the Money Market funds over several months. We will be adding an additional broker to provide more investment options.

Fiscal Agent / US Bank –

Unspent bond proceeds and required bond reserves are invested by the Fiscal Agent in accordance with the bond documents.

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CITY COUNCIL AGENDA

TO: City Council
FROM: Michael Rock, City Manager
PREPARED BY: Michelle Green, Deputy Finance Director
Melissa Elizondo, Accountant
MEETING DATE: February 9, 2016
SUBJECT: Report of Investments for November 2015

RECOMMENDATION: The City Council receive and file the monthly *Report of Investments*.

JUSTIFICATION: State law requires that a monthly report of investments be submitted to the Governing Legislative Body.

BACKGROUND/ANALYSIS: This report includes investments on hand at the end of November 2015. As of November 30, 2015, the City's operating funds totaled \$75,900,584. Included in Successor Agency operating funds is \$860,572 of restricted CRA bond proceeds that are on deposit with LAIF and reflected separately on the Summary Schedule.

As of November 30, 2015 approximately 37% of the City's unrestricted cash balances were invested in investments other than LAIF.

The November Investment Report includes the following documents:

- Summary Schedule of Cash and Investments
- Operational Portfolio Individual Investments
- Individual Investments with Fiscal Agent
- Investment Report Supplemental Information

The attached Summary Schedule of Cash and Investments has been updated to show the rate of earnings allowance received from Wells Fargo Bank. The amount earned reduces the total amount of bank fees charged.

FISCAL DATA: The latest reports from the State indicate that the average interest achieved by the Local Agency Investment Fund (LAIF) was increased to 0.374% in November. The average rate for all investments in November was 0.381%.

RECOMMENDED AND APPROVED BY:



Michael Rock
City Manager

Summary Schedule of Cash and Investments

<u>Operating Funds</u>		<u>Amount</u>
<u>Petty Cash</u>		4,205
<u>Bank Accounts</u>		
	Interest	
	Rate	Amount
Wells Fargo Bank	0.180% *	808,852
Bank of America-Airport	0.020%	6,263
Bank of America-Parking Citations	0.020%	3,658
Bank of America-CNG Station	0.020%	<u>4,276</u>
<i>Money Market and Bank Account Sub-Total</i>		823,049
 <u>Government Pools</u>		
Account #1 Operating Amount	44,970,413	
Account #1 CRA Bond Cash Bal.	860,572	
Local Agency Investment Fund: Account #1	0.374%	45,830,985
Account #2 Successor Agency Cash Bal	0	
Local Agency Investment Fund: Account #2	0.374%	<u>0</u>
<i>Government Pool Sub-Total</i>		<u>45,830,985</u>
Operating Cash Balance		46,658,239
 <u>Restricted Operating Funds</u>		
Riverside Public Utilities- Highmark U.S. Government Money Market Fund	0.040%	1,264,675
California ISO Corp- Union Bank		109,556
Worker's Compensation Program- (PERMA)		1,854,930
 <u>Other Investments</u>		
Investments-US Bank/Piper Jaffray - See Page 2	0.399%	26,013,185
 <i>Operating Funds Total</i>		 <u><u>75,900,584</u></u>

Fiscal Agent

	<u>Amount</u>
US Bank	<u>29,239,058</u>
<i>Fiscal Agent Total</i>	<u>29,239,058</u>

* Rate of earnings allowance received, offsets analyzed bank charges.

Operational Portfolio Individual Investments

Par Value	Investment Description	Coupon Rate	Interest Rate	Maturity Date	Purchase Date	Date	Discount or (Premium) Amortization	Market Value	
<u>Bank Accounts</u>									
808,852	Wells Fargo Bank-Operating	n/a	0.18%	daily	varies	808,852	n/a	808,852	
6,263	Bank of America-Airport	n/a	0.02%	daily	varies	6,263	n/a	6,263	
3,658	Bank of America-Parking Citations	n/a	0.02%	daily	varies	3,658	n/a	3,658	
4,276	Bank of America-Parking Citations	n/a	0.02%	daily	varies	4,276	n/a	4,276	
Sub-total								823,049	
<u>Government Pools</u>									
45,830,985	L.A.L.F. account #1	n/a	0.374%	daily	varies	45,830,985	n/a	45,830,985	
0	L.A.L.F. account #2	n/a	0.374%	daily	varies	0	n/a	0	
								45,830,985	
<u>Investments-US Bank/Piper Jaffray</u>									
2,000,000	Federal Home Loan Bks	n/a	0.500%	7/15/2016	4/15/2014	2,000,000		2,000,080	
1,700,000	FHLMC Mtn	n/a	0.700%	12/30/2016	6/30/2014	1,700,000		1,697,756	
1,000,000	FNMA	n/a	1.250%	11/27/2018	5/27/2015	1,000,000		1,002,120	
2,000,000	Federal Home Loan Bks	n/a	1.100%	3/29/2018	7/1/2015	2,000,000		2,001,560	
2,000,000	FHLMC Mtn	n/a	1.250%	7/27/2018	7/27/2015	2,000,000		2,001,420	
2,000,000	Federal Home Loan Bks	n/a	1.050%	10/5/2018	10/5/2015	2,000,000		1,986,460	
15,323,789	Money Market	n/a	0.010%	daily	varies	15,323,789	0	15,323,789	
US Bank/Piper Jaffray Average Rate=			0.399%						26,013,185

Average Rate All= 0.381%

It has been verified that this investment portfolio is in conformity with the City of Banning's investment policy which was approved by the City Council on January 13, 2015. The Treasurer's cash management program provides sufficient liquidity to meet estimated future expenditures for a period of six months. The weighted average maturity of the pooled investment portfolio is 111 days and does not include Bond Reserve Fund Investments.

City of Banning Investment Report
Individual Investments with Fiscal Agent

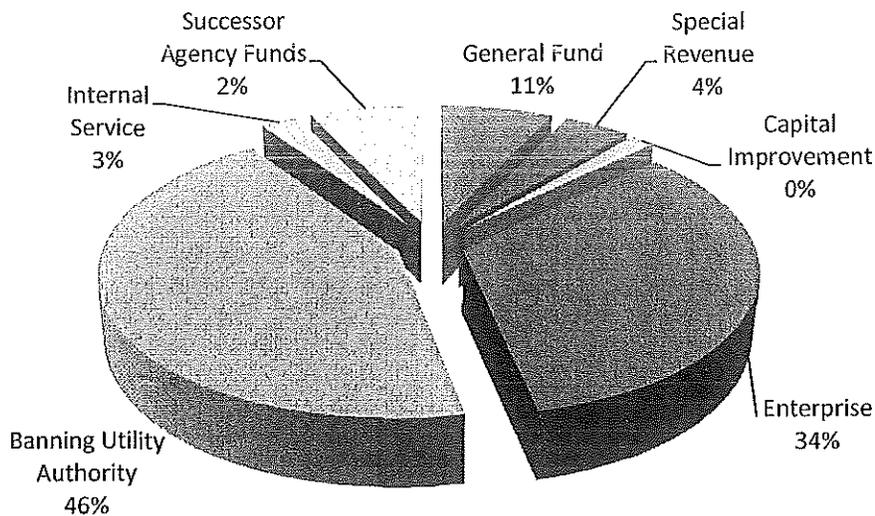
November 30, 2015

TRUSTEE	Bond Maturity Date	Investment Description	Current Yield	Bond Reserve Bond Maturity Date	Minimum Reserve Requirement	Nov-15	11/30/2015 Market Value
COB IMPROVEMENT DISTRICT LIMITED OBLIGATION BONDS SERIES 2005A							
2005 Fair Oaks Ranch Estates	2035	US Bank Mmkt 5-Ct	0.020%	daily	188,024	3.15	188,034
COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF BANNING TAX ALLOCATION, SERIES 2003							
2003 CRA Tax Allocation Bonds	2028	U S Treasury Bill	4.61%	1/29/2015	971,250		991,881
		US Bank Mmkt 5-Ct	0.020%	daily		0.36	21,264
		US Bank Mmkt 5-Ct	0.000%	daily			7
		US Bank Mmkt 5-Ct	0.000%	daily			10
Surplus Fund		US Bank Mmkt 5-Ct	0.000%	daily			12
COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF BANNING TAX ALLOCATION PARITY BONDS, SERIES 2007							
Redevelop Fund	2037	US Bank Mmkt 5-Ct	0.020%	daily		141.57	8,334,610
		US Bank Mmkt 5-Ct	0.000%	daily			13
Reserve Fund		US Bank Mmkt 5-Ct	0.020%	daily	1,875,100	31.85	1,875,257
Special Fund		US Bank Mmkt 5-Ct	0.000%	daily			16
Surplus Fund		US Bank Mmkt 5-Ct	0.000%	daily			11
BUA - WASTEWATER ENTERPRISE REVENUE BONDS REFUNDING AND IMPROVEMENT PROJECTS 2005 SERIES							
Interest Account		US Bank Mmkt 5-Ct	0.000%	daily		1.74	2
Principal Account		US Bank Mmkt 5-Ct	0.000%	daily		1.36	3
		US Bank Mmkt 5-Ct	0.020%	daily		55.49	3,266,694
BUA - WATER ENTERPRISE REVENUE BONDS REFUNDING AND IMPROVEMENT PROJECTS 2015 SERIES							
Project Fund		First Amer Treas Oblig Fd CL D	0.000%	daily			3,007,562
Cost of Issuance Fund		First Amer Treas Oblig Fd CL D	0.000%	daily			29,606
BFA - ELECTRIC SYSTEM REVENUE BONDS 2015 SERIES							
Revenue Fund		First Amer Treas Oblig Fd CL D	0.000%	daily			332,452
Acquisition & Construction		First Amer Treas Oblig Fd CL D	0.000%	daily			11,158,581
Cost of Issuance		First Amer Treas Oblig Fd CL D	0.000%	daily			33,043
*Paid Semi-Annually-Deposited into Money Mkt Account			Total			235.56	29,239,058

City of Banning
Investment Report Supplemental Information

Pooled Cash Distribution

Investment reports for cities typically do not include the cash balance of the individual funds that make up the total pooled cash. This is primarily due to timing differences between when investment reports are prepared and when month end accounting entries are posted. Investment reports are usually prepared first. However, the pie chart below provides an understanding of the percentage distribution of the investments by fund type. The percentages were calculated using the average cash balances from the twelve month period of October 2014 to September 2015. *(The percentages will be updated quarterly.)*



The Table below describes the funds that are included within the Fund Types used for the pie chart.

Fund Type	Description of Funds
Governmental	General Fund
Special Revenue	Restricted Funds (i.e. CFDs, grants)
Capital Improvement	Development Impact Fee funds
Enterprise	Airport, Transit, Refuse, Electric
Banning Utility Authority	Water, Wastewater, Reclaimed water
Internal Service	Risk Management, Fleet, IT, Utility Services
Successor Agency Funds	Previously called Redevelopment Agency

Summary Schedule – Line item descriptions

Petty Cash --

The City maintains petty cash in various departments for incidental purchases. This line item includes the cash drawers for cashiering in utility billing.

Bank Accounts –

When reviewing the *Report of Investments*, please keep in mind that the balances shown on the *Summary Schedule of Cash and Investments* for bank accounts are “statement” balances. They reflect what the financial institution has on hand as of particular date and lists on their statement. They are not “general ledger” balances. General ledger balances reflect all activity through a particular date (i.e. all checks that have been written and all deposits that have been made) and is what we show on our books (the general ledger). The general ledger balance more accurately reflects the amount of cash we have available.

It should be noted that statement balances and general ledger balances can differ significantly. For example – on June 30th the statement balance for Wells Fargo Bank could show \$1,000,000, however, staff may have prepared a check run in the amount of \$750,000 on the same day. Our general ledger balance would show \$250,000, as the Wells Fargo statement does not recognize the checks that have been issued until they clear the bank.

For investment decisions and cash handling purposes staff relies on the balance in the general ledger. Staff does not invest funds that are not available. Sufficient funds must be kept in the bank accounts to cover all checks issued.

- Wells Fargo Bank – This is the City checking account. All cash receipts, payroll and accounts payables checks are processed through this account. Balances fluctuate based on activity and cash flow needs. As excess funds accumulate, they are transferred to LAIF to increase earnings. The Summary Schedule of Cash and Investments shows the rate of earnings allowance received from the bank. The amount earned reduces the total amount of bank fees charged.
- Bank of America – Airport – The City maintains a Trust account for credit card purchases made at the airport. When the account balance exceeds \$3000, excess funds are transferred to the Wells Fargo Bank account.
- Bank of America – Parking Citations – The City maintains a Trust account for the processing of parking citations through Turbo Data. When the account balance exceeds \$3000, excess funds are transferred to the Wells Fargo Bank account.
- Bank of America – CNG – The City maintains a Trust account for credit card purchases of CNG fuel made at the City yards. When the account balance exceeds \$3000, excess funds are transferred to the Wells Fargo Bank account.

Summary Schedule – Line item descriptions – Cont.

Government Pools –

- Local Agency Investment Fund – Account #1
 - This account includes both City pooled funds and a restricted cash balance related to the CRA bonds. Investments in LAIF are limited to \$50M.
- Local Agency Investment Fund – Account #2
 - There is currently no balance in this account.
 - Note: When the State established the cutoff date of January 31, 2012 for the elimination of the Redevelopment Agency, LAIF staff recommended a transfer of the available balance from the CRA account to the City account to protect the funds from a rumored State raid or freezing of the funds.

Restricted Operating Funds at Riverside Public Utilities –

The City Electric operation has an agreement with Riverside Public Utilities (RPU) to purchase power for the City. Part of the agreement requires that the City maintain a balance in the trust account used by RPU. The City does not control the investments or earnings of the trust account.

Restricted Operating Funds at California ISO-

The California ISO facilitates the purchase and sale of the City's electricity. The City participates in periodic Congestion Revenue Rights (CRR) auctions to acquire financial hedges for transmission congestion. In order to participate in the CRR auctions the City was required to have a secured form of financial security. A cash deposit in the amount of \$100,000 was placed with Union bank in March, 2012 to meet the requirements. An additional \$9,297 was deposited in May 2015 to meet revised requirements. The account is an interest bearing collateral account.

Restricted Operating Funds at PERMA-

The City participates in a JPA with the Public Entity Risk Management Authority (PERMA), who provides administration for the City's worker's compensation insurance program. PERMA requires the City to deposit funds into an account used by PERMA for the payment of worker's compensation claims. The City does not control the investments or earnings of this account.

Other Investments –

Currently the City works with a Piper Jaffray broker to make various investments per the City policy and in accordance with State guidelines. The Broker is not on retainer, nor do they receive a City paid fee with each investment. Funds in the Money Market fluctuate as securities mature or get called. Staff is in the process of investing the Money Market funds over several months. We will be adding an additional broker to provide more investment options.

Fiscal Agent / US Bank –

Unspent bond proceeds and required bond reserves are invested by the Fiscal Agent in accordance with the bond documents.

CITY COUNCIL AGENDA

TO: City Council
FROM: Michael Rock, City Manager
PREPARED BY: Michelle Green, Deputy Finance Director
Melissa Elizondo, Accountant
MEETING DATE: February 9, 2016
SUBJECT: Report of Investments for December 2015

RECOMMENDATION: The City Council receive and file the monthly *Report of Investments*.

JUSTIFICATION: State law requires that a monthly report of investments be submitted to the Governing Legislative Body.

BACKGROUND/ANALYSIS: This report includes investments on hand at the end of December 2015. As of December 31, 2015, the City's operating funds totaled \$76,453,748. Included in Successor Agency operating funds is \$863,278 of restricted CRA bond proceeds that are on deposit with LAIF and reflected separately on the Summary Schedule.

As of December 31, 2015 approximately 39% of the City's unrestricted cash balances were invested in investments other than LAIF.

The December Investment Report includes the following documents:

- Summary Schedule of Cash and Investments
- Operational Portfolio Individual Investments
- Individual Investments with Fiscal Agent
- Investment Report Supplemental Information

The attached Summary Schedule of Cash and Investments has been updated to show the rate of earnings allowance received from Wells Fargo Bank. The amount earned reduces the total amount of bank fees charged.

FISCAL DATA: The latest reports from the State indicate that the average interest achieved by the Local Agency Investment Fund (LAIF) was increased to 0.400% in December. The average rate for all investments in December was 0.392%.

RECOMMENDED AND APPROVED BY:



Michael Rock
City Manager

Summary Schedule of Cash and Investments

<u>Operating Funds</u>		<u>Amount</u>
<u>Petty Cash</u>		4,205
<u>Bank Accounts</u>		
	Interest	
	Rate	Amount
Wells Fargo Bank	0.130% *	2,493,136
Bank of America-Airport	0.020%	7,502
Bank of America-Parking Citations	0.020%	4,223
Bank of America-CNG Station	0.020%	<u>4,730</u>
<i>Money Market and Bank Account Sub-Total</i>		2,509,591
<u>Government Pools</u>		
Account #1 Operating Amount	43,967,707	
Account #1 CRA Bond Cash Bal.	863,278	
Local Agency Investment Fund: Account #1	0.400%	44,830,985
Account #2 Successor Agency Cash Bal	0	
Local Agency Investment Fund: Account #2	0.400%	<u>0</u>
<i>Government Pool Sub-Total</i>		<u>44,830,985</u>
Operating Cash Balance		47,344,781
<u>Restricted Operating Funds</u>		
Riverside Public Utilities- Highmark U.S. Government Money Market Fund	0.040%	1,146,393
California ISO Corp- Union Bank		109,567
Worker's Compensation Program- (PERMA)		1,829,320
<u>Other Investments</u>		
Investments-US Bank/Piper Jaffray - See Page 2	0.399%	26,023,687
Operating Funds Total		<u>76,453,748</u>

Fiscal Agent

	<u>Amount</u>
US Bank	<u>28,883,896</u>
Fiscal Agent Total	<u>28,883,896</u>

* Rate of earnings allowance received, offsets analyzed bank charges.

Operational Portfolio Individual Investments

Par Value	Investment Description	Coupon Rate	Interest Rate	Maturity Date	Purchase Date	Date	Discount or (Premium) Amortization	Market Value	
<i>Bank Accounts</i>									
2,493,136	Wells Fargo Bank-Operating	n/a	0.18%	daily	varies	2,493,136	n/a	2,493,126	
7,502	Bank of America-Airport	n/a	0.02%	daily	varies	7,502	n/a	7,502	
4,223	Bank of America-Parking Citations	n/a	0.02%	daily	varies	4,223	n/a	4,223	
4,730	Bank of America-Parking Citations	n/a	0.02%	daily	varies	4,730	n/a	4,750	
Sub-total								2,509,591	
<i>Government Pools</i>									
44,830,985	L.A.I.F. account #1	n/a	0.400%	daily	varies	44,830,985	n/a	44,830,985	
0	L.A.I.F. account #2	n/a	0.400%	daily	varies	0	n/a	0	
								44,830,985	
<i>Investments-US Bank/Piper Jaffray</i>									
2,000,000	Federal Home Loan Bks	n/a	0.500%	7/15/2016	4/15/2014	2,000,000		1,999,120	
1,700,000	FHLMC Mtn	n/a	0.700%	12/30/2016	6/30/2014	1,700,000		1,697,722	
1,000,000	FNMA	n/a	1.250%	11/27/2018	5/27/2015	1,000,000		1,001,490	
2,000,000	Federal Home Loan Bks	n/a	1.100%	3/29/2018	7/1/2015	2,000,000		2,000,440	
2,000,000	FHLMC Mtn	n/a	1.250%	7/27/2018	7/27/2015	2,000,000		2,000,500	
2,000,000	Federal Home Loan Bks	n/a	1.050%	10/5/2018	10/5/2015	2,000,000		1,983,600	
15,323,789	Money Market	n/a	0.010%	daily	varies	15,323,789	0	15,340,815	
US Bank/Piper Jaffray Average Rate=			0.399%						26,023,687

Average Rate All= 0.392%

It has been verified that this investment portfolio is in conformity with the City of Banning's investment policy which was approved by the City Council on January 13, 2015. The Treasurer's cash management program provides sufficient liquidity to meet estimated future expenditures for a period of six months. The weighted average maturity of the pooled investment portfolio is 105 days and does not include Bond Reserve Fund Investments.

City of Banning Investment Report
Individual Investments with Fiscal Agent

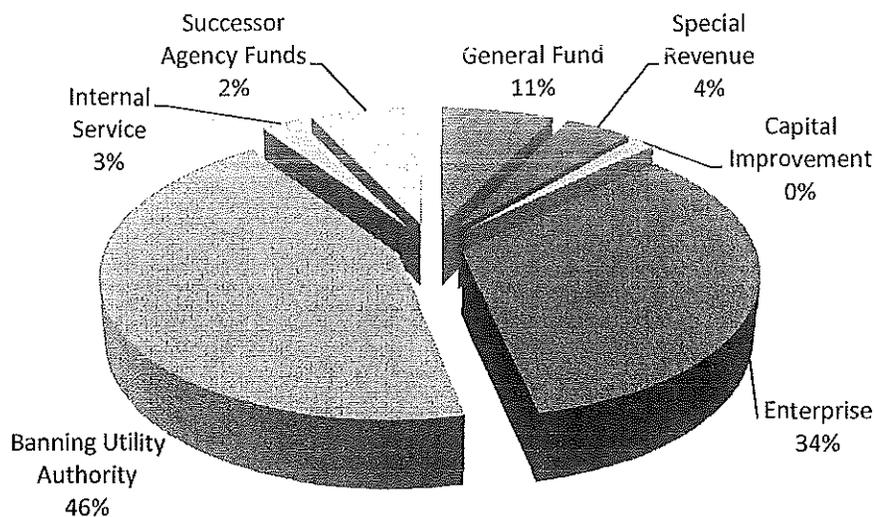
December 31, 2015

TRUSTEE	Bond Maturity Date	Investment Description	Current Yield	Bond Reserve Maturity Date	Minimum Reserve Requirement	Dec-15	12/31/2015 Market Value
COB IMPROVEMENT DISTRICT LIMITED OBLIGATION BONDS SERIES 2005A							
2005 Fair Oaks Ranch Estates	2035	US Bank Mmkt 5-Ct	0.020%	daily	188,024	3.09	188,037
COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF BANNING TAX ALLOCATION, SERIES 2003							
2003 CRA Tax Allocation Bonds	2028	U S Treasury Bill	4.61%	1/29/2015	971,250		991,911
		US Bank Mmkt 5-Ct	0.020%	daily		0.35	21,264
		US Bank Mmkt 5-Ct	0.000%	daily			7
		US Bank Mmkt 5-Ct	0.000%	daily			10
Surplus Fund		US Bank Mmkt 5-Ct	0.000%	daily			12
COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF BANNING TAX ALLOCATION PARITY BONDS, SERIES 2007							
Redevelop Fund	2037	US Bank Mmkt 5-Ct	0.020%	daily		137.01	8,334,747
		US Bank Mmkt 5-Ct	0.000%	daily			13
Reserve Fund		US Bank Mmkt 5-Ct	0.020%	daily	1,875,150	30.83	1,875,288
Special Fund		US Bank Mmkt 5-Ct	0.000%	daily			16
Surplus Fund		US Bank Mmkt 5-Ct	0.000%	daily			11
BUA - WASTEWATER ENTERPRISE REVENUE BONDS REFUNDING AND IMPROVEMENT PROJECTS 2005 SERIES							
Interest Account		US Bank Mmkt 5-Ct	0.000%	daily		0.11	2
Principal Account		US Bank Mmkt 5-Ct	0.000%	daily		0.04	3
		US Bank Mmkt 5-Ct	0.020%	daily		53.70	3,266,748
BUA - WATER ENTERPRISE REVENUE BONDS REFUNDING AND IMPROVEMENT PROJECTS 2015 SERIES							
Project Fund		First Amer Treas Oblig Fd Cl D	0.000%	daily		7.37	3,007,570
Cost of Issuance Fund		First Amer Treas Oblig Fd Cl D	0.000%	daily		0.07	29,606
BFA - ELECTRIC SYSTEM REVENUE BONDS 2015 SERIES							
Revenue Fund		First Amer Treas Oblig Fd CL D	0.000%	daily			0
Acquisition & Construction		First Amer Treas Oblig Fd CL D	0.000%	daily		27.34	11,158,608
Cost of Issuance		First Amer Treas Oblig Fd CL D	0.000%	daily		0.02	10,043
*Paid Semi-Annually-Deposited into Money Mkt Account				Total		259.93	28,883,856

City of Banning
Investment Report Supplemental Information

Pooled Cash Distribution

Investment reports for cities typically do not include the cash balance of the individual funds that make up the total pooled cash. This is primarily due to timing differences between when investment reports are prepared and when month end accounting entries are posted. Investment reports are usually prepared first. However, the pie chart below provides an understanding of the percentage distribution of the investments by fund type. The percentages were calculated using the average cash balances from the twelve month period of October 2014 to September 2015. *(The percentages will be updated quarterly.)*



The Table below describes the funds that are included within the Fund Types used for the pie chart.

Fund Type	Description of Funds
Governmental	General Fund
Special Revenue	Restricted Funds (i.e. CFDs, grants)
Capital Improvement	Development Impact Fee funds
Enterprise	Airport, Transit, Refuse, Electric
Banning Utility Authority	Water, Wastewater, Reclaimed water
Internal Service	Risk Management, Fleet, IT, Utility Services
Successor Agency Funds	Previously called Redevelopment Agency

Summary Schedule – Line item descriptions

Petty Cash –

The City maintains petty cash in various departments for incidental purchases. This line item includes the cash drawers for cashiering in utility billing.

Bank Accounts –

When reviewing the *Report of Investments*, please keep in mind that the balances shown on the *Summary Schedule of Cash and Investments* for bank accounts are “statement” balances. They reflect what the financial institution has on hand as of particular date and lists on their statement. They are not “general ledger” balances. General ledger balances reflect all activity through a particular date (i.e. all checks that have been written and all deposits that have been made) and is what we show on our books (the general ledger). The general ledger balance more accurately reflects the amount of cash we have available.

It should be noted that statement balances and general ledger balances can differ significantly. For example – on June 30th the statement balance for Wells Fargo Bank could show \$1,000,000, however, staff may have prepared a check run in the amount of \$750,000 on the same day. Our general ledger balance would show \$250,000, as the Wells Fargo statement does not recognize the checks that have been issued until they clear the bank.

For investment decisions and cash handling purposes staff relies on the balance in the general ledger. Staff does not invest funds that are not available. Sufficient funds must be kept in the bank accounts to cover all checks issued.

- Wells Fargo Bank – This is the City checking account. All cash receipts, payroll and accounts payables checks are processed through this account. Balances fluctuate based on activity and cash flow needs. As excess funds accumulate, they are transferred to LAIF to increase earnings. The Summary Schedule of Cash and Investments shows the rate of earnings allowance received from the bank. The amount earned reduces the total amount of bank fees charged.
- Bank of America – Airport – The City maintains a Trust account for credit card purchases made at the airport. When the account balance exceeds \$3000, excess funds are transferred to the Wells Fargo Bank account.
- Bank of America – Parking Citations – The City maintains a Trust account for the processing of parking citations through Turbo Data. When the account balance exceeds \$3000, excess funds are transferred to the Wells Fargo Bank account.
- Bank of America – CNG – The City maintains a Trust account for credit card purchases of CNG fuel made at the City yards. When the account balance exceeds \$3000, excess funds are transferred to the Wells Fargo Bank account.

Summary Schedule – Line item descriptions – Cont.

Government Pools –

- Local Agency investment Fund – Account #1
 - This account includes both City pooled funds and a restricted cash balance related to the CRA bonds. Investments in LAIF are limited to \$50M.
- Local Agency investment Fund – Account #2
 - There is currently no balance in this account.
 - Note: When the State established the cutoff date of January 31, 2012 for the elimination of the Redevelopment Agency, LAIF staff recommended a transfer of the available balance from the CRA account to the City account to protect the funds from a rumored State raid or freezing of the funds.

Restricted Operating Funds at Riverside Public Utilities –

The City Electric operation has an agreement with Riverside Public Utilities (RPU) to purchase power for the City. Part of the agreement requires that the City maintain a balance in the trust account used by RPU. The City does not control the investments or earnings of the trust account.

Restricted Operating Funds at California ISO-

The California ISO facilitates the purchase and sale of the City's electricity. The City participates in periodic Congestion Revenue Rights (CRR) auctions to acquire financial hedges for transmission congestion. In order to participate in the CRR auctions the City was required to have a secured form of financial security. A cash deposit in the amount of \$100,000 was placed with Union bank in March, 2012 to meet the requirements. An additional \$9,297 was deposited in May 2015 to meet revised requirements. The account is an interest bearing collateral account.

Restricted Operating Funds at PERMA-

The City participates in a JPA with the Public Entity Risk Management Authority (PERMA), who provides administration for the City's worker's compensation insurance program. PERMA requires the City to deposit funds into an account used by PERMA for the payment of worker's compensation claims. The City does not control the investments or earnings of this account.

Other Investments –

Currently the City works with a Piper Jaffray broker to make various investments per the City policy and in accordance with State guidelines. The Broker is not on retainer, nor do they receive a City paid fee with each investment. Funds in the Money Market fluctuate as securities mature or get called. Staff is in the process of investing the Money Market funds over several months. We will be adding an additional broker to provide more investment options.

Fiscal Agent / US Bank –

Unspent bond proceeds and required bond reserves are invested by the Fiscal Agent in accordance with the bond documents.

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CITY OF BANNING
CITY COUNCIL REPORT

TO: CITY COUNCIL

FROM: Michael Rock, City Manager

PREPARED BY: Art Vela, Acting Public Works Director
Holly Stuart, Management Analyst

MEETING DATE: February 9, 2016

SUBJECT: Resolution No. 2016-12, “Authorizing the Annual Submittal of CalRecycle Payment Program Applications”

RECOMMENDATION: The City Council adopt Resolution No. 2016-12:

- I. Authorizing the annual submittal of CalRecycle Payment Program applications.
- II. Authorizing the Administrative Services Director to make necessary budget adjustments and appropriations and transfers related to program payments.
- III. Authorizing the City Manager or his/her designee as a “Signature Authority” to execute all documents necessary to implement the program on an annual basis and secure funding.
- IV. Authorization under this resolution is effective until rescinded by the Signature Authority or Governing Body.

JUSTIFICATION: CalRecycle’s procedures for administering payment programs require an applicant’s governing body to declare by resolution certain authorizations related to the administration of the payment program.

BACKGROUND: The Department of Resources Recycling and Recovery (CalRecycle) administers a program to provide opportunities for beverage container recycling. The goal of this program is to reach and maintain an 80 percent recycling rate for all California Refund Value (CRV) beverage containers including but not limited to aluminum, glass and plastic.

Pursuant to Public Resources Code section 48000 et seq., 14581 and 42023.1(g). the Department of Resources Recycling and Recovery (CalRecycle) has established various payment programs to make payments to qualifying jurisdictions. CalRecycle distributes funding to eligible cities and counties specifically for beverage container recycling and litter

cleanup activities. Each city is eligible to receive a minimum of \$5,000, or an amount calculated by CalRecycle, on a per capita basis based on population, whichever is greater. Generally, the City has participated in the program since 2007 and has received approximately \$8,000 annually.

As outlined in the revised program requirements, due to a recent audit by the California State Auditor, CalRecycle's own fiduciary responsibility, and to align this program with other existing payment programs, this program now requires all participants to report all expenditures on an annual basis beginning with the Fiscal Year 2014-15 cycle. Additionally, the new guidelines require that all recipients submit an approved City Council resolution with program payment requests.

Funds provided to the City under the payment program are eligible for the following activities:

- Beverage Container Collection Programs implemented throughout the community.
- Litter Clean-up activities such as clean-up events.
- Advertising and promotional activities such as flyers or posters
- Recycling Education such as recycling guides, hotline, or website.
- Personnel such as a recycling coordinator or consultant activities.
- Recycled Content Products such as playground equipment or building material.

In the past, the City of Banning utilized funds for outreach programs to Multi-family units, outreach to businesses and for litter clean-up events.

OPTIONS: Staff recommends the approval of this resolution enabling the City to continue to receive funding in an amount not less than \$5,000 annually. Although not recommended, the option exists to not approve the resolution resulting in the loss of funding and support of City programs and efforts in recycling and diversion.

FISCAL IMPACT: Historically, the City has received approximately \$8,000 annually.

Prepared and Reviewed by:



Art Vela
Acting Public Works Director

Reviewed by:



Rochelle Clayton
Administrative Services Director/
Deputy City Manager

Approved by:



Michael Rock
City Manager

RESOLUTION NO. 2016-12

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BANNING, CALIFORNIA, AUTHORIZING THE ANNUAL SUBMITTAL OF CALRECYCLE PAYMENT PROGRAM APPLICATIONS

WHEREAS, pursuant to Public Resources Code sections 48000 et seq., 14581, and 42023.1(g), the Department of Resources Recycling and Recovery (CalRecycle) has established various payment programs to make payments to qualifying jurisdictions; and

WHEREAS, in furtherance of this authority CalRecycle is required to establish procedures governing the administration of the payment programs; and

WHEREAS, CalRecycle's procedures for administering payment programs require, among other things, an applicant's governing body to declare by resolution certain authorizations related to the administration of the payment program.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Banning as follows:

SECTION 1. The Banning City Council adopts Resolution No. 2016-12 authorizing the annual submittal of CalRecycle Payment Program Applications.

SECTION 2. The Administrative Services Director is authorized to make necessary budget adjustments and appropriations and transfers related to program payments.

SECTION 3. The City Manager or his/her designee, under this resolution, have the "Signature Authority" to execute all documents necessary to implement and secure payment.

SECTION 4. This resolution and authorization is effective until rescinded by the Signature Authority or Governing Body.

PASSED, ADOPTED AND APPROVED this 9th day of February, 2016.

Arthur L. Welch, Mayor
City of Banning

ATTEST:

Marie A. Calderon,
City Clerk of the City of Banning

**APPROVED AS TO FORM AND
LEGAL CONTENT:**

Anthony R. Taylor, City Attorney
Aleshire & Wynder, LLP

CERTIFICATION:

I, Marie Calderon, City Clerk of the City of Banning, California, do hereby certify that the foregoing Resolution No. 2016-12, was duly adopted by the City Council of the City of Banning, California, at a Regular Meeting thereof held on the 9th day of February, 2016, by the following vote, to wit:

AYES:

NOES:

ABSTAIN:

ABSENT:

Marie A. Calderon,
City Clerk of the City of Banning



CITY OF BANNING
CITY COUNCIL REPORT

TO: CITY COUNCIL

FROM: Michael Rock, City Manager

PREPARED BY: Art Vela, Acting Public Works Director
Holly Stuart, Management Analyst

MEETING DATE: February 9, 2016

SUBJECT: Resolution No. 2016-04, "Awarding the Custodial Services Agreement to Merchants Building Maintenance, LLC of Pomona, CA for Civic Center and Municipal Facilities Maintenance in the amount of \$79,243.10"

RECOMMENDATION: The City Council adopt Resolution No. 2016-04:

- I. Awarding the Custodial Services Agreement to Merchants Building Maintenance, LLC of Pomona, California for Civic Center and Municipal Facilities.
- II. Authorizing the Administrative Services Director to make necessary budget adjustments, appropriations and transfers related to the Custodial Services Agreement.
- III. Authorizing the City Manager to execute the Custodial Services Agreement with Merchants Building Maintenance, LLC in the amount of \$79,243.10.

JUSTIFICATION: Custodial services are needed to provide regular scheduled custodial services to effectively, efficiently and safely maintain a high level of cleanliness for City facilities. Merchants Building Maintenance, LLC is the highest ranked and most qualified company to provide complete custodial services for the Civic Center and municipal facilities.

BACKGROUND: The current janitorial company has provided services since 2007. After approximately 8 years of service, in order to determine if the City is receiving the most economical and best available services the Public Works Department prepared a Request for Proposal ("RFP") for Janitorial Services.

On October 30, 2015 a RFP for Custodial Services for the City of Banning Civic Center and Municipal Facilities was published in the Press Enterprise. Additionally, the RFP was directly mailed to nine companies and advertised on the City of Banning website.

Proposals were due on December 3, 2015 and the Public Works Department received five (5) responses. A committee was assembled consisting of 3 members and proposals were evaluated based on qualifications, experience, responsiveness, understanding and approach with the following outcome:

<u>Companies</u>	<u>Score</u>	<u>Bid Amount Per Month</u>
1) Merchants Building Maintenance, LLC.	775.00	\$6,215.00
2) Golden Touch Cleaning	750.00	\$5,994.00
3) Octo Clean	550.00	\$7,083.00
4) Custom Service Systems	550.00	\$10,027.00
5) Consolidated Cleaning Systems	Incomplete	\$5,469.00

Upon further review of the scope of services, in order to reduce costs and better meet operational needs, the frequency of some of the tasks were adjusted changing daily tasks to occur on a weekly basis. The revised scope of services, attached as Exhibit "A", was sent to the two highest ranked proposers including Merchants Building Maintenance, LLC and Golden Touch Cleaning. In response, the following revised monthly fee schedules were received by the Public Works Department:

<u>Companies</u>	<u>Revised Bid Amount Per Month</u>
1) Merchants Building Maintenance, LLC.	\$5,149.54
2) Golden Touch Cleaning	\$5,994.00

Although the frequency of some services were reduced, Golden Touch Cleaning responded stating that there will be no adjustment to their fee schedule. As a result, staff respectfully requests that a contract be awarded to Merchants Building Maintenance, LLC. The company was founded in 1961, is family owned and operated with over 3,000 employees. Additionally, Merchants Building Maintenance, LLC has experience with providing public agencies janitorial services and is currently on contract with the cities of Riverside, Hemet, Palmdale and Ontario.

As a result of the RFP process and the revisions to the scope of services, a savings will be realized. The current janitorial services are provided at a cost of \$5,811.51 per month (\$69,738.12/year). Additionally, an average of \$2,000.00 per year is spent on deep floor cleanings at the Community Center. Current annual expenditures amount to \$71,738.12 per year. The Merchant Builders Maintenance, LLC bid of \$61,794.48 (\$5,149.54/month), which includes quarterly floor cleaning at the Community Center, will provide an annual savings of \$9,943.64.

Consequently, staff recommends a contract award in the total amount of \$79,243.10 for a fifteen (15) month period beginning April 1, 2016 and ending June 30, 2017 which includes \$2,000.00 for miscellaneous services as needed. This agreement will have an option to be renewed for an additional three (3) single years upon annual review and approval by City Council with extensions and services terminating no later than June 30, 2020. Upon annual

review, the contract annual fee schedule may be adjusted due to the Consumer Prices Index (“CPI”) which may be considered at the time of extension.

OPTIONS: The City Council may choose to take no action on this matter which would result in an interruption in janitorial services.

FISCAL IMPACT: The total agreement amount of \$79,243.10 will be funded by the operational budgets of Building and Maintenance (\$35,459.10), Police Department (\$31,584.00) and the Community Services Department (\$10,200.00) with the additional \$2,000.00 being allocated by the departments at the time additional services are deemed necessary.

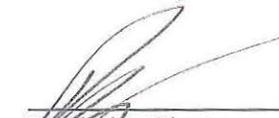
ATTACHMENT: Exhibit “A” – Scope of Services

Prepared and Reviewed by:



Art Vela
Acting Public Works Director

Reviewed by:



Rochelle Clayton
Administrative Services Director/
Deputy City Manager

Approved by:



Michael Rock
City Manager

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RESOLUTION NO. 2016-04

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BANNING, CALIFORNIA, AWARDING THE CUSTODIAL SERVICES AGREEMENT TO MERCHANTS BUILDING MAINTENANCE, LLC OF POMONA, CA FOR CIVIC CENTER AND MUNICIPAL FACILITIES MAINTENANCE IN THE AMOUNT OF \$79,243.10

WHEREAS, on October 30, 2015 a Request for Proposals ("RFP") for Custodial Services for the City of Banning Civic Center and Municipal Facilities was published in the Press Enterprise in additionally the RFP was mailed to nine companies and advertised on the City of Banning website; and

WHEREAS, proposals were due on December 3, 2015 and the Public Works Department received five (5) responses; and

WHEREAS, a committee consisting of 3 members evaluated the proposals based on qualifications, experience, responsiveness, understanding and approach; and

WHEREAS, following the committee recommendation and with reconsideration of needed services, Merchants Building Maintenance, LLC was identified as the most qualified bidder; and

WHEREAS, Merchants Building Maintenance, LLC was founded in 1961, is family owned and operated with over 3,000 employees and has experience with providing public agencies janitorial services and is currently on contract with the cities of Riverside, Hemet, Palmdale and Ontario; and

WHEREAS, the contract award is in the total amount of \$79,243.10 for a fifteen (15) month period beginning April 1, 2016 and ending June 30, 2017 which includes \$2,000.00 for miscellaneous services as needed with an option to be renewed for an additional three (3) single years upon annual review and approval by City Council with extensions and services terminating no later than June 30, 2020; and

WHEREAS, upon annual review, the contract annual fee schedule may be adjusted due to the Consumer Prices Index ("CPI") which may be considered at the time of extension; and

WHEREAS, the total agreement amount of \$79,243.10 will be funded by the operational budgets of Building and Maintenance (\$35,459.10), Police Department (\$31,584.00) and the Community Services Department (\$10,200.00) with the additional \$2,000.00 being allocated by the departments at the time additional services are deemed necessary for a total agreement amount of \$79,243.10.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Banning as follows:

SECTION 1. The Banning City Council adopts Resolution No. 2016-04 awarding the Custodial Services Agreement to Merchants Building Maintenance, LLC of Pomona, CA for Civic Center and Municipal Facilities.

SECTION 2. The Administrative Services Director is authorized to make necessary budget adjustments and appropriations and transfers related to program payments.

SECTION 3. The City Manager is authorized to execute the Custodial Services Agreement with Merchants Building Maintenance, LLC in the amount of \$79,243.10.

PASSED, ADOPTED AND APPROVED this 9th day of February, 2016.

Arthur L. Welch, Mayor
City of Banning

ATTEST:

Marie A. Calderon,
City Clerk of the City of Banning

**APPROVED AS TO FORM AND
LEGAL CONTENT:**

Anthony R. Taylor, City Attorney
Aleshire & Wynder, LLP

CERTIFICATION:

I, Marie Calderon, City Clerk of the City of Banning, California, do hereby certify that the foregoing Resolution No. 2016-04, was duly adopted by the City Council of the City of Banning, California, at a Regular Meeting thereof held on the 9th day of February, 2016, by the following vote, to wit:

AYES:

NOES:

ABSTAIN:

ABSENT:

Marie A. Calderon,
City Clerk of the City of Banning

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Exhibit "A"

Scope of Services

VI. SCOPE OF SERVICES AND SPECIFICATIONS

The intent of these specifications is to secure a Contractor which shall provide **COMPLETE CUSTODIAL SERVICES** in a cost effective and professional manner.

- A. The Contractor shall supply all licenses, permits and fees necessary to complete work. The Contractor agrees to indemnify, defend and hold harmless the CITY OF BANNING for any and all loss, liability, damages, claims or demands of employees, agents and workers of the Contractor, or of all provisions hereof.
- B. The Contractor shall furnish all labor, tools, materials, and equipment to provide custodial services as set forth in the specifications.
- C. The City shall provide trash liners and paper products; toilet tissue, seat liners, and paper towels, for the services set forth in the specifications.
- D. All work shall be done in a thorough and workmanlike manner to the satisfaction of the Public Works Director/City Engineer, or his authorized agent, and comply with all legal generally accepted practices for custodial services. The premises shall be maintained at the level of service provided for in these specifications at all times.
- E. The Contractor shall have the duty to provide complete custodial services of all work sites listed in **Section IV**, including, but not limited to duties listed in **Section VII**, and any others added in the future. When additional services or portions thereof, are accepted by the City and become part of the custodial service contract, the City and Contractor shall negotiate a fair and reasonable cost to compensate the Contractor for the newly assigned work.
- F. Employees of the Contractor shall not disturb papers on desks, open drawers of cabinets, use telephones, radios or television sets or tamper with personal or city property. Employees of the Contractor shall report anything out of the ordinary, such as cracked windows. Employees of the Contractor shall call the Banning Police Department immediately when they observe anyone destroying city property either inside or outside the building. Upon leaving, when applicable, the employees of the Contractor shall see that all doors and windows so designated are locked, and lights so designated are turned off.
- G. **Coordination and Phasing** – The Contractor shall hereby be made cognizant of the fact that the Council Chambers, meeting rooms, and, at times, conferences rooms and office spaces will be in use by employees and residents before or after normal working hours. All work shall be performed in a phased operation so that these meetings are not disrupted. In no case shall work commence in an area occupied for meeting purposes. The City Hall Information Desk will supply the Contractor with LISTINGS of all scheduled meetings; however, department conferences and impromptu meetings are not

scheduled and must be handled as they occur.

H. Personnel Attire – All employees shall be required to wear appropriate attire that readily identifies the individual as an employee of the Contractor. Additionally, the individual will wear a picture identification badge that identifies the individual and Contractor. All badges as required by this contract will be approved by the Public Works Director/City Engineer or his designee and be provided by the Contractor at the Contractor's expense.

I. SPECIAL CONDITIONS:

1. The Contractor is to provide each of the items with his/her Bid Package as listed below:
 - a. Organizational data
 - b. Organizational chart including all executives.
 - c. The name of the foreman of supervisor assigned to supervise the work of this contract.
 - d. Current number of employees of the company.
 - e. Brief description of company personnel and training procedures.
2. Level of cleaning with frequency charts of each building. Service frequencies must be equal or exceed those specified.
3. Inventory of all equipment and adequate cleaning supplies to be kept on the premises.

J. Quality Control - The Contractor shall provide an "Inspection/Checklist Form" for each facility location as approved by the Public Works Director/City Engineer or his designee. The Contractor's personnel will use this form to reflect services performed and any exceptions to the requirements. Additionally, both the Contractor's Supervisor and Public Works Director/City Engineer or his designee evaluating the effectiveness and adequacy of services performed, will use this form. This form will be completed daily and be maintained in the Janitor's closet in an appropriate binder. A copy of the inspection/checklist will be forwarded to the Public Works Director/City Engineer and/or his designee on a weekly basis.

K. The Contractor will sign in and out at each shift change on a log sheet in the Janitor's closet for each facility location. A "Service Log" will also be maintained and checked daily for customer requests at each facility location. Items requiring completion will be so noted at the end of each shift. The Contractor will post a copy of the daily, weekly, monthly, quarterly, annual tasks as listed in these specifications in the Janitor's closet. The Janitor's closet will be kept in a neat, clean and orderly condition at all times, and securely locked when not in use. The Janitor's closet will be stocked with ample consumable items at all times. The Contractor will complete the "Service Log Sheet" and "Inspection/Checklist" daily and file it in an appropriate binder located in Janitor's closet.

L. Requirements Subsequent to Contract Execution – The Contractor is hereby required to conform to the following:

1. The Contractor shall furnish all labor, cleaning materials and equipment necessary to perform the specified work, with the *exception* of owner consumable items such as *toilet paper, paper towels, hand soap refills for dispenser units, sanitary napkins, toilet seat covers and waste container liners*, the Contractor shall be responsible to secure city supplied items and refill all containers and dispensers. The Contractor may propose as an alternative option the cost of these consumable items. This alternative proposal will include the individual cost of each item being proposed.
2. The Contractor's equipment shall be new or in the best maintained working order for its intended function. Hepa type filtered vacuum cleaner must be used for all facilities. Equipment, which is faulty or does not perform to the satisfaction of the City, shall be replaced. Contractor equipment and supplies shall be stored only in the areas designated by the City.

M. The Contractor shall be available twenty-four (24) hours a day, seven (7) days a week to respond to all emergencies within two (2) hours of notification.

N. The Contractor will maintain photo identification badges for all individual performing services under the said contract identifying the company's name, individual's name, title of the individual, and a picture image of the individual. Background checks and clearance will be performed by the contractor in a manner approved by the City and maintained in a binder utilized by the Contractor to log in and log out at each location. Badges and background to be performed at the expense of the contractor in a manner approved by the City. Badges and background check to be approved by City staff will be provided at the contractor's expense.

VII. SPECIFICATIONS - FREQUENCY OF SERVICE

The following is an itemized list by area of cleaning activities required five (5) times per week for the Civic Center, City Yard, Police Department facilities and Community Center/Senior Center, Monday through Friday, except the Water Shop, which will require cleaning activities (3) times per week, Monday through Friday.

A. GENERAL PROCEDURES - ALL AREAS – DAILY

~~1. Empty and wipe clean all desk and counters.~~

~~2.1.~~ Empty all desk and area trash containers, including recycling bins.

~~3.2.~~ Replace container liners as required.

~~4.3.~~ Sweep all composition floors with chemically treated dust mops.

~~5.4.~~ Sweep all bar contrite floors with sweeping compound.

- ~~6. Vacuum all carpeting with particular attention to high-use areas.~~
- ~~7. Spot clean carpeting.~~
- ~~8.5. Spot mop or clean spillage on floors, bare concrete, vinyl-tile, or carpet.~~
- ~~9. Clean ducts and soft buff all counters, tables, chairs, and furniture.~~
- ~~10.6. Spot clean to remove fingerprints from glass and metal doorframes of entry doors and wall switches; including all conference rooms.~~
- ~~11. Clean customer service windows.~~
- ~~12.7. Spot clean interior office windows as needed or requested.~~
- ~~13. Clean, sanitize and polish all drinking fountains.~~
- ~~14. Clean interior and exterior of all glass panel doors and windows.~~
- ~~15. Perform low dusting, defined as floor level to five feet above floor, including base molding or top set, sill ledges, chair and personnel rails, partitions, chairs, tables, desks, telephones, filing cabinets, and all office furniture.~~
- ~~16.8. Remove all graffiti from walls and furniture. Notify the Director of Public Works or his designee of any graffiti that cannot be removed with normal graffiti removal cleaning solutions.~~
- ~~17.9. Maintain custodial closets and storage areas clean and orderly.~~
- ~~18.10. Secure all exterior doors and turn off all but security night lighting when applicable.~~
- ~~19.11. Disinfect all doorknobs / handles throughout City facilities.~~

NOTICE: Under no circumstances shall any papers, books, documents or equipment be touched, moved or displaced.

SPECIAL NOTE: Any suspiciously important envelope or other material found in the trash or recycling containers or on the floor shall be left in the area with a note.
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C. RESTROOMS - DAILY

- 1. Empty all trash containers, replace all liners.
- 2. Wash all consumable product containers.
- 3. Refill all consumable products with city-furnished supplies.
- 4. Sweep floor clear of all debris.
- 5. Damp mop and disinfect all resilient and ceramic floors.
- 6. Wet wipe and disinfect toilet partitions with a cleaning and sanitizing solution.
- 7. Empty and sanitize all sanitary napkin disposal units.
- 8. Clean and polish all vitreous fixtures, including toilet bowls, tanks, urinals, and hand basins; clean tile and tile flooring in men's shower/restroom with a cleaning and sanitizing solution.
- 9. Clean and disinfect all flush rings, drain and overflow outlets.

10. Clean and disinfect tops and underside of toilet seats.
11. Clean and polish all chrome fittings.
12. Clean and polish all glass and mirrors.
13. Clean splash marks on walls adjacent to or over sinks.
14. Remove spot, stain, and splash marks and all graffiti from walls and partitions. (Notify the City's Director of Public Works or his designee of any graffiti that cannot be removed with normal graffiti removal solutions.)
15. Dust metal partitions, wet wipe and clean both sides of restroom entry doors.
16. Remove fingerprints from glass, doors, door frames, and light switches.
17. Report any or all water leaks, plugged lavatories, etc., to the Director of Public Works or his designee.

D. AREA SPECIFIC REQUIREMENTS

1. LOBBY AREAS AND MAIN CORRIDORS:

- a. Daily spot clean all glass, metal doorframes; interior and exterior, and main entrance doors passageway/lobby area.
- b. Daily remove all trash and place in bins at pickup area.
- c. Daily clean and sanitize drinking fountains in the lobby/restroom areas.
- ~~b.~~
- e.d. WeeklyDaily dust mop/vacuum floor areas. The contractor is responsible for moving and replacing items that are less than 20lbs in order to thoroughly vacuum.
- ~~d.c. WeeklyDaily damp mop resilient tile.~~
- ~~e. Daily clean and sanitize drinking fountains in the lobby/restroom areas.~~
- f. Monthly wash all glass partition, interior and exterior, and metal doorframes of passageway/front lobby entrance area.
- g. Quarterly deep clean all high-traffic and carpeted areas.

2. COUNCIL CHAMBER AND ADJACENT MEDIA ROOM AND CORRIDORS

- a. WeeklyDaily dry wipe and buff microphones with extreme care.
- b. WeeklyDaily clean stage chairs.
- c. Monthly vacuum Media Room and clean glass window.
- d. Monthly wash interior and exterior glass partition and metal doorframes in east entry lobby area.
- e. DO NOT CLEAN any electronic buttons, switches or gears.

3. PRIVATE OFFICE AREAS (i.e. City Manager, Directors, City Council Members Office)

- a. Daily remove all trash, replace liners and place trash in bins at pickup area.
- a.b. Daily empty recyclable bins
- b.c. Weekly dDust and wipe clean desks and counters.
- e.d. Weekly yVacuum carpet floor, as needed, minimum once a week. The contractor is responsible for moving and replacing items that are less than 20lbs in order to thoroughly vacuum.
- d.e. Monthly clean glass window interior.
- e.f. Daily empty recyclable bins.

E. EMPLOYEE BREAK ROOMS AND KITCHENS ~~-DAILY~~

- 1. Daily eEmpy, wash, disinfect and replace liners in all trash containers and place trash in bins at pickup area.
- 2. Daily cClean and disinfect all counter tops, tabletops, and interior of sink.
- 3. No cleaning of dishes, silverware, or coffeepots will be required.
- 4. Do not clean coffee machines. Leave machines plugged in and in the same "on" or "off" position as left by staff, unless an empty coffee pot has been left on top of any "on" element, then it shall be removed and set aside.
- 5. Weekly cClean exterior of all appliances; refrigerator, conventional oven, microwave oven, and toaster oven in the employee kitchen/lunchroom area.
- 6. Weekly dDust mop/vacuum hard floor area, wet mop and disinfect all resilient/hard surface floor area and spot clean all carpet adjacent thereto.
- 7. Weekly dDust miscellaneous furniture (chairs, couches, etc.).
- 8. Weekly dDamp mop resilient tile.
- 9. Weekly rRemove fingerprints from doors, frames, light switches, handles and push plates.
- 10. Restock paper towels containers.

F. BUILDING SECURITY - **DAILY**

- 1. Turn off all lights (except security and night lights).
- 2. Close windows.
- 3. Lock all doors.
- 4. Set alarms.

G. ALL AREAS – WEEKLY

1. Dust all high and low horizontal surfaces, including sills, ledges, moldings, shelves, locker tops, frames and file cabinets.
2. Empty all recyclable bins or as needed and place in recyclable bin.
3. Damp wipe plastic and leather furniture.
- ~~4. Polish buff hard and resilient floors in traffic areas. REMOVE HEEL MARKS.~~
- ~~5.4.~~ Remove fingerprints from glass partitions, metal door frames and light switches in office areas.
- ~~6.5.~~ Clean and polish bright metal to 70" height.
- ~~7.6.~~ Clean and sanitize waste containers in restrooms and break areas.
- ~~8.7.~~ Clean the interior of the microwave oven, toaster, and conventional stove in the employees' kitchen/lunchroom area.
- ~~9.8.~~ Enzyme clean all floors and walls.
- ~~9.~~ Disinfect all doorknobs.
- ~~10.~~ Empty and wipe clean all desk and counters.
- ~~11.~~ Vacuum all carpeting with particular attention to high use areas. The contractor is responsible for moving and replacing items that are less than 20lbs in order to thoroughly vacuum.
- ~~12.~~ Spot clean carpeting
- ~~13.~~ Spot mop or clean spillage on floors, bare concrete, vinyl-tile, or carpet.
- ~~14.~~ Clean ducts and soft buff all counters, tables, chairs and furniture.
- ~~15.~~ Spot clean to remove fingerprints from glass and metal doorframes of entry doors and wall switches; including all conference rooms.
- ~~16.~~ Clean customer service windows.
- ~~17.~~ Clean, sanitize and polish all drinking fountains.
- ~~18.~~ Clean interior and exterior of all glass panel doors and windows.
- ~~19.~~ Perform low dusting, defined as floor level to five feet above floor, including base molding or top set, sill ledges, chair and personnel rails, partitions, chairs, tables, desks, telephones, filing cabinets, and all office furniture.
- ~~20.~~ BI WEEKLY- Polish buff hard and resilient floors in traffic areas. REMOVE HEEL MARKS.
- ~~10.21.~~

I. ALL AREAS – MONTHLY

1. Clean entire interior/exterior glass partitions and metal doorframes.
2. Thoroughly wash all restroom floors and detail corners to remove residual buildup.

3. Clean entire desk tops.
4. Dry dust wood paneled surfaces.
5. Remove dust and cobwebs from ceiling areas; vacuum all ceiling vents, taking care to not move directional vents.
6. Spray buff entire resilient and hard surface floor areas.
7. Spot clean all carpeted areas.
8. Detail vacuum carpet edges and under desks and office furniture. The contractor is responsible for moving and replacing items that are less than 20lbs in order to thoroughly vacuum.
9. Completely clean the entire interior of the refrigerator. A "Notice" shall remain posted on the refrigerator at all times of the day of clean up. Therefore, any items such as expired food, containers, etc., within the refrigerator shall be discarded by the contractor. The City shall notify staff internally and provide ample notice to them. The contractor shall notify the Director of Public Works or his designee one (1) week in advance of the cleaning or a set day of the month shall be determined. Any items labeled "Keep" by its owner shall remain after cleaning.

J. ALL AREAS – QUARTERLY

1. Clean windows, interior and exterior including all window that are located in high spaces.
2. Clean and polish office furniture.
3. Damp clean diffuser outlets in ceiling and walls.
4. Dry clean area adjacent to diffuser outlets.
5. Wash all waste baskets.
6. Dust Venetian blinds.
7. Spray buff resilient and hard surface floors, plus apply floor finish and ensure that all floors maintain a shine leaving no residual floor finish.
8. Completely clean the entire interior of the freezer portion of the refrigerator and discard all food items not labeled "keep" by its owner. Provide at least two week notice to staff and post a notice of the date of cleaning. If additional cleaning is required, you will be notified.
9. Wash and sanitize chairs and tables in employee break rooms and conference rooms located in all buildings.
10. Wash and sanitize metal partitions and wall surfaces in all restrooms.

K. SEMI-ANNUAL REQUIREMENTS

1. Clean and polish all baseboards.
2. Dust lighting fixtures

3. Damp clean lobby and reception chairs.
4. Move all furniture, deep clean all carpeted surfaces using a water extraction method.
5. Strip, wash and machine polish resilient and hard surface floors.
6. Steam clean showers and shower drainage trough.

L. ALL AREAS – ANNUALLY

Move furniture, strip, and seal and apply floor finish to all resilient and hard surface floors.

M. COMMUNITY CENTER AND SENIOR CENTER

1. Daily cleaning of restrooms as described in Section VII. Specifications, Subsection C “Restrooms”.
2. Quarterly buffing/waxing of all floors and shampooing of all carpets (excluding the multi-purpose room gym floors and the Community Center)

O. WATER SHOP

1. Services provided to the Water Shop will be restricted to the administration offices, break room area and restroom.

VIII. COMPENSATION

A. BASIC COMPENSATION

OWNER shall pay Contractor, as compensation for the services to be performed, the sum of per month listed in the Contract Agreement with additional adjustments as specified thereafter. Additional adjustments shall be made to the monthly compensation if new areas are included in the City of Banning, Custodial Services.

Compensation may be adjusted annually, on July 1st of each year commencing on July 1, 2017, during the term of the Contract Agreement to reflect annual changes in the U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index Los Angeles-Riverside-Orange County Area, or any successor index, as set forth over the previous available twelve (12) months prior to the date of adjustment.

IX. ADDITIONAL WORK

- A. The Public Works Director/City Engineer may authorize the Contractor to perform additional work. Additional work shall be defined as work not included in the specifications with the exception of additional sites, or portions thereof that may be added and shall be in writing.
- B. Prior to the Contractor performing any additional work, the Contractor shall

prepare and submit a written description of the work with an estimate of labor and materials cost. No work shall commence without written authorization from the Public Works Director/City Engineer, or his designee. In the event that conditions exist where there is imminent danger of injury to the public or damage to property, the Public Works Director/City Engineer may verbally authorize the work to be performed upon receiving a verbal estimate from the Contractor. Within twenty-four (24) hours after receiving verbal authorization, the Contractor shall submit a written estimate to the Public Works Director/City Engineer for written approval.

- C. The cost estimate for additional work shall consist of the following elements:
 - 1. Wholesale cost of materials including sales tax plus ten percent (10%).
 - 2. Base cost of labor plus fifteen percent (15%) for overhead and profit.

- D. Change Order - Written authorization for additional work from the Public Works Director/City Engineer, or his designee, shall be by the issuance of a Change Order. This Change Order shall be considered an amendment to the Contract Agreement and approved by both the Public Works Director/City Engineer and Contractor.

- E. All additional work shall commence on the specified date established and shall diligently proceed until completion.

- F. Upon completion of the additional work, the Public Works Director/City Engineer or his designee shall be notified so that the work may be verified.

- G. The Contractor shall submit an invoice for compensation with attached photocopies of original invoices for materials. Compensation shall not exceed the written estimate. The Contractor's invoice shall be subject to audit and review by the City prior to payment.

- H. The City of Banning reserves the right to repair and/or contract with a third party to perform such additional work.

XIV. WORK SCHEDULE

- A. The Contractor shall accomplish all normal custodial duties required under this contract by 7:00 a.m. ~~between the hours of 5:00 a.m. and 8:00 a.m.~~, **Monday through Friday unless otherwise negotiated.** Normal City business and operations shall not be disrupted. Exceptions may be made to normal working hours, where incidences of use may be too great during the hours specified to allow for proper maintenance. The Public Works Director/City Engineer may grant, on an individual basis, permission to perform contract maintenance during other hours. **The Contractor shall establish a schedule of routine work to be**

followed in the performance of this contract, and submit such schedule to the Public Works Director/City Engineer.



**CITY OF BANNING
CITY COUNCIL REPORT**

TO: CITY COUNCIL

FROM: Michael Rock, City Manager

PREPARED BY: Brian Guillot, Acting Community Development Director
Reuben Arceo, Contract Planner

MEETING DATE: February 9, 2016

SUBJECT: TENTATIVE TRACT MAP NO. 15-4501 (TTM 36939)
ZONE CHANGE NO. 15-3501

RECOMMENDATION: That the City Council:

1. Conduct a public hearing on Tentative Tract Map No. 15-4501 (TTM 36939) and Zone Change No. 15-3501; and
2. Introduce Ordinance No. 1495 (Attachment 1):

Adopting a Mitigated Negative Declaration and Mitigation, Monitoring, and Reporting Program; approving Tentative Tract Map No. 15-4501 (TTM 36939) a proposal to subdivide 34.6 acres of vacant land for purposes of creating 98 numbered lots for single-family residential development and three (3) lettered lots; and, approving Zone Change No. 15-3501 amending the Zoning Map to eliminate the RL-10,000 Overlay affecting the western portion of the site to Low Density Residential (LDR, 0 to 5 units per acre); APN's 535-430-001 through 021, 535-431-001 through 015, 535-432-001 through 017, 535-070-004 and 006, subject to Conditions of Approval attached hereto and incorporated herein by reference as Exhibit A.

PLANNING COMMISSION: At the regularly scheduled Planning Commission meeting held on December 2, 2015, the Planning Commission, at a duly noticed public hearing, considered the subject project and continued the item to the January 6, 2016, meeting. The commission requested additional public notice and the opportunity to review the typographic errors found in the environmental documents. The vote was 5-0 to continue.

At the regularly scheduled Planning Commission meeting held on January 6, 2016, the Planning Commission, at a duly noticed public hearing, considered the subject project and approved Resolution No. 2015-11 recommending that the City Council adopt the Mitigated Negative Declaration and Mitigation, Monitoring, and Reporting Program; and, approve Tentative Tract Map No. 15-4501 (TTM 36939) and Zone Change No. 15-3501. The vote was 3-2 for approval.

JUSTIFICATION: The applicant submitted an application to subdivide 34.6 acres of vacant land for purposes of creating 98 numbered lots for single-family residential development and three (3) lettered lots; and, amending the Zoning Map to eliminate the RL-10,000 overlay affecting the western portion of the site to Low Density Residential (LDR, 0 to 5 units per acre). Filed by Peter J. Pitassi of Diversified Pacific, 10621 Civic Center Drive, Rancho Cucamonga, CA 91730.

Approval of this proposal would provide for additional housing units within the City. In the past six (6) years the City has issued just six (6) permits for single family dwellings. The 2014-2021 Regional Housing Needs Assessment (RHNA) obligations as prepared by the Southern California Association of Governments (SCAG) sets forth the planning period goal of 3,792 units for the City. Approval of this application would be a step in delivering housing units in accordance with the goals and policies of the City’s Housing Element of the General Plan and RHNA.

BACKGROUND: The process to approve a subdivision includes (1) a recommendation to approve a tentative map by Planning Commission; (2) approval of a tentative map by City Council, (3) approval of a final map by City Council, which usually includes a development agreement for improvements; and, (4) approval of a Design Review application by Planning Commission to address the architecture of the structures and other more detailed design related elements of the project. Each of these activities includes a public hearing; and, the process may take many months to years to complete.

This proposal intends to improve upon the design of the existing approved subdivision maps as it relates to the Alquist-Priolo earthquake fault zone that impacts the northerly portion of the site.

TTM 36939 intends to subdivide a 34.6 acre vacant site into 98 single-family residential lots for development purposes. The project site is located north of Wilson Street between Sunrise Avenue and Sunset Avenue. The Montgomery Creek channel constitutes a portion of the tract’s southern boundary as noted in Figure 1. The 34.6 acre vacant site is characterized by relatively flat and hilly undulations as shown in the Figure 3 photos, with general elevations of the property ranging from approximately 2,550 to 2,650 feet above mean sea level. The property is currently zoned Low Density Residential (LDR) with a RL-10,000 Overlay, which establishes a minimum single-family residential lot size of 10,000 square feet. However, the applicant is proposing to remove the RL-10,000 overlay.

Table 1 below denotes the surrounding zoning districts within the Project area.

Table 1: Subject Site Zoning Districts

Location	General Plan Designation	Zoning Designation
Site	Low Density Residential	LDR-east 19 acres (0-5 DU/Acre) LDR RL-10,000-west 16 acres(0-5 DU/Acre)
North	Open Space/Specific Plan Area	Open Space/Specific Plan Area (Banning Bench-Loma Linda Specific Plan)
South	Medium Density Residential /Low Density Residential	MDR (0-10 DU/acres)/LDR (0-5 DU/Acre)
East	Low-Density Residential	LDR (0-5 DU/Acre)
West	Low Density Residential	LDR RL-10,000 (0-5 DU/Acre)

Source: City of Banning General Plan Land Use Map, City of Banning-Existing Zoning Map

Prior to the proposed project, two previous subdivision maps have been considered by the City to subdivide the property. In April 2003, the City Council approved TTM 30642. Tract Map 30642, which is recorded but not developed, subdivided 19.3 acres of the site and created 53 single family lots ranging in size from 7,468 square feet to 25,403 square feet with an average lot size of 11,492 square feet. Approximately the eastern third of this site was previously graded in preparation for residential development. However, lots were never finished graded, nor homes or streets constructed. A natural gas transmission pipeline bisects Tract Map 30642 crossing the tract in a northwest to the southeast direction (see Figure 4). As was the case with TM 30642, TTM 36939 proposes to locate public streets over the existing natural gas transmission line. TTM 32429, approved in 2005, intended to subdivide 16.86 acres to create 44 single-family lots. TTM 32429 will expire in August of 2016. If approved and recorded as a final map, the proposed TTM 36939 will supersede TTM 32429, and re-subdivide TM 30642 to a new configuration.

The site has remained vacant since the above mentioned subdivision maps were last proposed in 2005. It is anticipated that this project will improve the area through the construction of new single-family homes along with the public improvements required in connection with the project.

Analysis Tentative Tract Map No. 15-4501 (TTM 36939)

TTM 36939 proposes a minimum lot size of 7,000 square feet, with three (3) lettered lots dedicated for open spaces purposes. **Residential lots range in size from 7,000 square feet to 19,239 square feet.** The majority of lot sizes however range between 7,000 to 8,200 square feet, totaling a density of 2.8 dwelling units per acre.

Concerning the three lettered lots; Lot 'A' will function as a fault setback zone, as a portion of the San Gorgonio pass fault zone traverses along the northern portion of the property line as shown in Figure 2. In accordance with the recommendation by the RMA Group Study dated April 8, 2014 and June 2015, and pursuant to the Alquist-Priolo Act, no human habitable structures can be built within the fault setback zone, which ranges in width from 40 feet to 180 feet in various locations. Lot 'B' (29,028 sq.ft.) and Lot 'C' (23,195 sq.ft.) shall operate as water quality basins. The basins will serve to retain runoff and mitigate developed condition flows as required by City Ordinance. City of Banning Ordinance No. 1415 requires that all development will make provisions to store runoff from rainfall events up to and including the 100 years, three-hour duration event onsite via storage or infiltration basins for new development and redevelopment. The basins will both be located adjacent to Wilson Street. The basins are for water quality purposes only and do not provide for dual use such as recreation.

Access to the Project site is from Sunset Avenue, Sunrise Avenue, and Wilson Street. The corridors are improved two (2) lane roadways within the Public right-of-way. Curb, gutter, and sidewalk have been partially installed. Pursuant to the LSA Associates Focused Traffic Impact Study dated July 28, 2015, the Study concluded that under existing and opening year conditions, the proposed intersection of Sunset Avenue/Dawn Lane and the roadway segment on Sunset Avenue between Wilson Street and the proposed Dawn Lane would operate at satisfactory Levels of Service (LOS) or better. The City of Banning defines "satisfactory" as LOS D. LOS D is the minimum LOS to be maintained on all roadway segments and intersections. The Project is estimated to generate 933 daily trips, with 73 trips occurring during the a.m. peak hour, and 98 trips occurring in the p.m. peak hour.

Lot 'A' of the proposed map is intended as a setback area for the earthquake fault located along the northerly boundary of the Project (this area is about five (5) acres, more or less). No structures are permitted to be constructed in this area; therefore, it may be considered open space that may be used by the community. Sylvan Park is located approximately 1,000 feet to the south of the project and may be accessed via Park Avenue from Wilson Street. The 7.8 acre site includes passive and active facilities, including a tee-ball field, a playground, a picnic shelter, picnic areas with barbeques, restrooms, two basketball courts, open space, and parking. Facilities may be rented for private and public functions. Table III-20 of the General Plan sets forth standards for Recreational Service Areas. The Radius of Area Served standards are stated as 0.5 miles (2,640 feet) for playgrounds and neighborhood parks, and three (3) miles for Community Parks. The location of Sylvan Park in relation to the proposed subdivision meets both standards as stated in the General Plan.

Internal neighborhood streets servicing the subdivision with curb and gutter within 60 foot two lane travel lanes include Eclipse Drive, and Dawn Lane. Eclipse Drive will connect to Sunrise Avenue and Dawn Lane will connect to Sunset Avenue. Water, sewer and electrical service will be provided by the City of Banning Public Works Department and Electric Department. The Project is required to connect to the existing eight (8) inch water mains on Sunrise Avenue and extend an eight (8) inch diameter water main in Dawn Lane, within the tract boundary to the existing 18-inch diameter water main on Sunset Avenue. All street improvements along Wilson Street, Sunset Avenue, and Sunrise Avenue will be subject to the City of Banning Engineering and Public Works development standards.

Analysis Zone Change No. 15-3501

The Applicant is proposing to rezone the site to eliminate the RL-10,000 Overlay affecting the western portion (about 16 acres, more or less) of the site to Low Density Residential (LDR) (0 to 5 dwelling units/acre) but without the 10,000 square foot minimum lot size. The minimum lots size for the LDR zoning district is 7,000 square feet. The overlay requirement of a minimum lot size of 10,000 square feet essentially reduces the density to something less than the General Plan land use maximum density for the LDR zoning district. The Project proposes 98 residential dwelling units and this number is well below the maximum density that the existing LDR zoning district along with the overlay density would allow. At the maximum of five units per acre, a total of 173 (5 dwelling units/acre x 34.6 acres) single-family units could be constructed. Due to the amount of space that is needed to accommodate the requirements of the Alquist-Priolo building setback zone and the desire of the applicant to construct single-family dwellings, it seems appropriate to consider the removal of the RL-10,000 Overlay.

The LDR zoning district allows the development of attached and detached single family homes, in traditional subdivisions and planned communities. The clustering of condominiums and townhomes may be appropriate with the provision of common area amenities and open space, when a Specific Plan is prepared. Home occupations are permitted. Bed & breakfasts and similar uses may be appropriate with the approval of a conditional use permit. However, the applicant is proposing the development of single family homes.

ENVIRONMENTAL DETERMINATION:

California Environmental Quality Act (CEQA)

The City Council, in light of the whole record before it including but not limited to the City's local CEQA Guidelines and Thresholds of Significance, the proposed Mitigated Negative Declaration and documents incorporated therein by reference, any written comments received and responses provided, the proposed Mitigation, Monitoring, and Reporting Program and other substantial evidence (within the meaning of Public Resources Code § 21080(e) and § 21082.2) within the record and/or provided at the public hearing, hereby finds and determines as follows:

1. **Review Period:** That the City has provided the public review period for the Mitigated Negative Declaration for the duration required under CEQA Guidelines Sections 15073 and 15105.
2. **Compliance with Law:** That the Mitigated Negative Declaration and Mitigation, Monitoring and Reporting Program were prepared, processed, and noticed in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.) and the local CEQA Guidelines and Thresholds of Significance adopted by the City of Banning.
3. **Independent Judgment:** That the Mitigated Negative Declaration reflects the independent judgment and analysis of the City.
4. **Mitigation, Monitoring, and Reporting Program:** That the Mitigation, Monitoring, and Reporting Program is designed to ensure compliance during project implementation in that changes to the project and/or mitigation measures have been incorporated into the project and are fully enforceable through permit conditions, agreements or other measures as required by Public Resources Code Section 21081.6.
5. **No Significant Effect:** That revisions made to the project plans agreed to by the applicant and mitigation measures imposed as conditions of approval on the project, avoid or mitigate any potential significant effects on the environment identified in the Initial Study to a point below the threshold of significance. Furthermore, after taking into consideration the revisions to the project and the mitigation measures imposed, the City Council finds that there is no substantial evidence, in light of the whole record, from which it could be fairly argued that the project may have a significant effect on the environment. Therefore, the City Council concludes that the project will not have a significant effect on the environment.

Multiple Species Habitat Conservation Plan (MSHCP)

The project is found to be consistent with the MSHCP. The project is located outside of any MSHCP criteria area and mitigation is provided through payment of the MSHCP mitigation fee.

MAPACT FINDINGS:

An application for a tentative map requires that it meet specific findings in accordance with Title 16 of the Banning Subdivision Municipal Code and Government Code Section 66473.1, 66473.5 and Section 66474. A tentative map must adequately meet the adopted provisions of the Title 16 Subdivision chapter based upon the following findings:

1. Tentative Tract Map (TTM) 36939 is consistent and compatible with the objectives, policies, general land uses, and programs specified in the City's General Plan.

Findings of Fact: The General Plan land use designation for the site is classified as Low Density Residential which allows housing densities from 0 to 5 dwelling units per acre. The proposed Map will result in the development of 98 single family residential dwelling units at a density of 2.8 units per acre. With the elimination of the RL-10,000 overlay zone currently overlying a portion of the property, this density level is within the range permitted under the General Plan land use designation for this site. One of the primary policies of the Land Use Element of the General Plan is that projects adjacent to existing neighborhoods shall be carefully reviewed to assure that neighborhood character is protected. The proposed Tentative Tract Map serves to achieve this objective in that the rezoning and subdivision design is consistent with existing neighborhood housing stock. Considering all of these aspects, the proposed Map furthers the objectives and policies of the General Plan and is compatible with the general land uses districts within the general vicinity of the Project.

2. The design and improvement of the subdivision proposed under Tentative Tract Map 36939 is consistent with the City's General Plan.

Findings of Fact: The proposed subdivision has been designed to meet City standards which provide satisfactory pedestrian and vehicular circulation, including emergency vehicle access and on site improvements, such as streets, utilities, and drainage facilities have been designed and are conditioned to be constructed in conformance with City standards.

3. The site is physically suitable for the type of development proposed under Tentative Tract Map 36939.

Findings of Fact: The 34.6 acre site is relatively flat with slight, hilly undulations ranging in elevation from 2,550 to 2,650 feet above mean sea level. Two previous subdivision entitlements reflect the historic interest to develop the property for residential development purposes in that the site lies adjacent to single-family residential zoned districts supported and supplied with the necessary infrastructure required for residential development. In that the Project intends to connect to with existing infrastructure, the Project will be consistent with the goals and objectives of the General Plan.

4. The site is physically suitable for the density of development under Tentative Tract Map 36939.

Findings of Fact: The site is located within an Earthquake Fault Zone and the Project's northern boundary line runs parallel with the San Gorgonio Pass Fault. The subdivision incorporates a fault setback zone, referenced as Lot "A" ranging in width from 40 feet to 160 feet. Pursuant to the Alquist-Priolo Act, no human habitation can be built within the fault setback zone. The Project shall prohibit the construction of structures within the fault setback zone. With the incorporation of the fault setback zone, the site is physically suitable for the intended density and consistent with the City's General Plan.

5. The design of the subdivision and improvements proposed under Tentative Tract Map 36939 is not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Findings of Fact: The site is currently vacant and does not contain any significant vegetation or habitat for wildlife. Per the Multiple Species Habitat Conservation Plan (MSHCP), there is no evidence that any endangered, threatened or listed species of plant or animal, or its habitat, is located on the site. There is no evidence that vernal pool complex, similar bodies of water, or conditions suitable for forming such bodies of water exist on the site. This determination is based on MSHCP report prepared by LSA Associates, dated May 2015. The Project incorporates conditions intended to comply with the recommendations of the MSHCP. In addition, this Project has been conditioned to comply with the environmental policies and regulations of the City of Banning and those of all local and regional governmental agencies having jurisdiction over the site.

6. The design of the subdivision and improvements proposed under Tentative Tract Map 36939 is not likely to cause health problems.

Findings of Fact: The design of the subdivision is in conformance with the City's General Plan, Zoning Ordinance, and Subdivision Ordinance, the construction of all units on the site has been conditioned to comply with all applicable City of Banning ordinances, codes, and standards including, but not limited to, the California Uniform Building Code, the City's Ordinances relating to Grading and Stormwater runoff management and controls. In addition, the design and construction of all improvements for the subdivision have been conditioned to be in conformance with adopted City street and public works development standards. The City's ordinances, codes, and standards have been created based on currently accepted standards and practices for the preservation of the public health, safety and welfare. Finally, the proposed street system throughout the subdivision will improve emergency vehicular access in the immediate neighborhood.

7. The design of the subdivision and improvements proposed under Tentative Tract Map 36939, will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.

Findings of Fact: No easements of record or easements established by judgement of a court of competent jurisdiction for public access across the site have been disclosed in a search of the title records for the site and the City does not otherwise have any constructive or actual knowledge of any such easements.

8. The design of the subdivision proposed, Tentative Tract Map 36939 adequately provides for future passive or natural heating and cooling opportunities.

Findings of Fact: Taking into consideration local climate and the existing contour and configuration of the site and its surroundings, the size and configuration of lots within the proposed subdivision have been arranged, to the greatest extent feasible, to permit orientation of structures in an east-west alignment for southern exposure, or to take advantage of natural shade, or to take advantage of prevailing breezes.

ZONE CHANGE FINDINGS:

1. The proposed Amendment is consistent with the goals and policies of the General Plan.

Findings of Fact: The property's land use designation is Low Density Residential with a portion of the site designated as RL-10,000. The minimum lot size per the RL-10,000 standard is intended for single family residential development with 10,000 square foot lots. The lots TTM 36939 proposes range from 7,468 square feet to 25,403 square feet which are large enough to accommodate families with children and daily home based activities. The zone change request eliminates the RL-10000 overlay and would allow 0 to 5 dwelling units per acre. The proposed 98 unit subdivision is below the maximum number that the Low Density Residential District permits. At the maximum permitted per the LDR District, 173 single family units could be provide. In keeping with the subdivision design, the rezoning proposed for the Project is consistent with the General Plan

2. The proposed Amendment is internally consistent with the Zoning Ordinance.

Findings of Fact: The proposed Project is not anticipated to result in exceeding, either cumulatively or individually, any applicable level of service standards. As discussed in the Staff Report and pursuant to the Project's conditions of approval, the proposed streets and subdivision design will be constructed in conformance with City standards and specifications. The Mitigation, Monitoring, and Reporting Program is intended to ensure that the developer adheres to best management practices for the development of the site.

3. The City Council has independently reviewed and considered the requirements of the California Environmental Quality Act.

Findings of Fact: The City, in light of the whole record before it including but not limited to the City's local CEQA Guidelines and Thresholds of Significance, the proposed Mitigated Negative Declaration and documents incorporated therein by reference, any written comments received and responses provided, the proposed Mitigation, Monitoring, and Reporting Program and other substantial evidence (within the meaning of Public Resources Code § 21080(e) and § 21082.2) within the record and/or provided at the public hearing, hereby finds and determines as found in findings listed above for the proposed Zone Change.

PUBLIC COMMUNICATION:

Planning Commission Meeting December 2, 2015

For the December 2, 2015, Planning Commission Meeting the proposed Mitigated Negative Declaration, Tentative Tract Map 36939, and Zone Change were advertised in the Record Gazette newspaper on November 20, 2015. For that Planning Commission meeting, staff did not receive any verbal or written comments for or against the project.

In preparation for the December 2, 2015, Planning Commission Meeting the Notice of Intent to adopt a Mitigated Negative Declaration regarding Tentative Tract Map 36939 and Zone Change, was advertised in the Record Gazette newspaper on October 16, 2015. This notice was also mailed to all property owners within 300 feet of the project.

The Planning Commission at the regularly scheduled meeting of December 2, 2015, directed that this item be continued and re-advertised.

Planning Commission Meeting January 6, 2016

In preparation for the January 6, 2016, Planning Commission Meeting the Notice of Intent to adopt a Mitigated Negative Declaration regarding Tentative Tract Map 36939 and Zone Change, was advertised in the Record Gazette newspaper on December 11, 2015.

Additionally, for the January 6, 2016, Planning Commission Meeting the Notice of Intent to adopt a Mitigated Negative Declaration regarding Tentative Tract Map 36939 and Zone Change were advertised in the The Press Enterprise newspaper on December 17, 2015. This notice was also mailed to all property owners within 300 feet of the project.

Public Notices were also sent to the following locations for public posting and notice:

1. City Hall, 99 E. Ramsey Street
2. US Post Office, 176 N. Alessandro Street
3. Banning Public Library, 21 W. Nicolet Street
4. Rio Ranch Market, 3317 W. Ramsey Street
5. Banning Unified School District, 161 W. Williams Street
6. Morongo Band of Mission Indians, 12700 Pumarra Road, Banning, CA 92220
7. Riverside County Clerk, 2720 Gateway Drive, Riverside, CA 92507
8. City of Banning Website <http://www.ci.banning.ca.us/>

A letter from Inge Schuler and Linda Pippenger was received at the hearing and a response to the comments is included in Attachment 9.

City Council Meeting February 9, 2016

The subject proposal was advertised in the Record Gazette newspaper on January 29, 2016, and notices were mailed to property owners located within 300 feet of the development. As of this date, staff has not received any verbal or written comments for or against the project.

Public Notices were also sent to the following locations for public posting and notice:

1. City Hall, 99 E. Ramsey Street
2. Banning Public Library, 21 W. Nicolet Street
3. Banning Unified School District, 161 W. Williams Street
4. Morongo Band of Mission Indians, 12700 Pumarra Road, Banning, CA 92220
5. Riverside County Clerk, 2720 Gateway Drive, Riverside, CA 92507
6. City of Banning Website <http://www.ci.banning.ca.us/>

OPTIONS: The subject proposal meets the requirements of the City's Housing Element of the General Plan, and the development code as outlined in the staff report. Section 16.14.030 of the Subdivision ordinance states that the City Council shall approve, conditionally approve, or disapprove the tentative map. Staff is recommending that the tentative map be conditionally approved as shown in the attached conditions of approval. The City Council may amend these conditions of approval at their discretion; however, it is important to recognize that there must be a nexus, or connection, between the conditions of approval and the proposed tentative map. Denial of the tentative map requires findings to support the denial. It is important to understand

that denial of the proposed tentative map in this case may not result in “no project” as there currently are existing approved maps for the site.

FISCAL IMPACT: There are no direct fiscal impacts to the General Fund related to the approval of TTM 36939. However, the City will realize revenue through payment of development impact fees should the site be developed and increased property tax revenue once the site is improved.

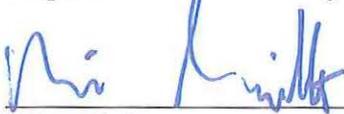
ATTACHMENTS:

1. Ordinance No. 1495
2. Planning Commission Resolution No. 2015-11
3. Vicinity Map
4. Tentative Tract Map 36939
5. Public Notice
6. Initial Study/Mitigated Negative Declaration
7. Mitigation, Monitoring, and Reporting Program
8. Geologic Fault Investigation - Report
Addendum to Geologic Fault Investigation - Letter
9. Response to written comments from the public

Figures:

1. Project Boundary
2. Earthquake Fault Zone
3. Photos
4. Snapshot from Geotechnical Report showing gas line
5. Typical street sections.

Prepared and Reviewed by:



Brian Guillot
Acting Community Development
Director

Approved by:



Michael Rock
City Manager

ATTACHMENT 1
Ordinance No. 1495

ORDINANCE NO. 1495

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BANNING, CALIFORNIA ADOPTING A MITIGATED NEGATIVE DECLARATION AND MITIGATION, MONITORING, AND REPORTING PROGRAM; APPROVING TENTATIVE TRACT MAP NO. 15-4501 (TTM 36939) TO SUBDIVIDE A 34.6 ACRE SITE TO CREATE 98 NUMBERED LOTS FOR SINGLE-FAMILY RESIDENTIAL DEVELOPMENT AND THREE (3) LETTERED LOTS; AND, ZONE CHANGE NO. 15-3501 AMENDING THE ZONING MAP TO ELIMINATE THE RL-10,000 OVERLAY AFFECTING THE WESTERN PORTION OF THE SITE TO LOW DENSITY RESIDENTIAL (LDR, 0 TO 5 UNITS PER ACRE)

WHEREAS, the applicant has submitted an application for a Zone Change and Tentative Tract Map so that the Planning Commission and City Council may consider the proposed amendment to the Zoning Map to eliminate the RL-10,000 Overlay and maintain the site's Low Density Residential (LDR) zoning designation, and Tentative Tract Map 36939 to subdivide a 34.6 acre lot for purposes of creating 98 single-family lots and 3 lettered lots, which was duly filed by:

Project Applicant:	Peter J. Pitassi 10621 Civic Center Drive Diversified Pacific Rancho Cucamonga, CA 91730
Project Owner:	Banning Wilson 97, LLC 10621 Civic Center Drive Rancho Cucamonga, CA 91730
Project Developer:	Banning Wilson 97, LLC 10621 Civic Center Drive Rancho Cucamonga, CA 91730
Parcel Address:	Generally located north of Wilson Street between Sunset and Sunrise Avenue
APN's:	APN 535-430-001 thru 021, 535-431-001 thru 015, 535- 432-001 thru 017, 535-070-004 and 006)
Site Area:	34.6 Acres

WHEREAS, the Municipal Code allows the subdivision of approximately 34.6 acres within the Low Density Residential zoning district into 98 parcels subject to the approval of the Zone Change to remove the existing RL-10,000 Overlay; and

WHEREAS, the Community Development Department has evaluated the project's potential effects on the environment as required under the California Environmental Quality Act ("CEQA") and prepared a Mitigated Negative Declaration (MND) in compliance with CEQA Statute Section 21064.5 which incorporates conditions and mitigation measures that reduce the potential impacts of the project below significance; and

WHEREAS, on November 20, 2015, and December 11, 2015, the City gave public notice as required under Government Code Section 66451.3 by advertising in the Record Gazette Newspaper, and mailing notices to all property owners within 300 feet of the project site of the holding of a public hearing for the Planning Commission's review, at which time the project would be considered; and

WHEREAS, the Mitigated Negative Declaration's Notice of Intent/Notice of Availability regarding Tentative Tract Map 36939 and Zone Change, was advertised in the Record Gazette and The Press Enterprise newspapers on October 16, 2015, and December 17, 2015, respectively. Additionally, the notice was mailed to all property owners within 300 feet of the Project; and

WHEREAS, on December 2, 2015, and January 6, 2016, the Planning Commission held the noticed public hearings at which time interested persons had an opportunity to testify in support of, or opposition to, the project and at which the Planning Commission considered the Mitigated Negative Declaration, Zone Change and Tentative Tract Map 36939; and

WHEREAS, on January 29, 2016, the City gave public notice as required under Government Code Section 66451.3 by advertising in the Record Gazette Newspaper, and mailing notices to all property owners within 300 feet of the project site of the holding of a public hearing for the City Council's review, at which time the project would be considered; and

WHEREAS, on February 9, 2016, the City Council held the noticed public hearing at which time interested persons had an opportunity to testify in support of, or opposition to, the project and at which the City Council considered the Mitigated Negative Declaration, Zone Change and Tentative Tract Map 36939; and

WHEREAS, at these public hearings, the Planning Commission and City Council considered, heard public comments on, and adopted a Mitigated Negative Declaration for the Project;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BANNING DOES ORDAIN AS FOLLOWS:

SECTION 1. ENVIRONMENTAL FINDINGS

The City Council, in light of the whole record before it, including but not limited to, the City's Local CEQA Guidelines, the recommendation of the Community Development Department as provided in the Staff Report dated February 9, 2016, and documents incorporated therein by reference, and any other evidence (within the meaning of Public Resources Code § 21080(e) and §21082.2) within the record or provided at the public hearing of this matter, hereby finds and determines as follows:

1. California Environmental Quality Act (CEQA)

The approval of the Tentative Tract Map 36939 is in compliance with the requirements of CEQA, in that on January 6, 2016, at a duly noticed public hearing, the Planning Commission approved and adopted a Mitigated Negative Declaration and Mitigation Monitoring Program reflecting its independent judgment and analysis and documenting that there was no substantial evidence, in light of the whole record, from which it could be fairly argued that the Project may have a significant effect on the environment. The documents comprising the City's environmental review for the Project are on file and available for public review at Banning City Hall, 99 E. Ramsey Street, Banning, California 92220.

2. Multiple Species Habitat Conservation Plan (MSHCP): The project is found to be consistent with the MSHCP. The project is located outside of any MSHCP criteria area and mitigation is provided through payment of the MSHCP mitigation fee.

SECTION 2. MAP ACT FINDINGS

In accordance with Banning Municipal Code § 22-27 and Government Code § 66473.1, § 66473.5 and § 66474, the City Council, in light of the whole record before it, including but not limited to the Planning Department's staff report and all documents incorporated by reference therein, the City's General Plan, Subdivision Ordinance, Zoning Ordinance, standards for public streets and facilities and any other evidence within the record or provided at the public hearing of this matter, hereby finds and determines as follows:

1. Tentative Tract Map (TTM) 36939 is consistent and compatible with the objectives, policies, general land uses, and programs specified in the City's General Plan.

Findings of Fact: The General Plan land use designation for the site is classified as Low Density Residential (LDR) which allows housing densities from 0 to 5 dwelling units per acre. The proposed Map will result in the development of 98 single family residential dwelling units at a density of 2.8 units per acre. With the elimination of the RL-10,000 overlay zone currently overlying a portion of the property, this density level is within the range permitted under the General Plan land use designation for this site. One of the primary policies of the Land Use Element of the General Plan is that projects adjacent to existing neighborhoods shall be carefully reviewed to assure that neighborhood character is protected. The proposed Tentative Tract Map serves to achieve this objective in that the rezoning and subdivision design is consistent with existing neighborhood housing stock. Considering all of these aspects, the proposed Map furthers the objectives and policies of the General Plan and is compatible with the general land uses districts within the general vicinity of the Project.

2. The design and improvement of the subdivision proposed under Tentative Tract Map 36939 is consistent with the City's General Plan.

Findings of Fact: The proposed subdivision has been designed to meet City standards which provide satisfactory pedestrian and vehicular circulation, including emergency vehicle access and on site improvements, such as streets, utilities, and drainage facilities have been designed and are conditioned to be constructed in conformance with City standards.

3. The site is physically suitable for the type of development proposed under Tentative Tract Map 36939.

Findings of Fact: The 34.6 acre site is relatively flat with slight, hilly undulations ranging in elevation from 2,550 to 2,650 feet above mean sea level. Two previous tentative tract entitlements reflect the historic interest to develop the property for residential development purposes in that the site lies adjacent to single-family residential zoned districts supported and supplied with the necessary infrastructure required for residential development. In that the Project intends to connect to with existing infrastructure, the Project will be consistent with the goals and objectives of the General Plan.

4. The site is physically suitable for the density of development under Tentative Tract Map.

Findings of Fact: The site is located within an Earthquake Fault Zone and the Project's northern boundary line runs parallel with the San Geronio Pass Fault. The subdivision incorporates a fault setback zone, referenced as Lot "A" ranging in width from 40 feet to 160 feet. Pursuant to the Alquist-Priolo Act, no human habitation can be built within the fault setback zone. The Project shall prohibit the construction of structures within the fault setback zone. With the incorporation of the fault setback zone, the site is physically suitable for the intended density and consistent with the City's General Plan.

5. The design of the subdivision and improvements proposed under Tentative Tract Map 36939 are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Findings of Fact: The site is currently vacant and does not contain any significant vegetation or habitat for wildlife. Per the Multiple Species Habitat Conservation Plan (MSHCP), there is no evidence that any endangered, threatened or listed species of plant or animal, or its habitat, is located on the site. There is no evidence that vernal pool complex, similar bodies of water, or conditions suitable for forming such bodies of water exist on the site. This determination is based on MSHCP report prepared by LSA Associates, dated May 2015. The Project incorporates conditions intended to comply with the recommendations of the MSHCP. In addition, this Project has been conditioned to comply with the environmental policies and regulations of the City of Banning and those of all local and regional governmental agencies having jurisdiction over the site.

6. The design of the subdivision and improvements proposed under Tentative Tract map 36939 is not likely to cause health problems.

Findings of Fact: The design of the subdivision is in conformance with the City's General Plan, Zoning Ordinance, and Subdivision Ordinance, the construction of all units on the site has been conditioned to comply with all applicable City of Banning ordinances, codes, and standards including, but not limited to, the California Uniform Building Code, the City's Ordinances relating to Stormwater runoff management and controls. In addition, the design and construction of all improvements for the subdivision has been conditioned to be in conformance with adopted City street and public works standards. The City's ordinances, codes, and standards have been created based on currently accepted standards and practices for the preservation of the public health, safety and welfare. Finally, the proposed street system throughout the subdivision will improve emergency vehicular access and in the immediate neighborhood.

7. The design of the subdivision and improvements proposed under Tentative Tract Map 36939, will not conflict with easement, acquired by the public at large, for access through or use of, property within the proposed subdivision.

Findings of Fact: No easements of record or easements established by judgement of a court of competent jurisdiction for public access across the site have been disclosed in a search of the title records for the site and the City does not otherwise have any constructive or actual knowledge of any such easements.

8. The design of the subdivision proposed, Tentative Tract Map 36939 adequately provides for future passive or natural heating and cooling opportunities.

Findings of Fact: Taking into consideration local climate and the existing contour and configuration of the site and its surroundings, the size and configuration of lots within the proposed subdivision have been arranged, to the greatest extent feasible, to permit orientation of structures in an east-west alignment for southern exposure, or to take advantage of natural shade, or to take advantage of prevailing breezes.

SECTION 3. ZONE CHANGE FINDINGS

1. The proposed Amendment is consistent with the goals and policies of the general plan.

Findings of Fact: The property's land use designation is Low Density Residential (LDR) with a portion of the site designated as RL-10,000. The minimum lot size per the RL-10,000 standard is intended for single family residential development with 10,000 square foot lots. The lots TTM 36939 proposes range from 7,468 square feet to 25,403 square feet which are large enough to accommodate families with children and daily home based activities. The zone change request eliminates the RL-10000 overlay and would allow 0 to 5 dwelling units per acre. The proposed 98 unit subdivision is below the maximum number that the Low Density Residential zoning district permits. At the maximum permitted per the LDR zoning district, 173 single family units could be provide. In keeping with the subdivision design, the rezoning proposed for the Project is consistent with the General Plan.

2. The proposed Amendment is internally consistent with the Zoning Ordinance.

Findings of Fact: The proposed Project is not anticipated to result in exceeding, either cumulatively or individually, any applicable level of service standards. As discussed in the Staff Report and pursuant to the Project's conditions of approval, the proposed streets and subdivision design will be constructed in conformance with City standards and specifications. The Mitigation, Monitoring, and Reporting Program is intended to ensure that the developer adheres to best management practices in the development of the site.

3. The Planning Commission has independently reviewed and considered the requirements of the California Environmental Quality Act.

Findings of Fact: The City, in light of the whole record before it including but not limited to the City's local CEQA Guidelines and Thresholds of Significance, the proposed Mitigated Negative Declaration and documents incorporated therein by reference, any written comments received and responses provided, the proposed Mitigation Monitoring Program and other substantial evidence (within the meaning of Public Resources Code § 21080(e) and § 21082.2) within the record and/or provided at the public hearing, hereby finds and determines as follows:

1. **Review Period:** That the City has provided the public review period for the Mitigated Negative Declaration for the duration required under CEQA Guidelines Sections 15073 and 15105.
2. **Compliance with Law:** That the Mitigated Negative Declaration and Mitigation Monitoring Program were prepared, processed, and noticed in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.) and the local CEQA Guidelines and Thresholds of Significance adopted by the City of Banning.
3. **Independent Judgment:** That the Mitigated Negative Declaration reflects the independent judgment and analysis of the City.
4. **Mitigation Monitoring Program:** That the Mitigation Monitoring Program is designed to ensure compliance during project implementation in that changes to the Project and/or mitigation measures have been incorporated into the Project and are fully enforceable through permit conditions, agreements or other measures as required by Public Resources Code Section 21081.6.
5. **No Significant Effect:** That revisions made to the Project plans agreed to by the applicant and mitigation measures imposed as conditions of approval on the Project, avoid or mitigate any potential significant effects on the environment identified in the Initial Study to a point below the threshold of significance. Furthermore, after taking into consideration the revisions to the Project and the mitigation measures imposed, the Planning Commission finds that there is no substantial evidence, in light of the whole record, from which it could be fairly argued that the Project may have a significant effect on the environment. Therefore, the Planning Commission concludes that the Project will not have a significant effect on the environment.

SECTION 4. CITY COUNCIL ACTION

The City Council hereby takes the following actions:

1. In accordance with CEQA Statue Section 21064.5, the City Council hereby adopts the Mitigated Negative Declaration and Mitigation, Monitoring, and Reporting Program and directs the Acting Community Development Director to prepare and file with the Clerk for the County of Riverside a Notice of Determination as provided under Public Resources Code Section 21108, and CEQA Guidelines Section 15075; and
2. Approves Zone Change No. 15-3501 amending the Zoning Map to eliminate the RL-10,000 Overlay affecting the western portion of the site to Low Density Residential (LDR, 0 to 5 units per acre) and approves Tentative Tract Map No. 15-4501 (TTM 36939) a proposal to subdivide 34.6 acres of vacant land for purposes of creating 98 numbered lots for single-family residential development and three (3) lettered lots, subject to Conditions of Approval attached hereto and incorporated herein by reference as Exhibit A.

SECTION 5. SEVERABILITY

If any section, subsection, sentence, clause, or portion of this ordinance is, for any reason, held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision will not affect the validity of the remaining portions of this ordinance. The City Council of the City of Banning hereby declares that it would have passed this Ordinance and each and every section, subsection, sentence, clause, phrase or portion thereof, irrespective of the fact that any one or more sections, subsections sentences, clauses, phrases, or portions thereof may be declared invalid or unconstitutional.

SECTION 6. PUBLICATION, EFFECTIVE DATE

The City Clerk shall certify to the passage and adoption of this ordinance, and shall make a minute of the passage and adoption thereof in the records of and the proceedings of the City Council at which the same is passed and adopted. This ordinance shall be in full force and effect thirty (30) days after its final passage and adoption, and within fifteen (15) calendar days after its final passage, the City Clerk shall cause a summary of this Ordinance to be published in a newspaper of general circulation and shall post the same at City Hall, 99 E. Ramsey Street, Banning, California.

PASSED, APPROVED, AND ADOPTED this _____ day of _____, 2016.

Arthur L. Welch, Mayor
City of Banning

ATTEST:

Marie A. Calderon, City Clerk
City of Banning, California

APPROVED AS TO FORM AND
LEGAL CONTENT:

Anthony R. Taylor, City Attorney
Aleshire & Wynder, LLP

CERTIFICATION:

I, Marie A. Calderon, City Clerk of the City of Banning, California, do hereby certify that Ordinance No. 1495 was duly introduced at a regular meeting of the City Council of the City of Banning, held on the __ day of _____, 2016, and was duly adopted at a regular meeting of said City Council on the __ day of _____, 2016, by the following vote, to wit:

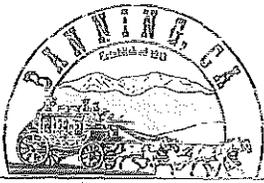
AYES:

NOES:

ABSENT:

ABSTAIN:

Marie A. Calderon, City Clerk
City of Banning, California



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City of Banning

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COMMUNITY DEVELOPMENT
DEPARTMENT

EXHIBIT A

PROJECT #: TENTATIVE TRACT MAP NO. 15-4501 (TTM 36939)

SUBJECT: Conditions of Approval*

APPLICANT: Peter J. Pitassi

LOCATION: APN: 535-430-001 thru 021, 535-431-001 thru 015, 535-432-001 thru 017, 535-070-004 and 006

*** All fair share agreements, covenant agreements, and agreements subject to recordation will be subject to review and approval by the City Attorney and will include appropriate enforcement provisions by the City and be properly securitized.**

Community Development Department

General Requirements

1. The applicant shall indemnify, protect, defend, and hold harmless, the City, and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, from any and all claims, demands, lawsuits, writs of mandamus, and other actions and proceedings (whether legal, equitable, declaratory, administrative or adjudicatory in nature), and alternative dispute resolutions procedures (including, but not limited to arbitrations, mediations, and other such procedures), (collectively "Actions"), brought against the City, and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, that challenge, attack, or seek to modify, set aside, void, or annul, the action of, or any permit or approval issued by, the City and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof (including actions approved by the voters of the City), for or concerning the project, whether such Actions are brought under the California Environmental Quality Act, the Planning and Zoning Law, the Subdivisions Map Act, Code of Civil Procedure Section 1085 or 1094.5, or any other state, federal, or local statute, law, ordinance, rule, regulation, or any decision of a competent jurisdiction. It is expressly agreed that the City shall have the right to approve, which approval will not be unreasonably withheld, the legal counsel providing the City's defense, and that applicant shall reimburse City for any costs and expenses directly and necessarily incurred by the City in the course of the defense. City shall promptly notify the applicant of any Action brought and City shall cooperate with applicant in the defense of the Action.

2. The issuance of these Conditions of Approval do not negate the requirements of the Engineering/Public Works Department or submittal, review, and approval of: Street improvement plans, signing and striping plans, grading plans, storm drain improvement plans, street lighting plans, water, sewer, and electrical improvement plans, or other plans as deemed necessary by the City Engineer.
3. Approval of Tentative Tract 36939 shall be for a period of two (2) years from the date of City Council approval. All Conditions of Approval must be met on or before the expiration date or the applicant must request an extension of time at least thirty (30) days prior to the expiration date; otherwise, the approval shall expire and become null and void.
4. A copy of the signed resolution of approval and all conditions of approval and any applicable mitigation measures shall be reproduced in legible form on the grading plans, building and construction plans, and landscape and irrigation plans submitted for review and approval as required by the reviewing department.
5. The design of all lots shall meet the minimum property development requirements contained in the City's Zoning Ordinance for the Low Density Residential Zoning District.
6. The placement of the subdivision's CMU walls shall be in accordance with the following plan:

Perimeter Wall – a 6' high tan split face CMU (on the public side) with a 2" smooth cap located:

- Along the west side of Lot 47, adjacent to Sunset Avenue
- Along the north side of the Montgomery Creek Channel Right-of Way
- Along the perimeter of Lot "B"
- Along the southeasterly side of Lot 69
- Along the south sides of Lots 78 and 81, and the east side of Lot 81
- Along the perimeter of Lot "C"
- Along the North side of Lots 5,6,9, and 10, and along the west side of Lot 10
- Along the Northeast and Northwest sides of Lot 11

Interior Fencing

- 6' high tan or white vinyl at rear and side yard fencing.
 - 3' wide vinyl gate at the return fence at the garage side of each home.
 - 6' high tan or white vinyl return fencing from the side fence to the home on each side
7. Prior to the issuance of any building permits, typical building elevations shall be submitted to the Planning Department for design review and approval, in accordance with the provisions and requirements of Article 16E of the Banning Ordinance Code.

8. Applicant shall pay all development fees adopted by the City in effect at the time of issuance of any building permits, which shall include but not be limited to: TUMF, MSHCP, police and fire safety developer fees, water and sewer fees, park land dedication fees, and electric meter installation fees etc. Project proponent shall provide written evidence to the City that school mitigation fees have been paid or other arrangements acceptable to the Banning Unified School District have been met.
9. A copy of the final grading plan, approved by Engineering, shall be submitted to the Office of Planning for review and approval of the landscaping and erosion control plans when graded cut slopes exceed five (5) feet in height and fill slopes exceed three (3) feet in height.
10. The following building setback lines shall be delineated on the composite development plan submitted for building permits:
 - a. Front yard - Minimum 20 feet.
 - b. Side yard (interior lot) - Minimum 10 feet (single-story: measured between the furthest projection of the wall to the property line).

Side yard setbacks for two-story dwellings shall be staggered per Section 17.08.240(E) of the zoning ordinance.
 - c. Side yard (corner lot - street side) – Minimum 15 feet.
 - d. Side yard (corner lot – abutting interior lot) - Minimum 10 feet (measured between the furthest projection of the wall to the property line)
 - e. Rear yard – minimum 15 feet.
11. The developer shall contact the U.S. postal Service to determine the appropriate type and location of mailboxes.
12. The applicant shall install slate, concrete, tile, clay tile, or equal roofing material approved by the Planning Department on all units within the subject property.
13. A trailer, used as an office by the property owner or his designee, may be permitted on the site during construction for a period not to exceed six (6) months. Prior to issuance of a building permit for any residential unit, said trailer shall be subject to a Land Use Permit reviewed and approved by the Planning Department.
14. Prior to the issuance of any Building Permits, the project proponent shall submit to the City's Planning Department for review and approval: (1) three (3) copies of a drought-tolerant landscape plan and irrigation plans prepared by a licensed landscape architect. The drought-tolerant landscape plan shall include the following:

- A. The location, type, size and quantity of vegetation to be installed, and a date by which the landscaping shall be completed.

- B. Required drought-tolerant slope planting: Slope planting shall be required for the surface of all cut slopes of three (3) feet or greater in height and fill slopes more than two (2) feet in height. Said slopes shall be protected against damage from erosion by providing jute netting and planting with ground cover plants or grass, except that grass will not exceed 25% of the total planting area on the slope face.
 - (1) All slopes exceeding three (3) feet in vertical height shall also be planted with shrubs, spaced at distances not to exceed five (5) feet on center; or, trees spaced at distances not to exceed ten (10) feet on center; or a combination of shrubs and trees.
 - (2) Slopes exceeding five (5) feet in vertical height shall be planted with a combination of drought-tolerant trees, shrubs and groundcover.
 - (3) Drought-tolerant slope planting as required by B(1) and (2), above, shall consist of the following sizes and quantities:
 - a. Trees: 30% — 24- inch box; 35% — 15-gallon; 25% - five gallon; 10% -one gallon.
 - b. Shrubs: 60% — five gallon; 40%—one gallon.
 - c. Groundcover: 100% coverage from flats planted 18-inch on-center.
 - (4) The approved landscape plan shall be installed on a phase by phase basis prior to the issuance of a Certificate of Occupancy for each single-family residence to be constructed within that phase.

- C. The fuel modification zone shall be landscaped in accordance with the City's General Plan policies and an analysis of the landscaping means the thinning of native combustible vegetation and the placement of fire resistant plant species as approved by the Fire Marshal.

The Plan shall be forwarded to a Landscape Architect for review and the applicant shall pay all fees associated with the review process. The approved landscape plan shall be implemented /installed on a phase by phase basis prior to the issuance of a Certificate of Occupancy for each single-family residence constructed within that phase, or at the direction of the Fire Marshal.

- 15. Prior to the issuance of a Certificate of Occupancy for each single-family residence constructed within TTM 36939, the applicant shall submit to the City for review and approval three (3) copies of a detailed landscape and irrigation plan (comprised of

xeriscape plant material) indicating type, species and location of the following minimum number of drought tolerant, multi-branched trees on each lot adjacent to the street right-of-way (all trees shall be planted with root barriers):

- Cul-de-sac lots – 1 tree; minimum 24” box
 - Interior lot – 2 trees; one 24” box, one 15-gallon
 - Corner lot – 3 trees; two 24” box and one 15-gallon.
 - The Plan shall be forwarded to a Landscape Architect for review and the applicant shall pay all fees associated with the review process. The approved landscape plan shall be implemented/installed on a phase by phase basis prior to the issuance of a Certificate of Occupancy for each single-family residence constructed within that phase. (Submit landscape and irrigation plans as soon as possible to allow sufficient time for a Landscape Architect to review same).
 - The landscaping for the street parkways, public lots, and other public areas shall be installed prior to occupancy of the first unit.
16. A six-(6) foot high chain link fence shall be maintained around the perimeter of the site during all phases of construction, or until replace by the permanent fencing and/or walls.
17. Developer shall meet all requirements of responsible agencies, including but not limited to: Southern California Gas Company, and Southern California Edison Company.

Standard Conditions

18. The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402, A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
19. The Project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below:
- Apply nontoxic chemical soil stabilizers according to manufactures’ specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
 - Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
 - Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 m (2 ft.) of freeboard (vertical space between the top o the load and top of the

trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114.

- Pave construction access roads at least 30 m (100 ft.) onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.

The applicable Cal/Recycle Sustainable (Green) Building Program Measures are:

- Recycle/reuse at least 50 percent of the construction material that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way for at least 10 percent of the project, as defined on the California Department of Resources Recycling and Recovery (CalRecycle) website: www.calrecycle.ca.gov

20. Prior to issuance of a grading permit, the developer shall provide to the City of Banning evidence of fully executed monitoring agreement(s) with the appropriate culturally affiliated Native American tribe(s) or band(s) for all ground disturbing activities associated with the project. If more than one tribe Federally Recognized Indian Tribe has requested monitoring, an equal rotation shall be created around the grading and ground disturbing schedule. This shall include a scope of work and a description of tribal monitoring activities.
21. In the event that previously undocumented archaeological resources are identified during earthmoving activities, further construction work in the area should be diverted or halted until the nature and significance of the find can be assessed.
22. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
23. The applicant shall file an Environmental Constraint Sheet. An Environmental Constraint Sheet means a duplicate of the final map on which are shown the Environmental Constraint Notes. This sheet shall be filed simultaneously with the final map, with the County Surveyor, and labeled Environmental Constraint Sheet in the top margin. Applicable items shall be shown under a heading labeled Environmental Constraint Notes. The Environmental Constraint Sheet shall contain the following statement:

THE ENVIRONMENTAL CONSTRAINT INFORMATION SHOWN ON THIS MAP SHEET IS FOR INFORMATIONAL PURPOSES DESCRIBING CONDITIONS AS OF THE DATE OF FILING, AND IS NOT INTENDED TO AFFECT THE RECORD TITLE INTEREST. THIS INFORMATION IS DERIVED FROM THE PUBLIC RECORDS OR REPORTS, AND DOES NOT IMPLY THE CORRECTNESS OR SUFFICIENCY OF THOSE RECORDS OR REPORTS BY THE PREPARER OF THIS MAP.

The sheet shall delineate constraints involving, but not limited to, any of the following that are conditioned by the advisory agency: archeological sites, geologic mapping, grading, building, and building setback lines, flood hazard zones, airport compatibility zones, seismic lines and setbacks, fire protection, water availability, and sewage disposal.

Mitigation

24. **Burrowing Owls.** The project falls within the Multiple Species Habitat Conservation Plan (MSHCP). Per the MSHCP 30-day Pre-construction Burrowing Owl Survey Guidelines, an additional pre-construction survey will be required within 30 days prior to beginning of site grading. If burrowing owls are found to be present, for compliance with the MSHCP, project-specific mitigation would be developed and authorized through consultation with the City of Banning and California Department of Fish and Wildlife.
25. **Any project-related effects to potentially jurisdictional streambeds** will require the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) report for compliance with the MSHCP. In addition, permits would be required from the U.S. Army Corp. of Engineers (USACE), RWQCB, and CDFW. Any necessary mitigation would be determined through the DBESP and permitting process with the USACE and CDFW.
26. **To avoid any potential effects to nesting birds protected by the Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code,** vegetation-clearing and preliminary ground-disturbing work should be completed outside of bird breeding season (typically February through August 31). In the event that initial groundwork cannot be conducted outside the bird breeding season, pre-construction surveys would be required within 30 days prior to construction. Should nesting birds be found, an exclusionary buffer will be established by the biologist. The buffer may be up to 500 feet in diameter, depending on the species of nesting bird found. The buffer will be clearly marked in the field by construction personnel under guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active.
27. **Fault Setback Zone.** The subdivision shall be designed with the fault setback zone as shown in the Tentative Tract Map 36939 and in accordance with the recommendations cited in the RMA Group Geologic Fault Investigation of Alquist-Priolo Zone Report dated April 8, 2014. Any deviation from the Fault Setback zone shall require Planning and City Engineer approval. Based on the requirements of

the Alquist-Priolo Act, no human habitation structures can be built within this zone, however other land uses may be permitted subject to Planning Approval.

- 28. Native Plant Recovery: Developer shall recover native and drought tolerant plant materials, and incorporate them into project landscaping, to provide or enhance habitat for local species to the extent possible.**
- 29. Archaeological Monitoring. Prior to the issuance of a grading permit, the Project Proponent shall implement the following program:**
 - a) A qualified archaeological monitor shall be retained by the Project Proponent to conduct monitoring of all grading and trenching activities and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.**
 - b) During grading operations, a professional archaeological monitor shall observe the grading operation until such time as monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure CR-2 shall apply.**
- 30. Treatment Plan. If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Proponent, and the City of Banning Community Development Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is two (2) to five (5) percent of the volume of the cultural deposit). The treatment plan shall require monitoring by the appropriate Native American Tribe(s) during data recovery excavations of archaeological resource(s) of prehistoric origin, and shall require that all recovered artifacts undergo laboratory analysis. At the completion of the laboratory analysis,**

any recovered archaeological resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American Tribe(s) if that is recommended by the City of Banning. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City of Banning Community Development Department.

31. **Paleontological Monitoring.** Prior to the issuance of grading permits, the Project Proponent shall implement the following program:

- a) A qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.
- b) The qualified paleontologist shall be empowered to temporarily halt or redirect grading activities paleontological resources are discovered.
- c) In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area.
- d) The qualified paleontologist shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly removed and the area cleared.
- e) If the discovery is significant the qualified paleontologist shall notify the Project proponent and the City immediately.
- f) In consultation with the Project proponent and the City, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.

Public Works

General Requirements

32. A Public Works Permit shall be required prior to commencement of any work within the public right-of-way. The contractor working within the public right-of-way shall submit proof of a Class "A" State Contractor's License, City of Banning Business License, and Liability Insurance. Any existing public improvements, or public improvements not accepted by the City that are damaged during construction shall be removed and replaced as determined by the City Engineer or his/her representative.

Prior to the issuance of any grading, construction, or public works permit by the City, the applicant shall obtain any necessary clearances and/or permits from the following agencies:

- Fire Marshal (access)
- Army Corps of Engineers
- CA Fish and Game
- Public Works Department (grading permits, street improvement permits)
- Riverside County Flood Control & Water Conservation District (storm drain)
- California Regional Water Quality Control Board Colorado River Basin (RWQCB)
- South Coast Air Quality Management District (SCAQMD)

The applicant is responsible for meeting all requirements of permits and/or clearances from the above listed agencies. When the requirements include approval of improvement plans, the applicant shall furnish proof of such approvals when submitting improvements plans to the City.

33. The following improvement plans shall be prepared by a Civil Engineer licensed by the State of California and submitted to the Engineering Division for review and approval. A separate set of plans shall be prepared for each line item listed below. Unless otherwise authorized in writing by the City Engineer, the plans shall utilize the minimum scale specified and shall be drawn on 24" x 36" Mylar film. Plans may be prepared at a larger scale if additional detail or plan clarity is desired (Note: the applicant may be required to prepare other improvement plans not listed here pursuant to improvements required by other agencies and utility purveyors):

- a. Rough/Precise Grading Plans 1" = 40' horizontal
(All Conditions of Approval shall be reproduced
on last sheet of set)
- b. Clearing Plans 1" = 50' horizontal
(Include fuel modifications zones)
(Include construction fencing plan)
- c. Erosion Control Plan, SWPPP and WQMP 1" = 40' Horizontal
(Note: a, b & c shall be reviewed and approved concurrently)
- d. Storm Drain Plans 1" = 40' Horizontal
- e. Street Improvement Plans 1" = 40' Horizontal
1" = 4' Vertical
- f. Signing & Striping Plans 1" = 40' Horizontal
- g. Construction Traffic Control Plan 1" = 40' Horizontal
(Major or Arterial Highways only)
- h. Landscaping Plans-Streets 1" = 20' Horizontal

i. Water & Sewer Improvement Plans

1" = 40' Horizontal
1" = 4' Vertical

Other engineered improvement plans prepared for City approval that are not listed herein shall be prepared in formats approved by the City Engineer prior to commencing plan preparation.

All off-site plan and profile street improvement plans and signing & striping plans shall show all existing improvements for a distance of at least 200-feet beyond the project limits, or at a distance sufficient to show any required design transitions.

All on-site signing and striping plans shall show the following at a minimum: stop signs, limit lines and legends, no parking signs, raised pavement markers (including blue raised pavement markers at fire hydrants) and street name signs per Public Works standard plans and/or as approved by the City Engineer.

A small index map shall be included on the title sheet of each set of plans, showing the overall view of the entire work area.

34. Upon completion of construction, the Developer shall furnish the City with reproducible record drawings on Mylar film of all improvement plans that were approved by the City Engineer. Each sheet shall be clearly marked "As-Built" or "As-Constructed" and shall be stamped and signed by the engineer or surveyor certifying the accuracy and completeness of the drawings. The applicant shall have all AutoCAD files submitted to the City, revised to reflect the "As-Built" conditions.

35. All utility systems including gas, electric, telephone, water, sewer, and cable TV shall be provided for underground, with easements provided as required, and designed and constructed in accordance with City codes and the utility provider. Telephone, cable TV, and/or security systems shall be pre-wired.

36. The Developer shall cause all public improvements to be constructed and accepted by the City prior to occupancy of the first unit; or, the Developer shall enter into an agreement to guarantee the construction of the public improvements as listed in the Conditions of Approval and as shown on the approved plans.

Rights of Way/Easements

37. Prior to issuance of any permit(s), the applicant shall acquire or confer property rights necessary for the construction or proper functioning of the proposed project/development. Conferred rights shall include right-of-way dedications, irrevocable offers to dedicate or grant of easements to the City for emergency services, maintenance, utilities, storm drain facilities, or temporary construction purposes including the reconstruction of essential improvements.

38. Offer to dedicate to the City of Banning for public purposes the right-of-way for Wilson Street fronting the site as an Arterial Highway; 55 feet one-half width (centerline to right-of-way). Offers of dedication shall include corner cut-off at intersections.
39. Related to COA No.36, the developer shall request the right-of-way dedication along Wilson Street fronting the Montgomery Creek Channel from the Riverside County Flood Control and Water Conservation District.
40. Offer to dedicate to the City of Banning for public purposes the right-of-way for Sunset Avenue fronting the site as an Collector Highway; 33 feet one-half width (centerline to right-of-way).
41. Offer to dedicate to the City of Banning for public purposes the right-of-way for Local Streets, including Sunrise Avenue fronting the site; 30 feet one-half width (centerline to right-of-way). Offers of dedication shall include corner cut-off at intersections.
42. Offer to dedicate to the City of Banning easements to maintain any slopes supporting public right-of-ways. Maintenance easements shall extend 10 feet beyond the toe of slope.
43. Submit a copy of the title report, closure calculations, and any separate instruments or necessary right-of-way documents to the Engineering Division for review and approval of the City Engineer prior to all improvement plans.
44. All street centerline monument ties shall be submitted to the Engineering Division.
45. Prior to the issuance of any certificates of occupancy, the applicant shall not grant any easements over any property subject to a requirement of dedication or irrevocable offer of dedication to the City of Banning or the Riverside County Flood Control and Water Conservation District unless such easements are expressly made subordinate to the easements to be offered for dedication to the City or RCFCD. Prior to granting any of said easements, the applicant shall furnish a copy of the proposed easement to the City Engineer for review and approval. Further, a copy of the approved easement shall be furnished to the City Engineer prior to the issuance of any certificate of use and/or occupancy.

Traffic

46. Street name signs and traffic control devices including traffic legends and traffic striping shall be installed, or relocated in accordance with Caltrans Standards and as shown on the approved plans, and/or as directed by the City Engineer.

Prior to the issuance of a grading permit or building permit, the applicant shall submit and obtain approval in writing from the Fire Marshall for the plans for all public or private access roads, drives, streets, and alleys. The plans shall include plan and sectional views and indicate the grade and width of the access road measured flow-line to flow-

line. When a dead-end access exceeds 150 feet or when otherwise required, a clearly marked fire apparatus access turnaround must be provided and approved by the Fire Marshall.

47. The intersection of Sunset Avenue and Dawn Lane shall be design in manner to mitigate sight distance issues.

Street Improvements

48. All street improvement designs shall provide pavement and lane transitions per City of Banning and Caltrans standards for transition to existing street sections.
49. Construct half-width street improvements in accordance with City standards fronting Wilson Street, Sunset Avenue and Sunrise Avenue including street lighting, curb and gutter, drive approaches, sidewalk, and asphalt concrete paving, traffic signs and striping, and any transitions. Street lights shall be installed offset of the existing street lights. Applicant's geotechnical engineer shall provide the design of the pavement section based upon the Caltrans method.
50. Construct full-width street improvements in accordance with City standards along local streets within the project boundaries including street lighting, curb and gutter, drive approaches, sidewalk, handicap ramps, and asphalt concrete paving, traffic signs and striping, and any transitions. Applicant's geotechnical engineer shall provide the design of the pavement section based upon the Caltrans method.
51. Any public improvements damaged during the course of construction shall be replaced to the satisfaction of the City Engineer, or his/her designee.
52. All required public improvements for the project shall be completed, tested, and approved by the Engineering Division prior to issuance of any Certificate of Occupancy.
53. The channel crossing of Wilson Street over the Montgomery Creek Channel shall be designed and constructed to the ultimate width of Wilson Street as approved by the City and Riverside County Flood Control and Water Conservation District. Access and safety devices such as guard rail, chain link fence, etc., shall be provided on the north side of Wilson Street for the maintenance of "Montgomery Creek Channel" as approved by the City and Riverside County Flood Control and Water Conservation District.

Grading/Drainage Improvements

54. In accordance with the June 19, 2015 RMA GeoScience Report, the Developer shall adhere to the comments, recommendations and conditions cited in the report as to the following:
 - Existing Fill in Graded Eastern Portion of the Site.
 - General Earthwork and Grading
 - Removals and Over excavation

- Earthwork Shrinkage and Subsidence
- Earthwork Recommendations
- Excavation Characteristics and Rock Disposal
- Fill and Cut Slopes
- Interior Slabs-on-Grade
- Foundation Setback from Slopes
- Temporary Slopes and Excavations
- Import Soils
- Cement type and Corrosion Potential
- Utility Trench Backfill
- Drainage and Moisture Proofing
- Plan Review
- Geotechnical Observation and Testing During Rough Grading
- Post-Grading Geotechnical Observation and Testing

55. Submit a Drainage Study with hydrologic and hydraulic analysis for developed and undeveloped (existing) conditions to the Engineering Division for review and approval. The study and analysis shall be prepared by a civil engineer licensed by the State of California and shall incorporate the drainage area north of the proposed tract. Drainage design shall be in accordance with Banning Master Drainage Plan adopted by Riverside County Flood Control and Water Conservation District (RCFCD), RCFCD Hydrology Manual, and standard plans and specifications. The 10-year storm flow shall be contained within the street curbs, and the 100-year storm shall be contained within the street right-of-way; when this criteria is exceeded, additional drainage facilities shall be designed and constructed.
56. The project shall comply with all RCFCD requirements including, but not limited to: drainage/debris basins, drainage easements, storm drain infrastructure and design criteria. A debris basin shall be included with this project to capture debris flows as recommended by the RCFCD.
57. Concrete lined interceptor channels shall be designed and constructed along the north boundary of the proposed development as required by Grading Ordinance.
58. Submit confirmation that the project meets the requirements of the Alquist-Priolo Earthquake Fault Zoning Act.
59. If the site is located in a Flood Area as identified in Flood Insurance Rate Map dated August 28, 2008 the developer is responsible for providing a certification by a registered professional engineer or architect demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
60. The project grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage areas, outlet points and outlet conditions. Otherwise, a drainage easement shall be obtained for the release of

concentrated or diverted storm flows. The project shall accept and convey storm flows from the adjacent property to the north.

61. The applicant shall comply with Chapter 15.24 "Stormwater Management Systems" of the Banning Municipal Code (BMC) and Title 18 "Grading, Erosion and Sediment Control" of the California Building Code related to excavation and grading; and the State Water Resources Control Board's orders, rules and regulations.
62. For construction activities including clearing, grading or excavation of land that disturbs one (1) acre or more of land, or that disturbs less than one (1) acre of land, but which is a part of a construction project that encompasses more than one (1) acre of land, the applicant shall be required to submit a Storm Water Pollution Protection Plan (SWPPP) and file a Notice of Intent (NOI) with the Regional Water Quality Control Board.

The applicant's SWPPP shall be reviewed and approved by the City Engineer prior to any permit issuance. The approved SWPPP and BMPs shall remain in effect for the entire duration of project construction until all improvements are completed and accepted by the City.

Note: The SWPPP may be supplemented with an Erosivity Waiver, if approved by the State Water Resource Control Board.

All erosion and sediment control BMPs proposed by the applicant shall be designed using the CASQA BMP handbook and approved by the City Engineer prior to any onsite or offsite grading, pursuant to this project.

63. Grading and excavations in the public right-of-way shall be supplemented with a soils and geology report prepared by a professional engineer or geologist licensed by the State of California.
64. Prior to the issuance of any building permit(s), a precise grading plan shall be submitted to the City Engineer for review and approval. A grading permit shall be obtained prior to commencement of any grading activity.
65. Prior to issuance of any grading or building permit, a Project-Specific Water Quality Management Plan (WQMP) shall be reviewed and approved in accordance with California Regional Water Quality Control Board Colorado River Basin Region Order No. R7-2013-0011.
 - At a minimum, all development will make provisions to store runoff from rainfall events up and including the **one-hundred year, three hour duration**. Post development peak urban runoff discharge rates shall not exceed pre-development peak urban runoff discharge rates.
66. Prior to the issuance of a building permit for any building lot, the applicant shall provide a lot pad certification stamped and signed by a qualified civil engineer or land surveyor.

Each pad certification shall list the pad elevation as shown on the approved grading plan, the actual pad elevation and the difference between the two, if any. Such pad certification shall also list the relative compaction of the pad soil.

67. Obtain Letter of Map Revision (LOMR) from FEMA.

Landscaping Public Right of Way

68. The Developer shall prepare a water conservation plan to reduce water consumption in the landscape environment using xeriscape principles. "Xeriscape" shall mean a combination of landscape features and techniques that in the aggregate reduce the demand for and consumption of water, including appropriate low water using plants, non-living ground-cover, a low percentage of turf coverage (limited to 25% of the planted area), permeable paving and water conserving irrigation techniques and systems. A low water-using drought tolerant plant includes species suited to our climate, requiring less water in order to grow well.
69. An automatic sprinkler system and landscaping shall be installed on a phase by phase basis, prior to occupancy of the first unit of that phase. The landscaping shall include the parkway fronting Sunrise Avenue, Wilson Street and the interior streets as they are included in each phase of construction. The system within the Landscape Maintenance District shall include a landscape controller, a separate water meter and electric meter, and plantings as approved by the Community Development Director. Landscaping plans and specifications shall be reviewed and approved by the City Engineer.
70. The Developer shall participate in a Landscape Maintenance District to be established by the City of Banning for the maintenance of landscape within the public right-of-way and the open space area within the development's boundary along Wilson Street and Lots A, B, and C. The Developer shall landscape and maintain said area until the City accepts it into the Landscape Maintenance District No. 1.
71. Landscape improvements shall be certified by a licensed landscape architect or licensed landscape contractor as having been installed in accordance with the approved detailed plans and specifications. The applicant shall furnish said certification, including an irrigation management report, for each landscape irrigation system and any other required implementation report determined applicable, to the City Engineer for review and approval.

Trash/Recycling

72. Construction debris shall be disposed of at a certified recycling site. It is recommended that the developer contact the City's franchised solid waste hauler, Waste Management of the Inland Valley at 1-800-423-9986, for disposal of construction debris.

Fees

73. Plan check fees for professional report review (geotechnical, drainage, etc.), and all improvement plans review, shall be paid prior to submittal of said documents for review and approval in accordance with the fee schedule in effect at the time of submittal.
74. A fee shall be paid to the Riverside County Flood Control and Water Conservation District to perform plan checking for the proposed project.
75. Public Works Inspection fees shall be paid prior to issuance of any permits in accordance with the fee schedule in effect at time of time of scheduling.
76. Water and sewer connection fees including frontage fees and water meter installation charges shall be paid on a per lot basis at the time of building permit issuance in accordance with the fee schedule in effect at that time.
77. A plan storage fee shall be paid for any engineering plans that may be required prior to issuance of certificate of occupancy in accordance with the fee schedule in effect at the time the fee is paid.
78. A Traffic Control mitigation fee shall be paid prior to issuance of building permits.
79. Payment of all associated development impact fees in effect at the time of building permit issuance.

Final Parcel Map

80. Security for the construction of public improvements in accordance with Government Code Section 66499 shall be as follows:
 - Faithful Performance Bond - 100% of estimated cost
 - Labor and Material Bond - 100% of estimated cost
 - Monumentation Bond - \$20,000.00

Securities for the public improvements shall be on file with the City Clerk prior to scheduling the final map for approval by City Council. Unit prices for bonding estimates shall be those specified or approved by the City Engineer.

81. Submit a copy of the title report, closure calculations, and any separate instruments or necessary easement or right-of-way documents to the Engineering Division for review and approval of the City Engineer prior to final map approval.
82. A map of the proposed subdivision drawn at 1"=200' scale showing the outline of the streets including street names shall be submitted to the City to update the city atlas map.
83. An original Mylar of the final map (after recordation) shall be provided to the City for the record files.

84. A record of all street centerline monument ties shall be submitted to the Engineering Division upon completion of improvements or prior to release of Monumentation Bond.

Water

85. Design and construct the water system (mains, laterals, hydrants, valves, blowoffs, airvaes, etc.) according to the City of Banning standards. The water mains shall be a minimum of eight inches in diameter ductile iron pipe and shall be designed to be a "looped" system. The applicant is directed to review the water plans previously approved with Tract Map No. 30642.
86. Pay all applicable water connection and frontage fees per Chapter 13.08 "Water, Sewer and Electricity Rates" of the Banning Municipal Code prior to the issuance of a building permit.

Sewer

87. Design and construct the sewer system (mains, laterals, manholes, etc.) according to the City of Banning standards. The applicant is directed to review the sewer plans previously approved with Tract Map No. 30642.
88. All sewer lines to be constructed within the Public right-of-way shall be extra strength Vitrified Clay Pipe. All sewer laterals shall be a minimum of 4 inches in diameter and all sewer mains shall be a minimum of 8 inches. Final sizes shall be approved by the City Engineer.
89. A sewer check valve shall be provided for each building with a finish pad elevation lower than the rim elevation of the immediate up-stream sewer manhole.

Fire Department

90. For residential areas, approved standard fire hydrants, located at each intersection, with no portion of any lot frontage more than a maximum of 500 feet from a hydrant. Minimum fire flow for all residential structures shall be 1000 GPM for a 2-hur duration at 20 psi residual operating pressure, which must be available before any combustible material is placed on the construction site.
91. The required water system, including fire hydrants shall be installed and accepted by the appropriate water agency prior to any combustible building material being placed on an individual lot. Two sets of water plans are to be submitted to the Fire Department for approval.
92. Applicant/Developer shall mount blue dot retro-reflectors pavement markers on private streets, public streets and driveways to indicate location of the fire hydrant. It should be eight (8) inches from centerline to the side that the fire hydrant is on, to identify fire hydrant locations.

93. Residential fire sprinklers are required in all one and two family dwellings per the California Residential Code. Contact the Riverside County Fire Department for the Residential Fire Sprinkler Standard.
94. Fire Apparatus access road and driveways shall be in compliance with the Riverside County Fire Department Standard number 06-05 (located at www.rvcfire.org). Access lanes will not have an up, or downgrade of more than 15%. Access roads shall have an unobstructed vertical clearance not less than 13 feet and 6 inches. Access lanes will be designed to withstand the weight of 70 thousand pounds over 2 axles. Access will have a turning radius capable of accommodating fire apparatus. Access lane shall be constructed with a surface so as to provide all weather driving capabilities.
95. Roadways may not exceed 1320 feet without secondary access. This access may be restricted to emergency vehicles only however, public egress must be unrestricted.
96. Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with approved provision for the turn-around capabilities of fire apparatus.
97. Any turn-around requires a minimum of 42-foot turning radius.
98. The minimum dimension for gates is 20 feet clear and unobstructed width and a minimum vertical clearance of 13 feet 6 inches in height. Any gate providing access from a road shall be located at least 35 feet setback from the roadway and shall open to allow a vehicle to stop without obstructing traffic on the road. Where a one-way road with a single traffic lane provides access to a gate entrance, a 38-foot turning radius shall be used.
99. Gates may be automatic or manual and shall be equipped with a rapid entry system (KNOX). Plans shall be submitted to the Fire Department for approval prior to installation. Automatic gate pins shall be rated with a shear pin force, not to exceed 30 pounds. Gates activated by the rapid entry system shall remain open until closed by the rapid entry system. Automatic gates shall be provided with backup power.

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ATTACHMENT 2
PC Resolution No. 2015-11

RESOLUTION NO. 2015-11

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF BANNING, CALIFORNIA, RECOMMENDING THAT THE BANNING CITY COUNCIL ADOPT ORDINANCE NO. 1495 ADOPTING A MITIGATED NEGATIVE DECLARATION AND MITIGATION, MONITORING, AND REPORTING PROGRAM; APPROVING TENTATIVE TRACT MAP NO. 15-4501 (TTM 36939) A PROPOSAL TO SUBDIVIDE 34.6 ACRES OF VACANT LAND FOR PURPOSES OF CREATING 98 NUMBERED LOTS FOR SINGLE-FAMILY RESIDENTIAL DEVELOPMENT AND THREE (3) LETTERED LOTS; AND, APPROVING ZONE CHANGE NO. 15-3501 AMENDING THE ZONING MAP TO ELIMINATE THE RL-10,000 OVERLAY AFFECTING THE WESTERN PORTION OF THE SITE TO LOW DENSITY RESIDENTIAL (LDR, 0 TO 5 UNITS PER ACRE), APN'S 535-430-001 THRU 021, 535-431-001 THRU 015, 535-432-001 THRU 017, 535-070-004 AND 006

WHEREAS, the applicant has submitted an application for a Zone Change and Tentative Tract Map No. 36939 so that the Planning Commission may consider the proposed amendment to the Zoning Map to eliminate the RL-10,000 Overlay and maintain the site's LDR District and Tentative Tract Map to subdivide a 34.6 acre lot for purposes of creating 98 single-family lots and 3 lettered lots, which was duly filed by:

Project Applicant:	Peter J. Pitassi Diversified Pacific 10621 Civic Center Drive Rancho Cucamonga, CA 91730
Project Owner:	Banning Wilson 97, LLC 10621 Civic Center Drive Rancho Cucamonga, CA 91730
Project Developer:	Banning Wilson 97, LLC 10621 Civic Center Drive Rancho Cucamonga, CA 91730
Parcel Address:	North of Wilson Street between Sunset and Sunrise Avenue
APN's:	APN 535-430-001 thru 021, 535-431-001 thru 015, 535-432-001 thru 017, 535-070-004 and 006)
Lot Area:	34.6 Acres

WHEREAS, the Municipal Code allows the subdivision of approximately 34.6 acres within the Low Density Residential Zone into 98 parcels subject to the approval of the Rezoning to amend the Zoning Map to remove the exiting RL-10,000 Overlay; and

WHEREAS, the Community Development Department has evaluated the project's potential effects on the environment as required under the California Environmental Quality Act ("CEQA") and prepared a Mitigated Negative Declaration (MND) in compliance with CEQA Statute Section 21064.5 which incorporates conditions and mitigation measures that reduce the potential impacts of the project below significance; and

WHEREAS, on December 11, 2015 the City gave public notice as required under Government Code Section 66451.3 by advertising in the The Press Enterprise newspaper of holding of a public hearing for the Planning Commission's review, at which time the project would be considered; and

WHEREAS, the Notice of Intent to adopt a Mitigated Negative Declaration regarding Tentative Tract Map 36939 and Zone Change, was advertised in the The Press Enterprise newspaper on December 17, 2015. Additionally, the notice was mailed to all property owners within 300 feet of the Project; and

WHEREAS, on January 6, 2015, the Planning Commission held the noticed public hearing at which time interested persons had an opportunity to testify in support of, or opposition to, the project and at which the Planning Commission considered the Mitigated Negative Declaration, Tentative Tract Map 36939, and Zone Change.

NOW THEREFORE, the Planning Commission of the City of Banning does hereby resolve, determine, find, and order as follows:

SECTION 1. ENVIRONMENTAL DETERMINATION

California Environmental Quality Act (CEQA)

The Planning Commission, in light of the whole record before it including but not limited to the City's local CEQA Guidelines and Thresholds of Significance, the proposed Mitigated Negative Declaration and documents incorporated therein by reference, any written comments received and responses provided, the proposed Mitigation, Monitoring, and Reporting Program and other substantial evidence (within the meaning of Public Resources Code § 21080(e) and § 21082.2) within the record and/or provided at the public hearing, hereby finds and determines as follows:

1. **Review Period:** That the City has provided the public review period for the Mitigated Negative Declaration for the duration required under CEQA Guidelines Sections 15073 and 15105.
2. **Compliance with Law:** That the Mitigated Negative Declaration and Mitigation, Monitoring and Reporting Program were prepared, processed, and noticed in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.)

and the local CEQA Guidelines and Thresholds of Significance adopted by the City of Banning.

3. **Independent Judgment:** That the Mitigated Negative Declaration reflects the independent judgment and analysis of the City.
4. **Mitigation Monitoring and Reporting Program:** That the Mitigation, Monitoring, and Reporting Program is designed to ensure compliance during project implementation in that changes to the project and/or mitigation measures have been incorporated into the project and are fully enforceable through permit conditions, agreements or other measures as required by Public Resources Code Section 21081.6.
5. **No Significant Effect:** That revisions made to the project plans agreed to by the applicant and mitigation measures imposed as conditions of approval on the project, avoid or mitigate any potential significant effects on the environment identified in the Initial Study to a point below the threshold of significance. Furthermore, after taking into consideration the revisions to the project and the mitigation measures imposed, the Planning Commission finds that there is no substantial evidence, in light of the whole record, from which it could be fairly argued that the project may have a significant effect on the environment. Therefore, the Planning Commission concludes that the project will not have a significant effect on the environment.

Multiple Species Habitat Conservation Plan (MSHCP)

The project is found to be consistent with the MSHCP. The project is located outside of any MSHCP criteria area and mitigation is provided through payment of the MSHCP mitigation fee.

SECTION 2. MAP ACT FINDINGS

An application for a Tentative Tract Map requires that it meet specific findings in accordance with Title 16 of the Banning Subdivision Municipal Code and Government Code Section 66473.1, 66473.5 and Section 66474. A tentative map must adequately meet the adopted provisions of the Title 16 Subdivision chapter based upon the following findings:

1. Tentative Tact Map 36939 is consistent and compatible with the objectives, policies, general land uses, and programs specified in the City's General Plan.

Findings of Fact: The General Plan land use designation for the site is classified as Low Density Residential which allows housing densities from 0 to 5 dwelling units per acre. The proposed Map will result in the development of 98 single family residential dwelling units at a density of 2.8 units per acre. With the elimination of the RL-10,000 overlay zone currently overlying a portion of the property, this density level is within the range permitted under the General Plan land use designation for this site. One of the primary policies of the Land Use Element of the General Plan is that projects adjacent to existing neighborhoods shall be carefully reviewed to assure that neighborhood character is protected. The proposed Tentative Tract Map serves to achieve this objective in that the rezoning and subdivision design is consistent with existing neighborhood housing stock. Considering all of these aspects, the

proposed Map furthers the objectives and policies of the General Plan and is compatible with the general land uses districts within the general vicinity of the Project.

2. The design and improvement of the subdivision proposed under Tentative Tract Map 36939 is consistent with the City's General Plan.

Findings of Fact: The proposed subdivision has been designed to meet City standards which provide satisfactory pedestrian and vehicular circulation, including emergency vehicle access and on site improvements, such as streets, utilities, and drainage facilities have been designed and are conditioned to be constructed in conformance with City standards.

3. The site is physically suitable for the type of development proposed under Tentative Tract Map 36939.

Findings of Fact: The 34.6 acre site is relatively flat with slight, hilly undulations ranging in elevation from 2,550 to 2,650 feet above mean sea level. Two previous tentative tract entitlements reflect the historic interest to develop the property for residential development purposes in that the site lies adjacent to single-family residential zoned districts supported and supplied with the necessary infrastructure required for residential development. In that the Project intends to connect to with existing infrastructure, the Project will be consistent with the goals and objectives of the General Plan.

4. The site is physically suitable for the density of development under Tentative Tract Map.

Findings of Fact: The site is located within an Earthquake Fault Zone and the Project's northern boundary line runs parallel with the San Gorgonio Pass Fault. The subdivision incorporates a fault setback zone, referenced as Lot "A" ranging in width from 40 feet to 160 feet. Pursuant to the Alquist-Priolo Act, no human habitation can be built within the fault setback zone. The Project shall prohibit the construction of structures within the fault setback zone. With the incorporation of the fault setback zone, the site is physically suitable for the intended density and consistent with the City's General Plan.

5. The design of the subdivision and improvements proposed under Tentative Tract Map 36939 is not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Findings of Fact: The site is currently vacant and does not contain any significant vegetation or habitat for wildlife. Per the Multiple Habitat Conservation Plan (MSHCP), there is no evidence that any endangered, threatened or listed species of plant or animal, or its habitat, is located on the site. There is no evidence that vernal pool complex, similar bodies of water, or conditions suitable for forming such bodies of water exist on the site. This determination is based on MSHCP report prepared by LSA Associates, dated May 2015. The Project incorporates conditions intended to comply with the recommendations of the MSHCP. In addition, this Project has been conditioned to comply with the environmental policies and regulations of the City of Banning and those of all local and regional governmental agencies having jurisdiction over the site.

6. The design of the subdivision and improvements proposed under Tentative Tract map 376939 is not likely to cause health problems.

Findings of Fact: The design of the subdivision is in conformance with the City's General Plan, Zoning Ordinance, and Subdivision Ordinance, the construction of all units on the site has been conditioned to comply with all applicable City of Banning ordinances, codes, and standards including, but not limited to, the California Uniform Building Code, the City's Ordinances relating to Stormwater runoff management and controls. In addition, the design and construction of all improvements for the subdivision has been conditioned to be in conformance with adopted City street and public works standards. The City's ordinances, codes, and standards have been created based on currently accepted standards and practices for the preservation of the public health, safety and welfare. Finally, the proposed street system throughout the subdivision will improve emergency vehicular access and in the immediate neighborhood.

7. The design of the subdivision and improvements proposed under Tentative Tract Map 36939, will not conflict with easement, acquired by the public at large, for access through or use of, property within the proposed subdivision.

Findings of Fact: No easements of record or easements established by judgement of a court of competent jurisdiction for public access across the site have been disclosed in a search of the title records for the site and the City does not otherwise have any constructive or actual knowledge of any such easements.

8. The design of the subdivision proposed, Tentative Tract Map 36939 adequately provides for future passive or natural heating and cooling opportunities.

Findings of Fact: Taking into consideration local climate and the existing contour and configuration of the site and its surroundings, the size and configuration of lots within the proposed subdivision have been arranged, to the greatest extent feasible, to permit orientation of structures in an east-west alignment for southern exposure, or to take advantage of natural shade, or to take advantage of prevailing breezes.

SECTION 3. ZONE CHANGE FINDINGS

1. The proposed Amendment is consistent with the goals and policies of the general plan.

Findings of Fact: The property's land use designation is Low Density Residential with a portion of the site designated as RL-10,000. The minimum lot size per the RL-10,000 standard is intended for single family residential development with 10,000 square foot lots. The lots TTM 36939 proposes range from 7,468 square feet to 25,403 square feet which are large enough to accommodate families with children and daily home based activities. The zone change request eliminates the RL-10000 overlay and would allow 0 to 5 dwelling units per acre. The proposed 98 unit subdivision is below the maximum number that the Low Density Residential District permits. At the maximum permitted

per the LDR District, 173 single family units could be provide. In keeping with the subdivision design, the rezoning proposed for the Project is consistent with the General Plan

2. The proposed Amendment is internally consistent with the Zoning Ordinance.

Findings of Fact: The proposed Project is not anticipated to result in exceeding, either cumulatively or individually, any applicable level of service standards. As discussed in the Staff Report and pursuant to the Project's conditions of approval, the proposed streets and subdivision design will be constructed in conformance with City standards and specifications. The Mitigation Monitoring and Report Program is intended to ensure that the developer adheres to best management practices in the development of the site.

3. The Planning Commission has independently reviewed and considered the requirements of the California Environmental Quality Act.

Findings of Fact: The City, in light of the whole record before it including but not limited to the City's local CEQA Guidelines and Thresholds of Significance, the proposed Mitigated Negative Declaration and documents incorporated therein by reference, any written comments received and responses provided, the proposed Mitigation Monitoring Program and other substantial evidence (within the meaning of Public Resources Code § 21080(e) and § 21082.2) within the record and/or provided at the public hearing, hereby finds and determines as follows:

1. Review Period: That the City has provided the public review period for the Mitigated Negative Declaration for the duration required under CEQA Guidelines Sections 15073 and 15105.
2. Compliance with Law: That the Mitigated Negative Declaration and Mitigation, Monitoring, and Reporting Program were prepared, processed, and noticed in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.) and the local CEQA Guidelines and Thresholds of Significance adopted by the City of Banning.
3. Independent Judgment: That the Mitigated Negative Declaration reflects the independent judgment and analysis of the City.
4. Mitigation, Monitoring, and Reporting Program: That the Mitigation, Monitoring, and Reporting Program is designed to ensure compliance during project implementation in that changes to the Project and/or mitigation measures have been incorporated into the Project and are fully enforceable through permit conditions, agreements or other measures as required by Public Resources Code Section 21081.6.
5. No Significant Effect: That revisions made to the Project plans agreed to by the applicant and mitigation measures imposed as conditions of approval on the Project,

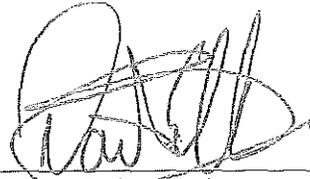
avoid or mitigate any potential significant effects on the environment identified in the Initial Study to a point below the threshold of significance. Furthermore, after taking into consideration the revisions to the Project and the mitigation measures imposed, the Planning Commission finds that there is no substantial evidence, in light of the whole record, from which it could be fairly argued that the Project may have a significant effect on the environment. Therefore, the Planning Commission concludes that the Project will not have a significant effect on the environment.

SECTION 4. PLANNING COMMISSION ACTIONS

The Planning Commission adopts Resolution No. 2015-11, recommending that the City Council take the following actions:

1. In accordance with CEQA Section 21064.5, the public agency adopts the Mitigated Negative Declaration and Mitigation, Monitoring, and Reporting Program and directs the Acting Community Development Director to prepare and file with the Clerk for the County of Riverside a Notice of Determination as provided under Public Resources Code Section 21108, and CEQA Guidelines Section 15075; and
2. That the City Council adopts Ordinance No. 1495, approving Tentative Tract Map No. 15-4501 (TTM 36939) a proposal to subdivide 34.6 acres of vacant land for purposes of creating 98 numbered lots for single-family residential development and three (3) lettered lots; and, approving Zone Change No. 15-3501 amending the zoning map to eliminate the RL-10,000 overlay affecting the western portion of the site to Low Density Residential (LDR, 0 to 5 units per acre), APN's 535-430-001 through 021, 535-431-001 through 015, 535-432-001 through 017, 535-070-004 and 006, subject to Conditions of Approval attached hereto and incorporated herein by reference as Exhibit A.

PASSED, APPROVED AND ADOPTED this 6th day of January, 2016.



David Ellis, Chairman
Banning Planning Commission

APPROVED AS TO FORM
AND LEGAL CONTENT:



Robert Khuu, Assistant City Attorney
Aleshire & Wynder, LLP

ATTEST:



Sandra Calderon, Recording Secretary
City of Banning, California

CERTIFICATION:

I, Sandra Calderon, Recording Secretary of the Planning Commission of the City of Banning, California, do hereby certify that the foregoing Resolution, No. 2015-11, was duly adopted by the Planning Commission of the City of Banning, California, at a regular meeting thereof held on the 6th day of January, 2016, by the following vote, to wit:

AYES: Shaw, Krick, Briant

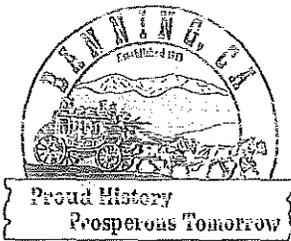
NOES: Ellis, Price

ABSENT: -0-

ABSTAIN: -0-



Sandra Calderon, Recording Secretary
City of Banning, California



City of Banning

99 E. Ramsey Street · P.O. Box 998 · Banning, CA 92220-0998 · (951) 922-3125 · Fax (951) 922-3128

COMMUNITY DEVELOPMENT
DEPARTMENT

EXHIBIT A

PROJECT #: TENTATIVE TRACT MAP NO. 15-4501 (TTM 36939)

SUBJECT: Conditions of Approval*

APPLICANT: Peter J. Pitassi

LOCATION: APN: 535-430-001 thru 021, 535-431-001 thru 015, 535-432-001 thru 017, 535-070-004 and 006

*** All fair share agreements, covenant agreements, and agreements subject to recordation will be subject to review and approval by the City Attorney and will include appropriate enforcement provisions by the City and be properly securitized.**

Community Development Department

General Requirements

1. The applicant shall indemnify, protect, defend, and hold harmless, the City, and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, from any and all claims, demands, lawsuits, writs of mandamus, and other actions and proceedings (whether legal, equitable, declaratory, administrative or adjudicatory in nature), and alternative dispute resolutions procedures (including, but not limited to arbitrations, mediations, and other such procedures), (collectively "Actions"), brought against the City, and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, that challenge, attack, or seek to modify, set aside, void, or annul, the action of, or any permit or approval issued by, the City and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof (including actions approved by the voters of the City), for or concerning the project, whether such Actions are brought under the California Environmental Quality Act, the Planning and Zoning Law, the Subdivisions Map Act, Code of Civil Procedure Section 1085 or 1094.5, or any other state, federal, or local statute, law, ordinance, rule, regulation, or any decision of a competent jurisdiction. It is expressly agreed that the City shall have the right to approve, which approval will not be unreasonably withheld, the legal counsel providing the City's defense, and that applicant shall reimburse City for any costs and expenses directly and necessarily incurred by the City in the course of the defense. City shall promptly notify the applicant of any Action brought and City shall cooperate with applicant in the defense of the Action.

2. The issuance of these Conditions of Approval do not negate the requirements of the Engineering/Public Works Department or submittal, review, and approval of: Street improvement plans, signing and striping plans, grading plans, storm drain improvement plans, street lighting plans, water, sewer, and electrical improvement plans, or other plans as deemed necessary by the City Engineer.
3. Approval of Tentative Tract 36939 shall be for a period of two (2) years from the date of City Council approval. All Conditions of Approval must be met on or before the expiration date or the applicant must request an extension of time at least thirty (30) days prior to the expiration date; otherwise, the approval shall expire and become null and void.
4. A copy of the signed resolution of approval and all conditions of approval and any applicable mitigation measures shall be reproduced in legible form on the grading plans, building and construction plans, and landscape and irrigation plans submitted for review and approval as required by the reviewing department.
5. The design of all lots shall meet the minimum property development requirements contained in the City's Zoning Ordinance for the Low Density Residential Zoning District.
6. The placement of the subdivision's CMU walls shall be in accordance with the following plan:

Perimeter Wall – a 6' high tan split face CMU (on the public side) with a 2" smooth cap located:

- Along the west side of Lot 47, adjacent to Sunset Avenue
- Along the north side of the Montgomery Creek Channel Right-of Way
- Along the perimeter of Lot "B"
- Along the southeasterly side of Lot 69
- Along the south sides of Lots 78 and 81, and the east side of Lot 81
- Along the perimeter of Lot "C"
- Along the North side of Lots 5,6,9, and 10, and along the west side of Lot 10
- Along the Northeast and Northwest sides of Lot 11

Interior Fencing

- 6' high tan or white vinyl at rear and side yard fencing.
 - 3' wide vinyl gate at the return fence at the garage side of each home.
 - 6' high tan or white vinyl return fencing from the side fence to the home on each side
7. Prior to the issuance of any building permits, typical building elevations shall be submitted to the Planning Department for design review and approval, in accordance with the provisions and requirements of Article 16E of the Banning Ordinance Code.

8. Applicant shall pay all development fees adopted by the City in effect at the time of issuance of any building permits, which shall include but not be limited to: TUMF, MSHCP, police and fire safety developer fees, water and sewer fees, park land dedication fees, and electric meter installation fees etc. Project proponent shall provide written evidence to the City that school mitigation fees have been paid or other arrangements acceptable to the Banning Unified School District have been met.
9. A copy of the final grading plan, approved by Engineering, shall be submitted to the Office of Planning for review and approval of the landscaping and erosion control plans when graded cut slopes exceed five (5) feet in height and fill slopes exceed three (3) feet in height.
10. The following building setback lines shall be delineated on the composite development plan submitted for building permits:
 - a. Front yard - Minimum 20 feet.
 - b. Side yard (interior lot) - Minimum 10 feet (single-story: measured between the furthest projection of the wall to the property line).

Side yard setbacks for two-story dwellings shall be staggered per Section 17.08.240(E) of the zoning ordinance.
 - c. Side yard (corner lot - street side) – Minimum 15 feet.
 - d. Side yard (corner lot – abutting interior lot) - Minimum 10 feet (measured between the furthest projection of the wall to the property line)
 - e. Rear yard – minimum 15 feet.
11. The developer shall contact the U.S. postal Service to determine the appropriate type and location of mailboxes.
12. The applicant shall install slate, concrete, tile, clay tile, or equal roofing material approved by the Planning Department on all units within the subject property.
13. A trailer, used as an office by the property owner or his designee, may be permitted on the site during construction for a period not to exceed six (6) months. Prior to issuance of a building permit for any residential unit, said trailer shall be subject to a Land Use Permit reviewed and approved by the Planning Department.
14. Prior to the issuance of any Building Permits, the project proponent shall submit to the City's Planning Department for review and approval: (1) three (3) copies of a drought-tolerant landscape plan and irrigation plans prepared by a licensed landscape architect. The drought-tolerant landscape plan shall include the following:

- A. The location, type, size and quantity of vegetation to be installed, and a date by which the landscaping shall be completed.
- B. Required drought-tolerant slope planting: Slope planting shall be required for the surface of all cut slopes of three (3) feet or greater in height and fill slopes more than two (2) feet in height. Said slopes shall be protected against damage from erosion by providing jute netting and planting with, ground cover plants or grass, except that grass will not exceed 25% of the total planting area on the slope face.
 - (1) All slopes exceeding three (3) feet in vertical height shall also be planted with shrubs, spaced at distances not to exceed five (5) feet on center; or, trees spaced at distances not to exceed ten (10) feet on center; or a combination of shrubs and trees.
 - (2) Slopes exceeding five (5) feet in vertical height shall be planted with a combination of drought-tolerant trees, shrubs and groundcover.
 - (3) Drought-tolerant slope planting as required by B(1) and (2), above, shall consist of the following sizes and quantities:
 - a. Trees: 30% — 24- inch box; 35% — 15-gallon; 25% - five gallon; 10% -one gallon.
 - b. Shrubs: 60% — five gallon; 40%—one gallon.
 - c. Groundcover: 100% coverage from flats planted 18-inch on-center.
 - (4) The approved landscape plan shall be installed on a phase by phase basis prior to the issuance of a Certificate of Occupancy for each single-family residence to be constructed within that phase.
- C. The fuel modification zone shall be landscaped in accordance with the City's General Plan policies and an analysis of the landscaping means the thinning of native combustible vegetation and the placement of fire resistant plant species as approved by the Fire Marshal.

The Plan shall be forwarded to a Landscape Architect for review and the applicant shall pay all fees associated with the review process. The approved landscape plan shall be implemented /installed on a phase by phase basis prior to the issuance of a Certificate of Occupancy for each single-family residence constructed within that phase, or at the direction of the Fire Marshal.

- 15. Prior to the issuance of a Certificate of Occupancy for each single-family residence constructed within TTM 36939, the applicant shall submit to the City for review and approval three (3) copies of a detailed landscape and irrigation plan (comprised of

xeriscape plant material) indicating type, species and location of the following minimum number of drought tolerant, multi-branched trees on each lot adjacent to the street right-of-way (all trees shall be planted with root barriers):

- Cul-de-sac lots –1 tree; minimum 24” box
 - Interior lot— 2 trees; one 24” box, one 15—gallon
 - Corner lot — 3 trees; two 24” box and one 15 —gallon.
 - The Plan shall be forwarded to a Landscape Architect for review and the applicant shall pay all fees associated with the review process. The approved landscape plan shall be implemented/installed on a phase by phase basis prior to the issuance of a Certificate of Occupancy for each single-family residence constructed within that phase. (Submit landscape and irrigation plans as soon as possible to allow sufficient time for a Landscape Architect to review same).
 - The landscaping for the street parkways, public lots, and other public areas shall be installed prior to occupancy of the first unit.
16. A six-(6) foot high chain link fence shall be maintained around the perimeter of the site during all phases of construction, or until replace by the permanent fencing and/or walls.
17. Developer shall meet all requirements of responsible agencies, including but not limited to: Southern California Gas Company, and Southern California Edison Company.

Standard Conditions

18. The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402, A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
19. The Project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below:
- Apply nontoxic chemical soil stabilizers according to manufactures’ specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
 - Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
 - Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 m (2 ft.) of freeboard (vertical space between the top o the load and top of the

- trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
- Pave construction access roads at least 30 m (100 ft.) onto the site from the main road.
 - Reduce traffic speeds on all unpaved roads to 15 mph or less.

The applicable Cal/Recycle Sustainable (Green) Building Program Measures are:

- Recycle/reuse at least 50 percent of the construction material that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way for at least 10 percent of the project, as defined on the California Department of Resources Recycling and Recovery (CalRecycle) website: www.calrecycle.ca.gov
20. Prior to issuance of a grading permit, the developer shall provide to the City of Banning evidence of fully executed monitoring agreement(s) with the appropriate culturally affiliated Native American tribe(s) or band(s) for all ground disturbing activities associated with the project. If more than one tribe Federally Recognized Indian Tribe has requested monitoring, an equal rotation shall be created around the grading and ground disturbing schedule. This shall include a scope of work and a description of tribal monitoring activities.
21. In the event that previously undocumented archaeological resources are identified during earthmoving activities, further construction work in the area should be diverted or halted until the nature and significance of the find can be assessed.
22. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
23. The applicant shall file an Environmental Constraint Sheet. An Environmental Constraint Sheet means a duplicate of the final map on which are shown the Environmental Constraint Notes. This sheet shall be filed simultaneously with the final map, with the County Surveyor, and labeled Environmental Constraint Sheet in the top margin. Applicable items shall be shown under a heading labeled Environmental Constraint Notes. The Environmental Constraint Sheet shall contain the following statement:

THE ENVIRONMENTAL CONSTRAINT INFORMATION SHOWN ON THIS MAP SHEET IS FOR INFORMATIONAL PURPOSES DESCRIBING CONDITIONS AS OF THE DATE OF FILING, AND IS NOT INTENDED TO AFFECT THE RECORD TITLE INTEREST. THIS INFORMATION IS DERIVED FROM THE PUBLIC RECORDS OR REPORTS, AND DOES NOT IMPLY THE CORRECTNESS OR SUFFICIENCY OF THOSE RECORDS OR REPORTS BY THE PREPARER OF THIS MAP.

The sheet shall delineate constraints involving, but not limited to, any of the following that are conditioned by the advisory agency: archeological sites, geologic mapping, grading, building, and building setback lines, flood hazard zones, airport compatibility zones, seismic lines and setbacks, fire protection, water availability, and sewage disposal.

Mitigation

24. **Burrowing Owls.** The project falls within the Multiple Species Habitat Conservation Plan (MSHCP). Per the MSHCP 30-day Pre-construction Burrowing Owl Survey Guidelines, an additional pre-construction survey will be required within 30 days prior to beginning of site grading. If burrowing owls are found to be present, for compliance with the MSHCP, project-specific mitigation would be developed and authorized through consultation with the City of Banning and California Department of Fish and Wildlife.
25. Any project-related effects to potentially jurisdictional streambeds will require the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) report for compliance with the MSHCP. In addition, permits would be required from the U.S. Army Corp. of Engineers (USACE), RWQCB, and CDFW. Any necessary mitigation would be determined through the DBESP and permitting process with the USACE and CDFW.
26. To avoid any potential effects to nesting birds protected by the Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code, vegetation-clearing and preliminary ground-disturbing work should be completed outside of bird breeding season (typically February through August 31). In the event that initial groundwork cannot be conducted outside the bird breeding season, pre-construction surveys would be required within 30 days prior to construction. Should nesting birds be found, an exclusionary buffer will be established by the biologist. The buffer may be up to 500 feet in diameter, depending on the species of nesting bird found. The buffer will be clearly marked in the field by construction personnel under guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active.
27. **Fault Setback Zone.** The subdivision shall be designed with the fault setback zone as shown in the Tentative Tract Map 36939 and in accordance with the recommendations cited in the RMA Group Geologic Fault Investigation of Alquist-Priolo Zone Report dated April 8, 2014. Any deviation from the Fault Setback zone shall require Planning and City Engineer approval. Based on the requirements of

the Alquist-Priolo Act, no human habitation structures can be built within this zone, however other land uses may be permitted subject to Planning Approval.

28. **Native Plant Recovery:** Developer shall recover native and drought tolerant plant materials, and incorporate them into project landscaping, to provide or enhance habitat for local species to the extent possible.
29. **Archaeological Monitoring.** Prior to the issuance of a grading permit, the Project Proponent shall implement the following program:
 - a) A qualified archaeological monitor shall be retained by the Project Proponent to conduct monitoring of all grading and trenching activities and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.
 - b) During grading operations, a professional archaeological monitor shall observe the grading operation until such time as monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure CR-2 shall apply.
30. **Treatment Plan.** If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Proponent, and the City of Banning Community Development Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is two (2) to five (5) percent of the volume of the cultural deposit). The treatment plan shall require monitoring by the appropriate Native American Tribe(s) during data recovery excavations of archaeological resource(s) of prehistoric origin, and shall require that all recovered artifacts undergo laboratory analysis. At the completion of the laboratory analysis,

any recovered archaeological resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American Tribe(s) if that is recommended by the City of Banning. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City of Banning Community Development Department.

31. **Paleontological Monitoring.** Prior to the issuance of grading permits, the Project Proponent shall implement the following program:

- a) A qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.
- b) The qualified paleontologist shall be empowered to temporarily halt or redirect grading activities paleontological resources are discovered.
- c) In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area.
- d) The qualified paleontologist shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly removed and the area cleared.
- e) If the discovery is significant the qualified paleontologist shall notify the Project proponent and the City immediately.
- f) In consultation with the Project proponent and the City, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.

Public Works

General Requirements

32. A Public Works Permit shall be required prior to commencement of any work within the public right-of-way. The contractor working within the public right-of-way shall submit proof of a Class "A" State Contractor's License, City of Banning Business License, and Liability Insurance. Any existing public improvements, or public improvements not accepted by the City that are damaged during construction shall be removed and replaced as determined by the City Engineer or his/her representative.

Prior to the issuance of any grading, construction, or public works permit by the City, the applicant shall obtain any necessary clearances and/or permits from the following agencies:

- Fire Marshal (access)
- Army Corps of Engineers
- CA Fish and Game
- Public Works Department (grading permits, street improvement permits)
- Riverside County Flood Control & Water Conservation District (storm drain)
- California Regional Water Quality Control Board Colorado River Basin (RWQCB)
- South Coast Air Quality Management District (SCAQMD)

The applicant is responsible for meeting all requirements of permits and/or clearances from the above listed agencies. When the requirements include approval of improvement plans, the applicant shall furnish proof of such approvals when submitting improvements plans to the City.

33. The following improvement plans shall be prepared by a Civil Engineer licensed by the State of California and submitted to the Engineering Division for review and approval. A separate set of plans shall be prepared for each line item listed below. Unless otherwise authorized in writing by the City Engineer, the plans shall utilize the minimum scale specified and shall be drawn on 24" x 36" Mylar film. Plans may be prepared at a larger scale if additional detail or plan clarity is desired (Note: the applicant may be required to prepare other improvement plans not listed here pursuant to improvements required by other agencies and utility purveyors):

- | | |
|--|---|
| a. Rough/Precise Grading Plans
(All Conditions of Approval shall be reproduced
on last sheet of set) | 1" = 40' horizontal |
| b. Clearing Plans
(Include fuel modifications zones)
(Include construction fencing plan) | 1" = 50' horizontal |
| c. Erosion Control Plan, SWPPP and WQMP
(Note: a, b & c shall be reviewed and approved concurrently) | 1" = 40' Horizontal |
| d. Storm Drain Plans | 1" = 40' Horizontal |
| e. Street Improvement Plans | 1" = 40' Horizontal
1" = 4' Vertical |
| f. Signing & Striping Plans | 1" = 40' Horizontal |
| g. Construction Traffic Control Plan
(Major or Arterial Highways only) | 1" = 40' Horizontal |
| h. Landscaping Plans-Streets | 1" = 20' Horizontal |

i. Water & Sewer Improvement Plans

1" = 40' Horizontal

1" = 4' Vertical

Other engineered improvement plans prepared for City approval that are not listed herein shall be prepared in formats approved by the City Engineer prior to commencing plan preparation.

All off-site plan and profile street improvement plans and signing & striping plans shall show all existing improvements for a distance of at least 200-feet beyond the project limits, or at a distance sufficient to show any required design transitions.

All on-site signing and striping plans shall show the following at a minimum: stop signs, limit lines and legends, no parking signs, raised pavement markers (including blue raised pavement markers at fire hydrants) and street name signs per Public Works standard plans and/or as approved by the City Engineer.

A small index map shall be included on the title sheet of each set of plans, showing the overall view of the entire work area.

34. Upon completion of construction, the Developer shall furnish the City with reproducible record drawings on Mylar film of all improvement plans that were approved by the City Engineer. Each sheet shall be clearly marked "As-Built" or "As-Constructed" and shall be stamped and signed by the engineer or surveyor certifying the accuracy and completeness of the drawings. The applicant shall have all AutoCAD files submitted to the City, revised to reflect the "As-Built" conditions.
35. All utility systems including gas, electric, telephone, water, sewer, and cable TV shall be provided for underground, with easements provided as required, and designed and constructed in accordance with City codes and the utility provider. Telephone, cable TV, and/or security systems shall be pre-wired.
36. The Developer shall cause all public improvements to be constructed and accepted by the City prior to occupancy of the first unit; or, the Developer shall enter into an agreement to guarantee the construction of the public improvements as listed in the Conditions of Approval and as shown on the approved plans.

Rights of Way/Easements

37. Prior to issuance of any permit(s), the applicant shall acquire or confer property rights necessary for the construction or proper functioning of the proposed project/development. Conferred rights shall include right-of-way dedications, irrevocable offers to dedicate or grant of easements to the City for emergency services, maintenance, utilities, storm drain facilities, or temporary construction purposes including the reconstruction of essential improvements.

38. Offer to dedicate to the City of Banning for public purposes the right-of-way for Wilson Street fronting the site as an Arterial Highway; 55 feet one-half width (centerline to right-of-way). Offers of dedication shall include corner cut-off at intersections.
39. Related to COA No.36, the developer shall request the right-of-way dedication along Wilson Street fronting the Montgomery Creek Channel from the Riverside County Flood Control and Water Conservation District.
40. Offer to dedicate to the City of Banning for public purposes the right-of-way for Sunset Avenue fronting the site as an Collector Highway; 33 feet one-half width (centerline to right-of-way).
41. Offer to dedicate to the City of Banning for public purposes the right-of-way for Local Streets, including Sunrise Avenue fronting the site; 30 feet one-half width (centerline to right-of-way). Offers of dedication shall include corner cut-off at intersections.
42. Offer to dedicate to the City of Banning easements to maintain any slopes supporting public right-of-ways. Maintenance easements shall extend 10 feet beyond the toe of slope.
43. Submit a copy of the title report, closure calculations, and any separate instruments or necessary right-of-way documents to the Engineering Division for review and approval of the City Engineer prior to all improvement plans.
44. All street centerline monument ties shall be submitted to the Engineering Division.
45. Prior to the issuance of any certificates of occupancy, the applicant shall not grant any easements over any property subject to a requirement of dedication or irrevocable offer of dedication to the City of Banning or the Riverside County Flood Control and Water Conservation District unless such easements are expressly made subordinate to the easements to be offered for dedication to the City or RCFC. Prior to granting any of said easements, the applicant shall furnish a copy of the proposed easement to the City Engineer for review and approval. Further, a copy of the approved easement shall be furnished to the City Engineer prior to the issuance of any certificate of use and/or occupancy.

Traffic

46. Street name signs and traffic control devices including traffic legends and traffic striping shall be installed, or relocated in accordance with Caltrans Standards and as shown on the approved plans, and/or as directed by the City Engineer.

Prior to the issuance of a grading permit or building permit, the applicant shall submit and obtain approval in writing from the Fire Marshall for the plans for all public or private access roads, drives, streets, and alleys. The plans shall include plan and sectional views and indicate the grade and width of the access road measured flow-line to flow-

line. When a dead-end access exceeds 150 feet or when otherwise required, a clearly marked fire apparatus access turnaround must be provided and approved by the Fire Marshall.

47. The intersection of Sunset Avenue and Dawn Lane shall be design in manner to mitigate sight distance issues.

Street Improvements

48. All street improvement designs shall provide pavement and lane transitions per City of Banning and Caltrans standards for transition to existing street sections.
49. Construct half-width street improvements in accordance with City standards fronting Wilson Street, Sunset Avenue and Sunrise Avenue including street lighting, curb and gutter, drive approaches, sidewalk, and asphalt concrete paving, traffic signs and striping, and any transitions. Street lights shall be installed offset of the existing street lights. Applicant's geotechnical engineer shall provide the design of the pavement section based upon the Caltrans method.
50. Construct full-width street improvements in accordance with City standards along local streets within the project boundaries including street lighting, curb and gutter, drive approaches, sidewalk, handicap ramps, and asphalt concrete paving, traffic signs and striping, and any transitions. Applicant's geotechnical engineer shall provide the design of the pavement section based upon the Caltrans method.
51. Any public improvements damaged during the course of construction shall be replaced to the satisfaction of the City Engineer, or his/her designee.
52. All required public improvements for the project shall be completed, tested, and approved by the Engineering Division prior to issuance of any Certificate of Occupancy.
53. The channel crossing of Wilson Street over the Montgomery Creek Channel shall be designed and constructed to the ultimate width of Wilson Street as approved by the City and Riverside County Flood Control and Water Conservation District. Access and safety devices such as guard rail, chain link fence, etc., shall be provided on the north side of Wilson Street for the maintenance of "Montgomery Creek Channel" as approved by the City and Riverside County Flood Control and Water Conservation District.

Grading/Drainage Improvements

54. In accordance with the June 19, 2015 RMA GeoScience Report, the Developer shall adhere to the comments, recommendations and conditions cited in the report as to the following:
 - Existing Fill in Graded Eastern Portion of the Site.
 - General Earthwork and Grading
 - Removals and Over excavation

- Earthwork Shrinkage and Subsidence
 - Earthwork Recommendations
 - Excavation Characteristics and Rock Disposal
 - Fill and Cut Slopes
 - Interior Slabs-on-Grade
 - Foundation Setback from Slopes
 - Temporary Slopes and Excavations
 - Import Soils
 - Cement type and Corrosion Potential
 - Utility Trench Backfill
 - Drainage and Moisture Proofing
 - Plan Review
 - Geotechnical Observation and Testing During Rough Grading
 - Post-Grading Geotechnical Observation and Testing
55. Submit a Drainage Study with hydrologic and hydraulic analysis for developed and undeveloped (existing) conditions to the Engineering Division for review and approval. The study and analysis shall be prepared by a civil engineer licensed by the State of California and shall incorporate the drainage area north of the proposed tract. Drainage design shall be in accordance with Banning Master Drainage Plan adopted by Riverside County Flood Control and Water Conservation District (RCFCD), RCFCD Hydrology Manual, and standard plans and specifications. The 10-year storm flow shall be contained within the street curbs, and the 100-year storm shall be contained within the street right-of-way; when this criteria is exceeded, additional drainage facilities shall be designed and constructed.
56. The project shall comply with all RCFCD requirements including, but not limited to: drainage/debris basins, drainage easements, storm drain infrastructure and design criteria. A debris basin shall be included with this project to capture debris flows as recommended by the RCFCD.
57. Concrete lined interceptor channels shall be designed and constructed along the north boundary of the proposed development as required by Grading Ordinance.
58. Submit confirmation that the project meets the requirements of the Alquist-Priolo Earthquake Fault Zoning Act.
59. If the site is located in a Flood Area as identified in Flood Insurance Rate Map dated August 28, 2008 the developer is responsible for providing a certification by a registered professional engineer or architect demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
60. The project grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage areas, outlet points and outlet conditions. Otherwise, a drainage easement shall be obtained for the release of

concentrated or diverted storm flows. The project shall accept and convey storm flows from the adjacent property to the north.

61. The applicant shall comply with Chapter 13.24 "Stormwater Management Systems" of the Banning Municipal Code (BMC) and Title 18 "Grading, Erosion and Sediment Control" of the California Building Code related to excavation and grading; and the State Water Resources Control Board's orders, rules and regulations.
62. For construction activities including clearing, grading or excavation of land that disturbs one (1) acre or more of land, or that disturbs less than one (1) acre of land, but which is a part of a construction project that encompasses more than one (1) acre of land, the applicant shall be required to submit a Storm Water Pollution Protection Plan (SWPPP) and file a Notice of Intent (NOI) with the Regional Water Quality Control Board.

The applicant's SWPPP shall be reviewed and approved by the City Engineer prior to any permit issuance. The approved SWPPP and BMPs shall remain in effect for the entire duration of project construction until all improvements are completed and accepted by the City.

Note: The SWPPP may be supplemented with an Erosivity Waiver, if approved by the State Water Resource Control Board.

All erosion and sediment control BMPs proposed by the applicant shall be designed using the CASQA BMP handbook and approved by the City Engineer prior to any onsite or offsite grading, pursuant to this project.

63. Grading and excavations in the public right-of-way shall be supplemented with a soils and geology report prepared by a professional engineer or geologist licensed by the State of California.
64. Prior to the issuance of any building permit(s), a precise grading plan shall be submitted to the City Engineer for review and approval. A grading permit shall be obtained prior to commencement of any grading activity.
65. Prior to issuance of any grading or building permit, a Project-Specific Water Quality Management Plan (WQMP) shall be reviewed and approved in accordance with California Regional Water Quality Control Board Colorado River Basin Region Order No. R7-2013-0011.
 - At a minimum, all development will make provisions to store runoff from rainfall events up and including the **one-hundred year, three hour duration**. Post development peak urban runoff discharge rates shall not exceed pre-development peak urban runoff discharge rates.
66. Prior to the issuance of a building permit for any building lot, the applicant shall provide a lot pad certification stamped and signed by a qualified civil engineer or land surveyor.

Each pad certification shall list the pad elevation as shown on the approved grading plan, the actual pad elevation and the difference between the two, if any. Such pad certification shall also list the relative compaction of the pad soil.

67. Obtain Letter of Map Revision (LOMR) from FEMA.

Landscaping Public Right of Way

68. The Developer shall prepare a water conservation plan to reduce water consumption in the landscape environment using xeriscape principles. "Xeriscape" shall mean a combination of landscape features and techniques that in the aggregate reduce the demand for and consumption of water, including appropriate low water using plants, non-living ground-cover, a low percentage of turf coverage (limited to 25% of the planted area), permeable paving and water conserving irrigation techniques and systems. A low water-using drought tolerant plant includes species suited to our climate, requiring less water in order to grow well.
69. An automatic sprinkler system and landscaping shall be installed on a phase by phase basis, prior to occupancy of the first unit of that phase. The landscaping shall include the parkway fronting Sunrise Avenue, Wilson Street and the interior streets as they are included in each phase of construction. The system within the Landscape Maintenance District shall include a landscape controller, a separate water meter and electric meter, and plantings as approved by the Community Development Director. Landscaping plans and specifications shall be reviewed and approved by the City Engineer.
70. The Developer shall participate in a Landscape Maintenance District to be established by the City of Banning for the maintenance of landscape within the public right-of-way and the open space area within the development's boundary along Wilson Street and Lots A, B, and C. The Developer shall landscape and maintain said area until the City accepts it into the Landscape Maintenance District No. 1.
71. Landscape improvements shall be certified by a licensed landscape architect or licensed landscape contractor as having been installed in accordance with the approved detailed plans and specifications. The applicant shall furnish said certification, including an irrigation management report, for each landscape irrigation system and any other required implementation report determined applicable, to the City Engineer for review and approval.

Trash/Recycling

72. Construction debris shall be disposed of at a certified recycling site. It is recommended that the developer contact the City's franchised solid waste hauler, Waste Management of the Inland Valley at 1-800-423-9986, for disposal of construction debris.

Fees

73. Plan check fees for professional report review (geotechnical, drainage, etc.), and all improvement plans review, shall be paid prior to submittal of said documents for review and approval in accordance with the fee schedule in effect at the time of submittal.
74. A fee shall be paid to the Riverside County Flood Control and Water Conservation District to perform plan checking for the proposed project.
75. Public Works Inspection fees shall be paid prior to issuance of any permits in accordance with the fee schedule in effect at time of time of scheduling.
76. Water and sewer connection fees including frontage fees and water meter installation charges shall be paid on a per lot basis at the time of building permit issuance in accordance with the fee schedule in effect at that time.
77. A plan storage fee shall be paid for any engineering plans that may be required prior to issuance of certificate of occupancy in accordance with the fee schedule in effect at the time the fee is paid.
78. A Traffic Control mitigation fee shall be paid prior to issuance of building permits.
79. Payment of all associated development impact fees in effect at the time of building permit issuance.

Final Parcel Map

80. Security for the construction of public improvements in accordance with Government Code Section 66499 shall be as follows:
 - Faithful Performance Bond - 100% of estimated cost
 - Labor and Material Bond - 100% of estimated cost
 - Monumentation Bond - \$20,000.00

Securities for the public improvements shall be on file with the City Clerk prior to scheduling the final map for approval by City Council. Unit prices for bonding estimates shall be those specified or approved by the City Engineer.

81. Submit a copy of the title report, closure calculations, and any separate instruments or necessary easement or right-of-way documents to the Engineering Division for review and approval of the City Engineer prior to final map approval.
82. A map of the proposed subdivision drawn at 1"=200' scale showing the outline of the streets including street names shall be submitted to the City to update the city atlas map.
83. An original Mylar of the final map (after recordation) shall be provided to the City for the record files.

84. A record of all street centerline monument ties shall be submitted to the Engineering Division upon completion of improvements or prior to release of Monumentation Bond.

Water

85. Design and construct the water system (mains, laterals, hydrants, valves, blowoffs, airvac, etc.) according to the City of Banning standards. The water mains shall be a minimum of eight inches in diameter ductile iron pipe and shall be designed to be a "looped" system. The applicant is directed to review the water plans previously approved with Tract Map No. 30642.
86. Pay all applicable water connection and frontage fees per Chapter 13.08 "Water, Sewer and Electricity Rates" of the Banning Municipal Code prior to the issuance of a building permit.

Sewer

87. Design and construct the sewer system (mains, laterals, manholes, etc.) according to the City of Banning standards. The applicant is directed to review the sewer plans previously approved with Tract Map No. 30642.
88. All sewer lines to be constructed within the Public right-of-way shall be extra strength Vitrified Clay Pipe. All sewer laterals shall be a minimum of 4 inches in diameter and all sewer mains shall be a minimum of 8 inches. Final sizes shall be approved by the City Engineer.
89. A sewer check valve shall be provided for each building with a finish pad elevation lower than the rim elevation of the immediate up-stream sewer manhole.

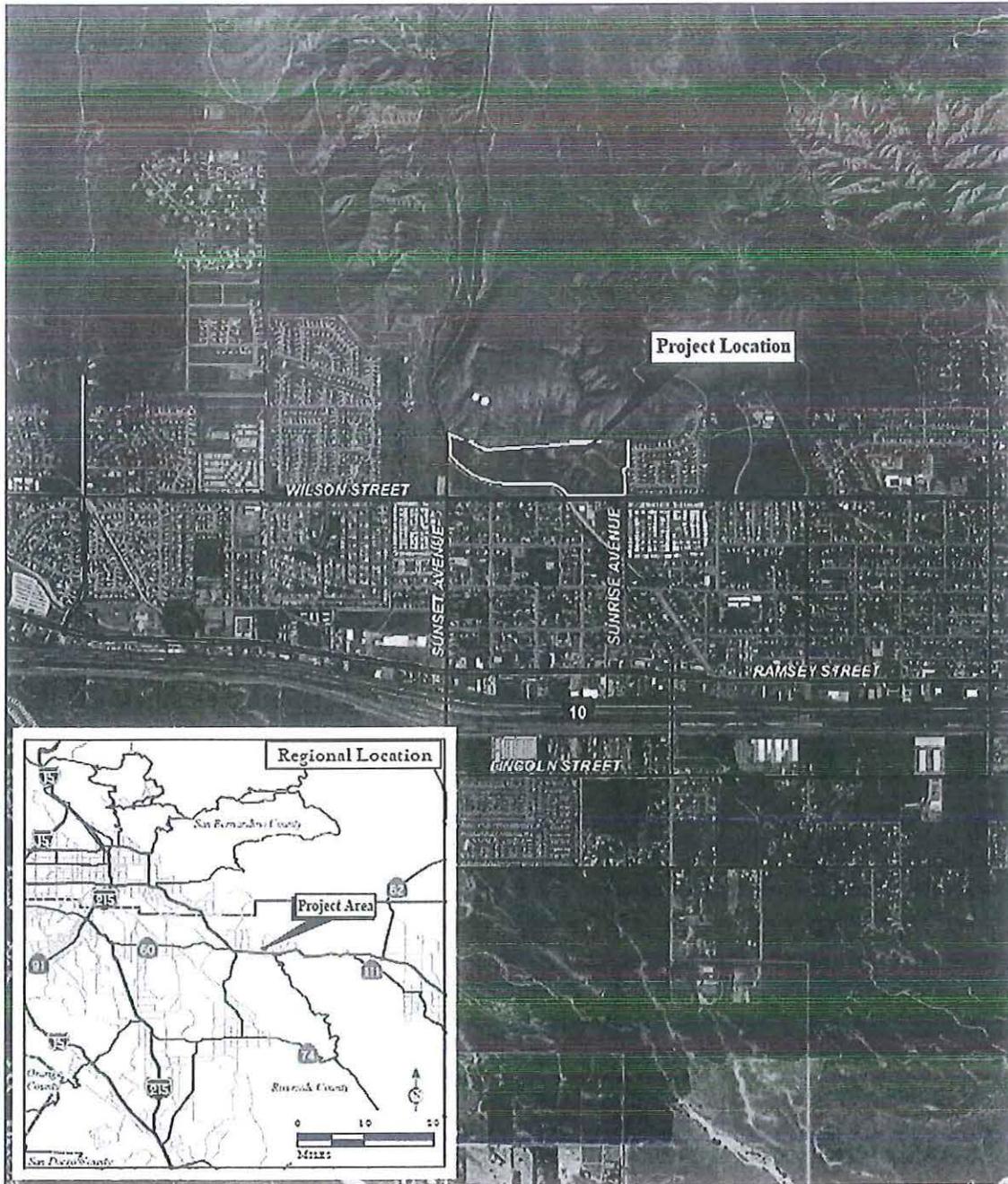
Fire Department

90. For residential areas, approved standard fire hydrants, located at each intersection, with no portion of any lot frontage more than a maximum of 500 feet from a hydrant. Minimum fire flow for all residential structures shall be 1000 GPM for a 2-hour duration at 20 psi residual operating pressure, which must be available before any combustible material is placed on the construction site.
91. The required water system, including fire hydrants shall be installed and accepted by the appropriate water agency prior to any combustible building material being placed on an individual lot. Two sets of water plans are to be submitted to the Fire Department for approval.
92. Applicant/Developer shall mount blue dot retro-reflectors pavement markers on private streets, public streets and driveways to indicate location of the fire hydrant. It should be eight (8) inches from centerline to the side that the fire hydrant is on, to identify fire hydrant locations.

93. Residential fire sprinklers are required in all one and two family dwellings per the California Residential Code. Contact the Riverside County Fire Department for the Residential Fire Sprinkler Standard.
94. Fire Apparatus access road and driveways shall be in compliance with the Riverside County Fire Department Standard number 06-05 (located at www.rvcfire.org). Access lanes will not have an up, or downgrade of more than 15%. Access roads shall have an unobstructed vertical clearance not less than 13 feet and 6 inches. Access lanes will be designed to withstand the weight of 70 thousand pounds over 2 axles. Access will have a turning radius capable of accommodating fire apparatus. Access lane shall be constructed with a surface so as to provide all weather driving capabilities.
95. Roadways may not exceed 1320 feet without secondary access. This access may be restricted to emergency vehicles only however, public egress must be unrestricted.
96. Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with approved provision for the turn-around capabilities of fire apparatus.
97. Any turn-around requires a minimum of 42-foot turning radius.
98. The minimum dimension for gates is 20 feet clear and unobstructed width and a minimum vertical clearance of 13 feet 6 inches in height. Any gate providing access from a road shall be located at least 35 feet setback from the roadway and shall open to allow a vehicle to stop without obstructing traffic on the road. Where a one-way road with a single traffic lane provides access to a gate entrance, a 38-foot turning radius shall be used.
99. Gates may be automatic or manual and shall be equipped with a rapid entry system (KNOX). Plans shall be submitted to the Fire Department for approval prior to installation. Automatic gate pins shall be rated with a shear pin force, not to exceed 30 pounds. Gates activated by the rapid entry system shall remain open until closed by the rapid entry system. Automatic gates shall be provided with backup power.

ATTACHMENT 3

Vicinity Map



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ATTACHMENT 5
Public Notice



NOTICE OF PUBLIC HEARING TO ADOPT ORDINANCE NO. 1495 AND NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR APPROVAL OF TENTATIVE TRACT MAP NO. 15-4501 (TTM 36939) AND ZONE CHANGE NO. 15-3501 AMENDING THE ZONING MAP TO ELIMINATE THE RL-10,000 OVERLAY AFFECTING THE WESTERN PORTION OF THE SITE TO LOW DENSITY RESIDENTIAL (LDR 0 TO 5 UNITS PER ACRE); APN'S 535-430-001 THRU 021, 535-431-001 THRU 015, 535-432-001 THRU 017, 535-070-004 AND 006.

NOTICE IS HEREBY GIVEN of a public hearing before the City of Banning City Council, to be held on Tuesday, February 9, 2016, at 5:00 p.m. in the Council Chambers, City Hall, 99 East Ramsey Street, Banning, California, to consider Ordinance No. 1495 approving Tentative Tract Map No. 15-4501 (TTM 36939) a proposal to subdivide a 34.6 acre site to create 98 numbered lots for single family residential development and 3 lettered lots; and, Zone Change No. 15-3501 amending the zoning map to eliminate the RL-10,000 overlay affecting the western portion of the site to Low Density Residential (0-5 du/ac). The subject parcels are generally located north of Wilson Street and east of Sunset Avenue in the City of Banning.

To locate these parcels, please go to the Riverside County website and type in <http://www3.tlma.co.riverside.ca.us/pa/rclis/viewer.htm> in the search engine and follow the instructions on the page.

Information regarding the Mitigated Negative Declaration, Tentative Tract Map No. 15-4501 (TTM 36939) and Zone Change No. 15-3501 can be obtained by contacting the City's Community Development Department at (951) 922-3125, or by visiting the City Hall located at 99 East Ramsey Street, Banning. You may also go to the City of Banning website at <http://www.ci.banning.ca.us/>.

All parties interested in speaking either in support of or in opposition of this item are invited to attend said hearing, or to send their written comments to the Community Development Department, City of Banning at P.O. Box 998, Banning, California, 92220.

If you challenge any decision regarding the above proposal in court, you may be limited to raising only those issues you or someone else raised in written correspondence delivered to the City Clerk at, or prior to, the time the City Council makes its decision on the proposal; or, you or someone else raised at the public hearing or in written correspondence delivered to the hearing body at, or prior to, the hearing (California Government Code, Section 65009).

BY ORDER OF THE ACTING COMMUNITY DEVELOPMENT DIRECTOR OF THE CITY OF BANNING, CALIFORNIA

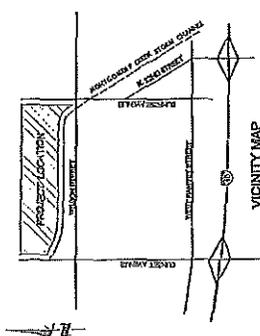
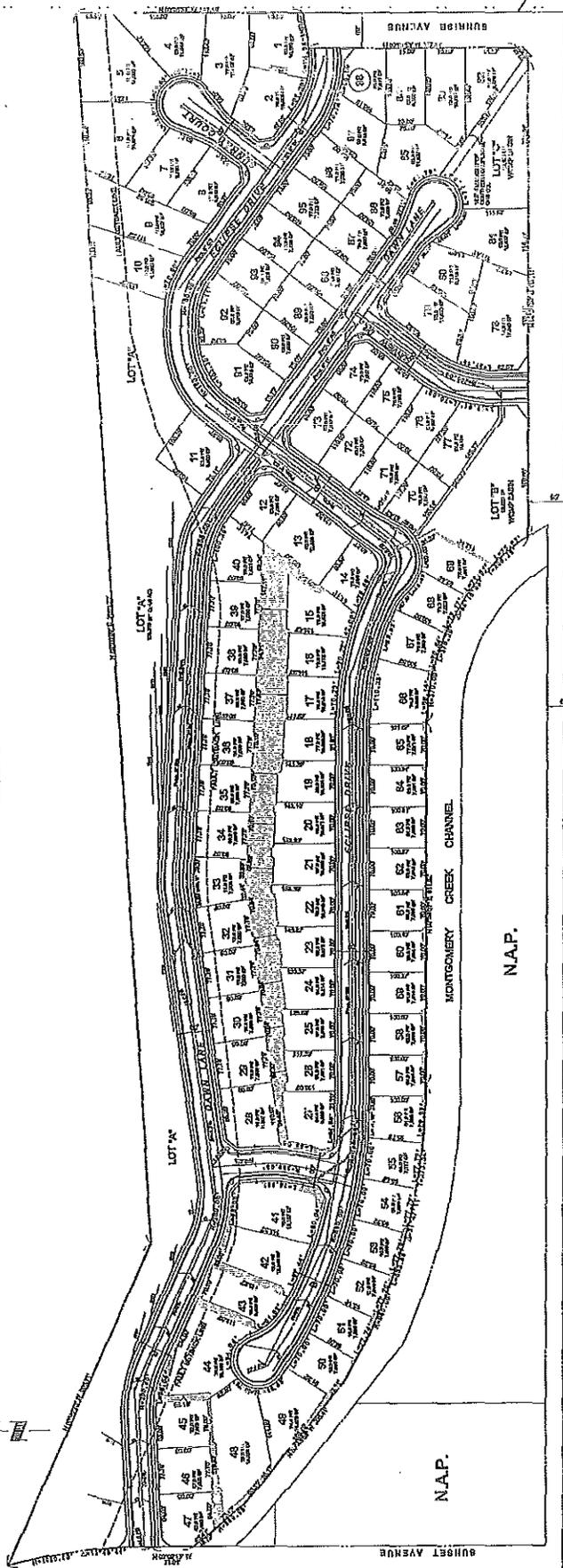
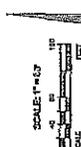
Brian Guillot
Acting Community Development Director

Dated: January 25, 2016
Publish: January 29, 2016

TENTATIVE TRACT MAP 36939

CITY of BANNING, CALIFORNIA

JULY, 2015



OWNER / APPLICANT
 HANCOCK VILLAGE OF, LLC
 10000 WILSON STREET, SUITE 100
 BANNING, CALIFORNIA 92410
 CONTACT: JAMES HANCOCK, 951-852-1111

LAND USE INFORMATION
 ZONING: LOW DENSITY RESIDENTIAL (LDN) (MAY BE)
 PROPOSED ZONING: LOW DENSITY RESIDENTIAL
 PROPOSED LOTS TO BE SPLIT INTO LOTS 1-10, 11-20, 21-30, 31-40, 41-50, 51-60, 61-70, 71-80, 81-90, 91-100, 101-110, 111-120, 121-130, 131-140, 141-150, 151-160, 161-170, 171-180, 181-190, 191-200, 201-210, 211-220, 221-230, 231-240, 241-250, 251-260, 261-270, 271-280, 281-290, 291-300, 301-310, 311-320, 321-330, 331-340, 341-350, 351-360, 361-370, 371-380, 381-390, 391-400, 401-410, 411-420, 421-430, 431-440, 441-450, 451-460, 461-470, 471-480, 481-490, 491-500, 501-510, 511-520, 521-530, 531-540, 541-550, 551-560, 561-570, 571-580, 581-590, 591-600, 601-610, 611-620, 621-630, 631-640, 641-650, 651-660, 661-670, 671-680, 681-690, 691-700, 701-710, 711-720, 721-730, 731-740, 741-750, 751-760, 761-770, 771-780, 781-790, 791-800, 801-810, 811-820, 821-830, 831-840, 841-850, 851-860, 861-870, 871-880, 881-890, 891-900, 901-910, 911-920, 921-930, 931-940, 941-950, 951-960, 961-970, 971-980, 981-990, 991-1000, 1001-1010, 1011-1020, 1021-1030, 1031-1040, 1041-1050, 1051-1060, 1061-1070, 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GENERAL NOTES

- TOTAL GROSS AREA = 343.48
- TOTAL UNIMPROVED LOTS = 88, TOTAL IMPROVED LOTS = 3
- MINIMUM LOT SIZE = 1,500 SF (RESIDENTIAL LOTS)
- LOT COVERAGE = 40% (RESIDENTIAL)
- MINIMUM FRONT YARD SETBACK = 10' (RESIDENTIAL)
- MINIMUM SIDE YARD SETBACK = 5' (RESIDENTIAL)
- MINIMUM REAR YARD SETBACK = 5' (RESIDENTIAL)

LAND PREPARED UNDER THE SUPERVISION OF
 OTTO-BLANCKENHORN GROUP, INC.
 1000 WILSON STREET, SUITE 100
 BANNING, CALIFORNIA 92410
 CONTACT: JAMES HANCOCK, 951-852-1111

Underground Service Alert
 800 TOLL FREE
 1-800-4-A-DAWG
 227-2600

CITY OF BANNING
 APPROVED BY: _____

TENTATIVE TRACT MAP 36939

SCALE: 1" = 40'

ATTACHMENT 6
IS/MND

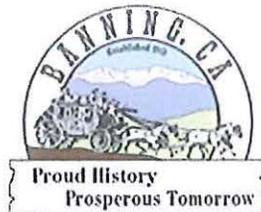
Initial Study Checklist/ Mitigated Negative Declaration

City of Banning:

Tentative Tract Map 36939

for

Property Located Between Sunset Avenue and Sunrise Avenue north of Wilson Street



City Banning

99 East Ramsey Street

Banning, CA 92220

Contact: Brian Guillot, Acting Community Development Director

(951) 922-3152

bguillot@ci.banning.ca.us

Applicant:

Peter J. Pitassi

10621 Civic Center Drive

Rancho Cucamonga, CA 91730

Contact: Peter J. Pitassi

(909) 481-1150

ppitassi@diversifiedpacific.com

Public Review

December 17, 2015

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APPLICATIONS

A. Tentative Tract Map No. 15-4501 (TTM 36939)

TTM 36939 proposes to subdivide a vacant 34.6 acre lot for purposes of creating 98 numbered lots for single-family Residential development and three (3) lettered lots for hydrology purposes, including roadways and supporting infrastructure.

B. Zone Change No. 15-3501

Rezone to amend the zoning map to eliminate the RL-10,000 Overlay affecting the western portion of the site to Low Density Residential (LDR, 0 to 5 units per acre).

1.0. INTRODUCTION

1.1 Purpose of an Initial Study Checklist

The California Environmental Quality Act (CEQA) requires that before a public agency makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment.

The purpose of an Initial Study Checklist is to provide a preliminary analysis of a proposed action to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report should be prepared for a project. An Initial Study Checklist also enables an applicant or the City of Banning to modify a project, mitigating adverse impacts in lieu of preparing an Environmental Impact Report, thereby potentially enabling the project to qualify for a Negative Declaration or a Mitigated Negative Declaration.

The Initial Checklist Study provides a factual basis for a Negative Declaration, Mitigated Negative Declaration, or serves to focus an Environmental Impact Report on the significant effects of a project.

1.2 Purpose of a Negative Declaration

A Mitigated Negative Declaration is a written statement by the City of Banning that the Initial Study Checklist identified potentially significant environmental effects of the project but the project is revised or mitigated measures are required to eliminate or mitigate impacts to less than significant levels.

1.3 Initial Study Checklist/ Negative Declaration Document

This document in its entirety is an Initial Study Checklist/Mitigated Negative Declaration prepared in accordance with the California Environmental Quality Act (CEQA), including all criteria, standards, and procedures of CEQA (California Public Resource Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.).

1.4 Public Review and Processing of the Initial Study Checklist/ Negative Declaration

This Initial Study Checklist/Mitigated Negative Declaration and a *Notice of Intent* to adopt the Mitigated Negative Declaration was distributed to the following entities for a 20-day public review period:

- 1) Organizations and individuals who have previously requested such notice in writing to the City of Banning;
- 2) Responsible and trustee agencies (public agencies that have a level of discretionary approval over some component of the proposed Project); and
- 3) The Riverside County Clerk.

The Notice of Intent also will be noticed to the general public in the *Record Gazette*, which is a primary newspaper of circulation in the areas affected by the Project.

The *Notice of Intent* identifies the location(s) where the Initial Study Checklist/Mitigated Negative Declaration and its associated technical reports are available for public review. During the 20-day public review period, comments on the adequacy of the Initial Study Checklist/Mitigated Negative Declaration document may be submitted to the City of Banning Community Development Department, Planning Division.

Following the 20-day public review period, the City of Banning Planning Division will review any comment letters received during the review period to determine whether any substantive comments were provided that may warrant revisions or recirculation to the Initial Study Checklist/Mitigated Negative Declaration document. If recirculation is not required (as defined by CEQA Guidelines §15073.5(b)), written and/or oral responses will be provided to the City of Banning Planning Commission for review as part of their deliberations concerning the Project.

For this Project, the Banning Planning Commission's role is advisory and will recommend that the Banning City Council approve, conditionally approve, or deny the Project. Accordingly, a public hearing will be held before the Banning City Council to consider the proposed Project, any comments received and make a determination on the adequacy of this Initial Study Checklist/Mitigated Negative Declaration.

At the conclusion of the public hearing process, the City Council will take action to approve, conditionally approve, or deny the proposed Project. If approved, the City Council will adopt findings relative to the Project's environmental effects as disclosed in the Initial Study Checklist/Mitigated Negative Declaration and a *Notice of Determination* will be filed with the Riverside County Clerk.

1.5 Initial Study Checklist/Mitigated Negative Declaration Findings and Conclusions

Section 3.0 of this document contains the Environmental Checklist/Initial Study that was prepared for the proposed Project pursuant to CEQA and City of Banning requirements.

The Initial Study Checklist determined that implementation of the proposed Project would result in **no impacts** to the environment under the following issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Geology and Soils
- Greenhouse Gas Emission
- Hydrology and Water Quality
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems, and,

- Land Use Planning

The Initial Study Checklist determined that the proposed Project would result in **potentially significant effects** to the following issue areas, but the Project Applicant will incorporate mitigation measures that would avoid or mitigate effects to a point where clearly no significant environmental impacts on the environment would occur:

- Biological Resources
- Cultural Resources
- Geological Resources
- Hazards and Hazardous Materials

The Initial Study Checklist determined that, with the incorporation of mitigation measures, there is no substantial evidence, in light of the whole record before the Lead Agency (City of Banning), that the Project as revised may have a significant effect on the environment. Therefore, based on the findings of the Initial Study Checklist, the City of Banning determined that a Mitigated Negative Declaration is the appropriate CEQA determination for the Project pursuant to CEQA Guidelines § 15070(b).

2.0 PROJECT BACKGROUND

2.1 Project Location

The City of Banning covers approximately 23.2 square miles within the County of Riverside. The City is bordered by the City of Beaumont to the west, Morongo Band of Mission Indians to the east and County of Riverside to the east and south. Specifically, the property is located on vacant land northeast of the intersection of Wilson Avenue and Sunset Avenue, as depicted on the U.S. Geological Survey (USGS) 7.5 MINUTE Beaumont, California quadrangle in projected Section 5, Township 3 South, Range 1 East. Refer to Exhibit 1, *Location Map/Aerial Photo*.

The Project site includes the following Assessor Parcel Numbers:

- 535-430-001 through 535-430-021
- 535-431-001 through 535-431-015
- 535-432-001 through 535-432-017
- 535-070-004
- 535-070-006

2.2 Existing Site Conditions/Environmental Setting

CEQA Guidelines §15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as “the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Intent/Notice of Availability is published, or at the time the environmental analysis is commenced...” (CEQA Guidelines §15125[a]).

In the case of the proposed Project, the Initial Study Checklist determined that a Mitigated Negative Declaration is the appropriate form of CEQA compliance document, which does not require a Notice of Preparation. Thus, the environmental setting for the proposed Project is the approximate date that the Project’s Notice of Intent/Notice of Availability is published. The Initial Study Checklist commenced the twenty (20) day circulation on December 11, 2015.

The Project site consists of approximately 34.6 gross acres. The site is undeveloped, but the eastern half of the Project site had previously been graded for home sites in 2009. The site is bordered on the west and north by undeveloped open space, and to the east and south by single-family homes and residences. The site’s topography is relatively flat with slight, hilly undulations and slopes gently to the south. The general elevation of the site ranges from approximately 2,550 to 2,650 feet above mean sea level. Primary access to the site is provided from Sunset Avenue, Sunrise Avenue and Wilson Street. Surrounding land uses are shown on Table 1.

The Gas Company provides natural gas services and facilities to the City of Banning and will be available to the Project site. Natural gas supply to the City originates from Texas, transported by two major east-west trending gas lines. These high pressure gas lines of varying sizes up to 36 inches in diameter, traverse through the eastern desert areas to the western end of Riverside County. In addition to the major east-west trending high-pressure transmission gas lines, other natural gas high pressure lines are located underground in Wilson and Lincoln Streets. A pipeline designed to carry liquid fuels runs east-west through the City. Though not currently in use, this pipeline has been used to transport crude oil, diesel fuel, and gasoline.

Table 1. Existing Land Uses

Location	Existing Use
Site	Vacant
North	Vacant
South	Single-Family Residential
East	Single-Family Residential
West	Vacant
<i>Source: LSA Field Inspection, May 2015</i>	

2.3 Existing General Plan Land Use and Zoning Designations

The City of Banning is an incorporated general law city of Riverside County, California. Prior to its incorporation, the area was governed by Riverside County. The City, incorporated in 1913, has a rich and colorful history. Banning served as a stagecoach and railroad stop between the Arizona territories and Los Angeles. The City is named in honor of General Phineas T. Banning, who freighted over the Mormon trail from Salt Lake to San Bernardino and Los Angeles.

Development activities that occur in the City of Banning are regulated by the City of Banning General Plan, adopted January 31, 2006, and the Zoning Code, referenced as Title 17 of the City of Banning Municipal Code. The General Plan is divided into a number of Area Plans that provide additional guidance for development and more specific land use designations under each category. Each property has a land use designation and a more descriptive Area Plan designation. The designation for the Project site is Low Density Residential and is within the Zoning Overlay RL-10,000 (Residential Low-10,000 square foot lots). The Applicant proposes to rezone the site to LDR (0 to 5 units per acre) by removing the RL-10,000 overlay.

Policy Areas

Policy Areas apply to portions of the General Plan that contain special or unique characteristics that merit detailed attention and focused planning policies. The Project site is not located within Policy Area.

A summary of the existing General Plan land use and Zoning Designations for the Project site and surrounding properties is provided in Table 2.

Table 2. Existing General Plan and Zoning Designations

Location	General Plan Designation	Zoning Designation
Site	Low-Density Residential	Low-Density Residential (0-5 DU/Acre)-RL-10,000 overlay west half
North	Open Space/Specific Plan Area	Open Space/Specific Plan Area
South	Medium Density Residential -Low Density Residential	Medium Density Residential (0-10 DU/Acre)-Low Density Residential (0-5 DU/Acre)
East	Low-Density Residential	Low Density Residential (0-5 DU/Acre)
West	Low Density Residential	Low Density Residential (0-5 DU/Acre) RL-10,000 overlay
<i>Source: City of Banning General Plan Land Use Map, City of Banning-Existing Zoning Map</i>		

2.4 Project Description

The Project Applicant, Peter J. Pitassi, submitted the following applications to the City of Banning which comprise the proposed Project: Tentative Tract Map (TTM 36939). The City of Banning refers to the application as Tentative Tract Map No. 15-4501 (TTM 36939).

The Project’s application materials are on file with the City of Banning Planning Department 99 East Ramsey Street, Banning, CA 92220) and are hereby incorporated by reference.

A. Tentative Tract Map (TTM 36939)

TTM 36939 proposes to subdivide the 34.6 acre site into 98 single-family residential lots with a minimum lot size of 7,000 square feet, three (3) lettered lots for open spaces purposes, roadways and other supporting infrastructure.

The above land uses and other on-site improvements are further described as follows:

Single-Family Residential

Residential lot sizes range from 7,000 square feet to 19,239 square feet. However, the majority of the lot sizes are within the 7,000 to 8,200 square foot range. The Project proposes a density of 2.8 dwelling units per acre.

Water Quality Basin

Two lots, ‘B’ (29,028 sq.ft.) and ‘C’ (23,195 sq.ft.) will function as water quality basins. The basins will serve to retain developed condition runoff and mitigate developed condition flows as required by City Ordinance. City of Banning Ordinance #1415&6 requires that “all development will make provisions to store runoff from rainfall events up to and including the 100 years, three-hour duration event onsite via storage or infiltration basins for new development and redevelopment.

The basins will both be located adjacent to Wilson Street. The basin is for water quality purposes only and does not provide for dual use such as recreation. The basin shall be designed in accordance with the City of Banning Engineering requirements.

On-Site Street Improvements

Access to the Project site is from Sunset Avenue and Sunrise Avenue and Wilson Street. The corridors are existing improved two (2) lane roadway within the Public right-of-way. Curb, gutter, and sidewalk have been partially installed. Wilson Street will parallel lots B and C. All street improvements along Wilson Street, Sunset and Sunrise Avenue will be subject to the City of Banning Engineering and Public Works requirements.

Internal neighborhood streets servicing the tract with curb and gutter within 60 foot two lane travel lanes include Eclipse Drive, and Dawn Lane. Eclipse and Dawn Streets will connect to Sunset and Sunrise Avenues.

On-Site Utility and Drainage Improvements

Water, sewer and electrical service will be provided by the City of Banning Public Works Department and Electrical Division. Sewer and water systems shall be designed in accordance with the City of Banning Engineering and Public Works requirements.

Water and sewer service to the Project site will be provided by the City of Banning. The Project is required to connect to the existing 8-inch water mains on Sunrise and extend an 8-inch diameter water main in Dawn Lane, within the tract boundary to the existing 18-inch diameter water main in Sunset Avenue.

B. Zone Change

The existing site will be rezoned from Low Density Residential (0-5 units per acre) with RL-10,000 Overlay (West Half) to Low Density Residential (0-5 units per acre).

C. Construction Schedule

Houses will be constructed based on market demand and absorption. Construction is expected to commence sometime in ~~2015~~ 2016 and would occur in several general phases. The Project Applicant expects the following time durations for the construction process, which would be somewhat sequential but overlap in some cases:

- Site Preparation 20 Days
- Grading 40 - days
- 1st Phase of Home Construction 60- days
- Architectural Coating 38 - days
- Paving 55 - days

Earthwork and Grading

The earthwork and grading details are based on proposed Tentative Tract Map 36939. The Project proposes 30,000 cubic yards (c.y.) of cut and 39,000 cubic yards of fill. The site is sloping southeasterly at an average rate of 5%, and so to grade building pads and slopes to approximately 5% slope and to match adjacent streets for access, the import of approximately 9,000 cubic yards is anticipated. The eastern half of the site was previously graded to pad and street configuration and will be re-compacted and re-certified.

D. Operational Characteristics

The proposed Project would be operated as a residential community. Typical operational characteristics include residents and visitors traveling to and from the site, leisure and maintenance activities occurring on individual residential lots and in the on-site recreational facilities and general maintenance of common areas. Low levels of noise and a moderate level of artificial exterior lighting typical of a residential community is expected.

Future Population

The Project would be developed with 98 single-family detached residential homes. Pursuant to City of Banning's General Plan, the median household size is currently 2.9 persons per dwelling unit. Using population generation estimates, the proposed Project could increase the City of Banning's population by up to 284 new residents if all the new residents currently reside outside the City limits. The City of Banning's 2003 population estimates (city limits only) as determined by the California Department of Finance is 25,600 residents. The City's population would increase by one (1) percent or ~~25,884~~ 284 residents. The Project is consistent with the Southern California Association of Governments (SCAG) population growth estimates in that the City's population is projected to reach 34,658 in 2010 and 42,027 in 2020. According to the City's Housing Element Regional Housing Needs Assessment (RHNA), the City of Banning has a total housing construction need of 1,780 units and an annual need of 237 units. The Project is consistent with the RHNA housing construction forecast efforts to meet the City's housing needs.

The *General Plan* land use designation currently assigned to the Project site is Low Density Residential (East Half) with a RL-10,000 residential overlay (West Half). The Project as proposed has a density of 2.8 dwelling units per acre.

If the Project site were built out in accordance with its existing *General Plan* land use designation, a maximum of 173 residential dwelling units could be constructed on the property. (Low Density Residential x 5 units per acre x 34.6 acres = 173 units). With the existing RL-10,000, minimum lot size overlay, a total of 150 units could be constructed. The Project proposes 98 residential dwelling units which is below the maximum permitted under the *General Plan* and current Zoning District.

3.0 INITIAL STUDY/ENVIRONMENTAL CHECKLIST

Evaluation Format

This Initial Study Checklist has been prepared in compliance with the California Environmental Quality Act (CEQA) Guidelines. The Project is evaluated based on its potential effect on seventeen (17) environmental factors categorized as follows, as well as Mandatory Findings of Significance:

- | | |
|-------------------------------------|--|
| 1. Aesthetics | 10. Land Use & Planning |
| 2. Agriculture & Forestry Resources | 11. Mineral Resources |
| 3. Air Quality | 12. Noise |
| 4. Biological Resources | 13. Population & Housing |
| 5. Cultural Resources | 14. Public Services |
| 6. Geology & Soils | 15. Recreation |
| 7. Greenhouse Gas Emissions | 16. Transportation & Traffic |
| 8. Hazards & Hazardous Materials | 17. Utilities & Service Systems |
| 9. Hydrology & Water Quality | 18. Mandatory Findings of Significance |

Each factor is analyzed by responding to a series of questions pertaining to the impact of the Project on the particular factor in the form of a checklist. This Initial Study Checklist provides a manner to analyze the impacts of the Project on each factor in order to determine the severity of the impact and determine if mitigation measures can be implemented to reduce the impact to less than significant without having to prepare an Environmental Impact Report.

CEQA also requires Lead Agencies to evaluate potential environmental effects based to the fullest extent possible on scientific and factual data (CEQA Guidelines §15064[b]). A determination of whether or not a particular environmental impact will be significant must be based on substantial evidence, which includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts (CEQA Guidelines §15064f[5]).

The effects of the Project are then placed in the following four categories, which are each followed by a summary to substantiate why the Project does not impact the particular factor with or without mitigation. If "Potentially Significant Impacts" that cannot be mitigated are determined, then the Project does not qualify for a Mitigated Negative Declaration and an Environmental Impact Report must be prepared:

<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Potentially significant impact(s) have been identified or anticipated that cannot be mitigated to a level of insignificance. An Environmental Impact Report must therefore be prepared.	Potentially significant impact(s) have been identified or anticipated, but mitigation is possible to reduce impact(s) to a less than significant category. Mitigation measures must then be identified.	No "significant" impact(s) identified or anticipated. Therefore, no mitigation is necessary.	No impact(s) identified or anticipated. Therefore, no mitigation is necessary.

Throughout the impact analysis in this Initial Study Checklist, reference is made to the following:

- **Plans, Policies, Programs (PPP)** – These include existing regulatory requirements such as plans, policies, or programs applied to the Project based on the basis of federal, state, or local law currently in place which effectively reduce environmental impacts.
- **Project Design Features (PDF)** – These measures include features proposed by the Project that are already incorporated into the Project’s design and are specifically intended to reduce or avoid impacts (e.g., water quality treatment basins).
- **Mitigation Measures (MM)** – These measures include requirements that are imposed where the impact analysis determines that implementation of the proposed Project would result in significant impacts. Mitigation measures are proposed to reduce impacts to less than significant levels. In accordance with the requirements of *CEQA*.

Plans, Policies, or Programs (PPP) and the Project Design Features (PDF) were assumed and accounted for in the assessment of impacts for each issue area.

Mitigation Measures (MM) were formulated only for those issue areas where the results of the impact analysis identified significant impacts that could to be reduced to less than significant levels.

All three types of measures described above will be required to be implemented as part of the Project, and will be included in the Mitigation Monitoring and Reporting Program for the Project.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

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

Because none of the environmental factors above are "checked", the Project does not require the preparation of an Environmental Impact Report.

Determination

On the basis of this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be recommended for adoption.

I find that although the proposal 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 Applicant. A MITIGATED NEGATIVE DECLARATION will be recommended for adoption.

I find that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposal MAY have a significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." 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 effect (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to all applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures are imposed upon the proposed Project, nothing further is required.



Signature

City of Banning

Agency

Brian Guillot
Acting Community Development Director

Printed Name/Title

December 11, 2015

Date

Appendices (On Compact Disk)

Appendix A. Multiple Species Habitat Conservation Plan

Appendix B. Cultural Resources Assessment

Appendix C. Focused Traffic Impact Study

Appendix D. Jurisdictional Delineation Report

Appendix E. Air Quality/Green House Gases Report

Appendix F. Water Quality Management Plan (WQMP)

3.1 Aesthetics

<i>Would the Project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 day or nighttime views in the area?			☐	

3.1 (a.) *Have a substantial adverse effect on a scenic vista?*

Determination: Less than Significant Impact.

Sources: General Plan, City of Banning, Google Earth, Project Application Materials.

Plans, Policies or Programs (PPP)

The following applies to the Project and would reduce impacts related to scenic vistas.

PPP 3.1-1 Banning Zoning Code: As required by the City of Banning Zoning Regulations, Table 17.08.030, residential building heights shall not exceed thirty-five (35) feet in height.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The site is a 34.6 acres vacant lot and is currently zoned Low Density Residential (0-5 du/ac) and RL-10,000 Overlay. The site slopes downward from the northwest to the southeast with elevations from 2,640 above sea level at the northwest corner of the project site to 2,593 above sea level at the north east corner. The elevation differential from the site’s north edge to Wilson Street is approximately eight (8) feet.

The Project butts against the San Bernardino National Forest. The San Bernardino National Forest lands are interspersed throughout the north central and northwesterly portions of the City’s planning area. There are no existing authorized or mapped trails on Forest lands in the planning area, nor trails proposed by the U.S. Forest Service. The Scenic Easement Deed Act (Government Code Sections 6950-6954) authorizes local governments to purchase fee land or scenic easements.

No scenic easements of record however lie adjacent to the Project area that will be affected by the future residential development. However, approximately 4.6 acres, referenced as Lot A on the Tract Map will remain as Open Space and function as a land buffer between the mountain foothills and the Project site. The 4.6 acres extends the length of the Project site.

As required by PPP 3.1-1 above, the residential structures proposed of the property are restricted to 35 feet in height and would not block or completely obstruct views from surrounding public roadways to the hills and mountains visible in the horizon under existing conditions.

The Project proposes to subdivide the site into 98 single-family residential lots and provide neighborhoods roadways and other supporting infrastructure. Views from the residences to the east and south will be affected by the construction of the proposed Project, insofar as the existing homes to the south are located at a lower elevation than those of the proposed Project. However the homes to the south are separated by Wilson Street, the Montgomery Creek Channel and the Creek's spreading basin area. Homes to the east are partially separated by Sunrise Avenue with existing homes further north along Sunrise Avenue lying adjacent to the Project site. Double row lots between Dawn Lane and Eclipse Drive separated by manufactured slopes between housing lots will be buttressed by retaining walls and slopes ranging from 8 to 30 feet. Residents on the low side of the slope will have back yards in accordance with the Zoning requirements for Low Density Residential districts. All views, particularly those to the north, south, and south easterly and northeasterly areas will not be affected by significant slope gradients.

With the implementation of PPP 3.1-1 the proposed Project impacts on aesthetics and scenic resources are expected to be less than significant.

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

Determination: No Impact.

Sources: California Department of Transportation "Scenic Highway Program Eligible and Officially Designated Routes," Banning General Plan Figure - Google Earth.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

According to the California Department of Transportation, the Project site is not located within a State Scenic Highway neither is the Project site adjacent to a County Scenic Highway. Therefore, construction and the long-term operation of the Project would have no impact on scenic resources within a scenic highway and no mitigation measures are required.

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

Determination: Less Than Significant Impact.

Sources: Project Application Materials, Google Earth.

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts related to the visual character and quality of the site and its surroundings. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.1-2 The Project shall comply with the *City of Banning Grading, Erosion and Sediment Control, Title 18 of the City of Banning Municipal Code* for residential development.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

Construction Impacts

During the Project's temporary construction period, construction equipment, supplies, and activities would be visible on the subject property from immediately surrounding areas. Construction activities are a common occurrence in the developing Inland Empire region of Southern California and are not considered to substantially degrade the area's visual quality. All construction equipment would be removed from the Project site following completion of the Project's construction activities. For these reasons, the temporary visibility of construction equipment and activities at the Project site would not substantially degrade the visual character of the surrounding area.

Operational Impacts

Development of the Project site would introduce residential development onto the site. The residential development will consist of single-family detached homes, with related improvements such as roadways, landscaping, walls, and street lights. These improvements would be implemented in accordance with the design standards contained in the *City of Banning Zoning Code*. Although the existing visual character of the site will change, it will not substantially change the character of the Project site such that it becomes visually incompatible or visually unexpected when viewed in the context of its residential surroundings.

Based on the analysis above, with implementation of PPP 3.1-2, impacts would be less than significant and no mitigation measures are required.

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

Determination: Less Than Significant Impact.

Sources: City of Banning Zoning Standards, Project Application Materials

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts related to light and glare. This measure would be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.1-3 As required by the City of Banning outdoor lighting, other than street lighting, shall be low to the ground or shielded and hooded to avoid shining onto adjacent properties and streets.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The proposed Project would increase the amount of light in the area above what is being generated by the vacant site by directly adding new sources of illumination including security and decorative lighting for the proposed houses.

PPP 3.1-3 requires that outdoor lighting, other than street lighting, shall be low to the ground or shielded and hooded to avoid shining onto adjacent properties and streets.

Based on the analysis above, with implementation of PPP 3.1-1, 3.1-2, and PPP 3.1-3 impacts would be less than significant and no mitigation measures are required.

3.2 AGRICULTURE AND FORESTRY RESOURCES

<p><i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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:</i></p>	<p>Potentially Significant Impact</p>	<p>Less Than Significant Impact With Mitigation Incorporated</p>	<p>Less Than Significant Impact</p>	<p>No Impact</p>
<p>a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>				■
<p>b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>				■
<p>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))?</p>				■
<p>d. Result in the loss of forest land or conversion of forest land to non-forest use?</p>				■
<p>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?</p>				■

3.2 (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? .

Determination: No Impact

Sources: Banning General Plan Land Use Map, Zoning Map

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program. As such, the Project has no potential to convert such lands to a non-agricultural use and no impact would occur. No mitigation measures are required.

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

Determination: No Impact.

Sources: Banning General Plan Land Use Map, Zoning Map

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The Project site is zoned RL-10,000. As such, it will not conflict with existing zoning for agricultural use. Pursuant to the California Land Conservation Act of 1965, a Williamson Act Contract enables private landowners to voluntarily enter into contracts with local governments for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive lower property tax assessments based upon farming and open space uses as opposed to full market value. The site is not under a Williamson Act Contract. As such, there is no impact. No mitigation measures are required.

3.2 (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))?

Determination: No Impact.

Sources: Banning General Plan Land Use Map, Zoning Map.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The Project site is zoned RL 10,000. No forest land, timberland, or timberland production occurs on the site so zoning for such uses or activities will not be impacted. Therefore, no impacts would occur and no mitigation measures are required.

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

Determination: No Impact.

Source: Field Survey.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The Project site consists of vacant land and does not contain forest land. Therefore, no impacts would occur and no mitigation measures are required.

3.2 (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?

Determination: No Impact.

Sources: Banning General Plan Land Use Map, Field Survey

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The Project site is approximately 34.6 gross acres in size and is situated by residential development and located in an area largely characterized by residential single family development. There is no land being used primarily for agricultural purposes in the vicinity of the site. As such, the Project would not result in conversion of Farmland to non-agricultural use and no impacts would occur. No mitigation measures are required.

3.3 AIR QUALITY

<i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			■	

3.3 (a) Conflict with or obstruct implementation of the applicable air quality plan (South Coast Air Quality Management District)?

Determination: Less Than Significant Impact.

Sources: LSA Associates, Air Quality and Climate change Study for Banning TTM 36939, September 24, 2015.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

Federal Air Quality Standards

Under the Federal Clean Air Act, the Federal Environmental Protection Agency establishes health-based air quality standards that California must achieve. These are called “national ambient air quality standards” and they apply to what are called “criteria pollutants.” Ambient (i.e. surrounding) air quality standard establish a concentration above which a criteria pollutant is known to cause adverse health effects to people. The national ambient air quality standards apply to the following criteria pollutants:

- Ozone (8-hour standard)

- Respirable Particulate Matter (PM10)
- Fine Particulate Matter (PM2.5)
- Carbon Monoxide (CO)
- Nitrogen Dioxide (NOx)
- Sulphur Dioxide (SO2), and
- Lead.

State Air Quality Standards

Under the California Clean Air Act, the California Air Resources Board also establishes health-based air quality standards that cities and counties (including ~~Jurupa Valley~~ Banning) must meet. These are called “state ambient air quality standards” and they apply to the following criteria pollutants:

- Ozone (1-hour standard)
- Ozone (8-hour standard)
- Respirable Particulate Matter (PM10)
- Fine Particulate Matter (PM2.5)
- Carbon Monoxide (CO)
- Nitrogen Dioxide (NOx)
- Sulphur Dioxide (SO2), and
- Lead

Regional Air Quality Standards

The City of Banning is located within the South Coast Air Basin which is under the jurisdiction of the South Coast Air Quality Management District. The District develops plans and regulations designed to achieve these both the national and state ambient air quality standards described above.

Attainment Designation

An “attainment” designation for an area signifies that criteria pollutant concentrations did not exceed the established standard. In contrast to attainment, a “nonattainment” designation indicates that a criteria pollutant concentration has exceeded the established standard.

Table 3 shows the attainment status of criteria pollutants in the South Coast Air Basin.

Table 3. Attainment Status of Criteria Pollutants in the South Coast Air Basin.

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1 hour standard	Nonattainment	No Standard
Ozone – 8 hour standard	Nonattainment	Nonattainment
Respirable Particulate Matter (PM10)	Nonattainment	Nonattainment
Fine Particulate Matter (PM2.5)	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NOx)	Nonattainment	Attainment
Sulfur Dioxide (SO2)	Attainment	Attainment
Lead	Attainment	Attainment

Source: South Coast Air Quality Management District, 2014

Air Quality Management Plan

The South Coast Air Quality Management District is required to produce air quality management plans directing how the South Coast Air Basin’s air quality will be brought into attainment with the national and state ambient air quality standards. The most recent air quality management plan is 2012 Air Quality Management Plan *and* it is applicable to City of Banning. The purpose of the 2012 Air Quality Management Plan is to achieve and maintain both the national and state ambient air quality standards described above.

In order to determine if a project is consistent with the 2012 Air Quality Management Plan, the South Coast Air Quality Management District has established consistency criterion which are defined in Chapter 12, Sections 12.2 and 12.3 of the South Coast Air Quality Management District’s CEQA Air Quality Handbook and are discussed below.

Consistency Criterion No. 1: *The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the 2012 Air Quality Management Plan.*

Consistency Criterion No. 1 refers to violations of the California Ambient Air Quality Standards and National Ambient Air Quality Standards. As evaluated under Issues 3.3 (b), (c), and (d), below, the Project would not exceed regional or localized significance thresholds for any criteria pollutant during construction or during long-term operation. Accordingly, the Project’s regional and localized emissions would not contribute substantially to an existing or potential future air quality violation or delay the attainment of air quality standards.

Consistency Criterion No. 2: *The proposed project will not exceed the assumptions in the 2012 Air Quality Management Plan.*

The growth forecasts used in the 2012 Air Quality Management Plan to project future emissions levels are based on the projections of the Regional Transportation Model utilized by the Southern

California Association of Governments, which incorporates land use data provided by city and county General Plans, as well as assumptions regarding population number, location of population growth, and a regional housing needs assessment.

The Banning General Plan land use designations currently assigned to the Project site is Low Density Residential (0 to 5 du/ac). If the Project site were built out in accordance with its existing *General Plan* land use designation, a maximum of 173 residential dwelling units could be constructed on the property. (Low Density Residential @ 5 units per acre x 34.6 acres = 173 units. The Project proposes only 98 single family residential dwelling units, which, constitutes only 57 percent of the development potential of the site. The housing density proposed is significantly below the build-out permitted under the current land use designation.

The 2012 Air Quality Management Plan relied in part upon the City's General Plan for the growth forecast estimates used in the 2012 Air Quality Management Plan. As such, the Project would not exceed the assumptions in the 2012 Air Quality Management Plan because it does not exceed the growth forecasts contained in the Plan.

For the reasons stated above, the Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, delay the timely attainment of air quality standards or the interim emissions reductions specified in the 2012 Air Quality Management Plan. In addition, the Project would not exceed the growth assumptions in the 2012 Air Quality Management Plan. As such, the Project would be consistent with the 2012 Air Quality Management Plan and impacts would be less than significant and no mitigation measures are required.

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

Determination: Less Than Significant Impact.

Sources: California Emissions Estimator Model, South Coast Air Quality Management District, Air Quality Management Plan, CEQA Air Quality Handbook, Project Application Materials

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts related to air quality violations. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.3-1 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402, A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

PPP 3.3-2 The Project is required to comply with Rule 403 "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving and stockpiling activities, grading, and equipment travel on unpaved roads.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The South Coast Air Quality Management District has developed regional and localized significance thresholds for regulated pollutants. Any project in the South Coast Air Basin with daily emissions that exceed any of the indicated regional or localized significance thresholds would be considered to contribute to a projected air quality violation. The Proposed Project's regional and localized air quality impacts are discussed below as shown in Table 4.

Regional Impact Analysis

As with any new development project, the Proposed Project has the potential to generate pollutant concentrations during both construction activities and long-term operation. The following provides an analysis based on the applicable regional significance thresholds established by the South Coast Air Quality Management District in order to meet Federal and State air quality standards.

Table 4. South Coast Air Quality Management District Air Quality Regional Significance Thresholds

Pollutant	Emissions (Construction) (pounds/day)	Emissions (Operational) (pounds/day)
NOx	100	55
VOC	75	55
PM10	150	150
PM2.5	55	55
SOx	150	150
CO	550	550
Lead	3	3

Source: South Coast Air Quality Management District CEQA Air Quality Significance Thresholds (2009)

Both construction and operational emissions for the Project were estimated by using the California Emissions Estimator Model which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as California Environmental Quality Act (CEQA) documents and is authorized for use by the South Coast Air Quality Management District.

Construction Related Impacts

Construction activities associated with the proposed Project will result in emissions of CO, VOCs, NOx, SOx, PM10, and PM2.5. Construction related emissions are expected from the following onsite and offsite construction activities and time duration:

- Site Preparation 20 Days
- Grading 40 Days
- 1st Phase of Home Construction 60 Days
- Architectural Coating 38 Days
- Paving 55 Days

Table 5 shows the South Coast Air Quality Management District daily criteria pollutant emissions thresholds for construction and operation of the proposed project in the Basin using the CalEEMod Model

Table 5. SCAQMD Emissions Thresholds

Emissions Source	Pollutant Thresholds (pounds per day)					
	ROC	NOX	CO	SO2	PM10	PM2.5
Construction	41	75	50	.064	10	6.6
Operational	55	100	550	150	150	55
	No	No	No	No	No	No

Source: LSA Associates Air Quality and Climate Change Study, September 24, 2015

As shown in Table 5 above, construction related emissions would not exceed South Coast Air Quality Management District regional construction criteria thresholds without mitigation. With implementation of PPP 3.3-1 above (includes increasing wetting disturbed areas to 3-times per day, reduce speed to 25 mph on unpaved areas of project, and cleaning paved access roads daily) PM10 emissions are reduced.

Fugitive Dust

Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, including cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations and weather conditions at the time of construction. The proposed project will be required to comply with SCAQMD Rules 402 and 403 to control fugitive dust. Table 5 lists total construction emissions (i.e., fugitive-dust emission and construction-equipment exhausts) that have incorporated a number of feasible control measures that can be reasonably implemented to significantly reduce PM10 emissions from construction.

Table 6: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)								
	VOC	NO _x	CO	SO _x	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}	CO _{2e}
Site Preparation	5.1	55	42	0.042	7.2	2.9	3.9	2.7	4,300
Grading	6.6	75	50	0.064	3.6	3.6	1.5	3.3	6,700
Building Construction	3.6	30	21	0.034	0.45	2	0.12	1.9	3,300
Architectural Coating	37	2.4	2.3	0.0039	0.078	0.2	0.021	0.2	360
Paving	2.1	22	16	0.024	0.17	1.3	0.015	1.2	2,500
Peak Daily	41	75	50	0.064	10		6.6		6,700
SCAQMD Thresholds	75	100	550	150	150		55		No
Significant Emissions?	No	No	No	No	No		No		Threshold

Architectural Coatings

Architectural coatings contain VOCs and are part of the O3 precursors. Based on the proposed project, it is estimated that application of the architectural coatings for the proposed peak construction day will result in a combined peak of 44lbs/day of VOC. Therefore, this VOC emission will not exceed the SCAQMD VOC Threshold of 75lbs/day.

Localized Impacts Analysis as described in the SCAQMD guidance on applying CalEEMod modeling results to localized impacts analysis, the equipment planned to be used on a peak day during site preparation and grading operations would disturb no more than 5 acres in a day¹. Thus the 5-acre LST thresholds are appropriate for this project. Table 7 shows that the emissions of pollutants on the peak day of construction would all be less than the SCQAMD LST thresholds, which means that the resulting concentrations at the church and nearest residences would be below the NAAQS and CAAQS concentrations.

Table 7. Construction Localized Impacts Analysis

Emissions Sources	NOx	CO	PM10	PM2.5
	On-Site Emission s	75	49	10
LST Thresholds	259	3,423	58	13
Significant Emissions?	NO	NO	NO	NO

1. South Coast Air Quality Management District (SCAQMD). Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/calceemod-guidance.pdf>, accessed September, 2015

Based on the above, the Project would not emit substantial concentrations of these pollutants during construction and would not contribute to an existing or projected air quality violation, on a direct or cumulative basis.

Odors

Heavy-duty equipment in the project area during construction would emit odors, primarily from the equipment exhaust. SCAQMD Rule 402 regarding nuisance states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which

cause, or have a natural tendency to cause, injury or damage to business or property." The proposed uses are not anticipated to emit any objectionable odors. Therefore, objectionable odors posing a health risk to potential on-site and existing off-site uses would not occur as a result of the proposed project, and no mitigation measures are required.

Naturally Occurring Asbestos

The proposed project is located in Riverside County, which is not among the counties that are found to have serpentine and ultramafic rock in their soils. Therefore, the potential risk for NOA during project construction is small and less than significant.

Table 6 and 7 show that daily regional construction emissions would not exceed the daily thresholds of any criteria pollutant emission thresholds established by the SCAQMD, and during construction, there will be no locally significant impacts, thus, no mitigation is required during project construction.

Long-Term Air Emission Impacts

Long-term air emission impacts are those associated with stationary sources and mobile sources involving any project-related change. The proposed project would result in both stationary and mobile source emissions. The stationary source emissions would come from natural gas consumption, landscape maintenance, and off-site electric power generation. Mobile sources from vehicular trips associated with the proposed uses emit pollutants.

The CalMEEMod Model was used to calculate the operational emissions. Mobile sources emissions were calculated based on the trip generation factors described in the Focused Traffic Impact Study (LSA Associates, Inc., September 2015). Other emissions sources were calculated using the defaults in the CalEEMod mode for the project land use.

Long-term operational emission associated with the full proposed project of 98 homes are shown in Table 8. Table 7 shows that the peak daily emissions of all criterial pollutants as a result of the proposed project would not exceed the corresponding SCAQMD daily emission thresholds. Therefore, project-related long-term air quality impacts would be less than significant.

Table 8: Opening Year Regional Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Sources	4.3	0.096	8.2	0.00043	0.18	0.17
Energy Sources	0.098	0.84	0.36	0.0053	0.068	0.068
Mobile Sources	3.6	12	41	0.099	6.9	2.0
Total Project Emissions	8.0	13	50	0.10	7.1	2.2
SCAQMD Thresholds	55	55	550	150	150	55
Significant?	No	No	No	No	No	No

Based on the analysis above, regional air quality impacts would be less than significant and no mitigation measures are required. With implementation of PPP 3.3-1 impacts would be further reduced to the maximum extent feasible.

Localized Impact Analysis

The localized impacts analysis by design only includes on-site sources; however, the CalEEMod model outputs for operations do not separate on-site and off-site emissions. The emissions shown in Table 9 below for area sources are assumed to all occur on site and for energy sources entirely off site. While some of the mobile-source emission will occur from vehicles driving on site, most of the mobile-source emissions calculated by the CalEEMod model would occur while the vehicles are driving off site. It is unlikely that the average on-site distance driven by vehicles will be 2,000 ft, which is approximately 4 percent of the total miles traveled. For a worst-case scenario assessment, the emissions shown in Table 9 include all on-site project-related area sources and 5 percent of the project-related new mobile sources

Table 9: Long-Term Operational Localized Impact Analysis (lbs/day)

Emissions Sources	NO _x	CO	PM ₁₀	PM _{2.5}
On-site emissions	0.70	10	0.53	0.27
LST Thresholds	259	3,423	14	3.8
Significant Emissions?	No	No	No	No

Table 9 shows that the emissions of pollutants during project operations would all be less than the SCAQMD LST thresholds, which means that the resulting concentrations at the church and nearest residences would be all below the NAAQS and CAAQS. Therefore, the proposed operational activity would not result in a locally significant air quality impact.

3.3(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)?*

Determination: Less Than Significant Impact.

Sources: California Emissions Estimator Model, South Coast Air Quality Management District, Air Quality Management Plan, CEQA Air Quality Handbook, Project Application Materials.

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts related to a cumulatively considerable net increase of any criteria pollutant. These measures will be included in the Project’s Mitigation Monitoring and Reporting Program:

- PPP 3.3-1 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 (Nuisance), “A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”
- PPP 3.3-2 The Project is required to comply with Rule 403 “Fugitive Dust.” Rule 403 requires implementation of best available dust control measures during construction

activities that generate fugitive dust, such as earth moving and stockpiling activities, grading, and equipment travel on unpaved roads.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

As discussed in Issue 3.3(b) above, the Project would not exceed the regional or localized significance thresholds for construction or operational activities. The Project would comply with South Coast Air Quality Management District Rule 402 (Nuisance) and Rule 403 (fugitive dust control) during construction, as well as all other adopted Air Quality Management Plan emissions control measures. Per South Coast Air Quality Management District rules and mandates, as well the California Environmental Quality Act requirement that impacts be mitigated to the maximum extent feasible, these same requirements would also be imposed on all projects within the South Coast Air Basin area, which would include all related projects.

Based on the analysis above impacts would be less than significant and no mitigation measures are required. With implementation of PPP 3.3-1 through PPP 3.3-2, impacts would be further reduced to the maximum extent feasible.

3.3(d) Expose sensitive receptors to substantial pollutant concentrations?

Determination: Less Than Significant Impact.

Sources, South Coast Air Quality Management District, CALFEEMod.

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts related to substantial pollutant concentrations to sensitive receptors. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

- PPP 3.3-1 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402, "Nuisance". A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- PPP 3.3-2 The Project is required to comply with Rule 403 "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving and stockpiling activities, grading, and equipment travel on unpaved roads.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

Sensitive receptors (i.e., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effects of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes. The residential uses adjacent to the site are considered sensitive receptors.

As indicated above under the discussion of Issue 3.3 (b), the Project would not exceed any of the South Coast Air Quality Management District's Localized Significance Thresholds during near-term construction or long-term operation. In addition, the Project would not create a CO Hot Spot. Accordingly, Project-related localized emissions would not expose sensitive receptors to substantial pollutant concentrations during construction or long-term operation, and impacts would be less than significant. With implementation of PPP 3.3-1 through PPP 3.3-2, impacts would be further reduced to the maximum extent feasible.

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

Determination: Less Than Significant Impact.

Source: CEQA Air Quality Handbook, Project Application Materials.

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts related to objectionable odors. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.3-1 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." Adherence to Rule 402 reduces the release of odorous emissions into the atmosphere.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

According to the South Coast Air Quality Management District CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project does not include any the above identified uses and therefore would not produce objectionable odors during operation.

Construction activities both onsite and offsite could produce odors from equipment exhaust, application of asphalt, and/or the application of architectural coatings. However, any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon completion of construction activities.

Based on the analysis above impacts would be less than significant and no mitigation measures are required. With implementation of PPP 3.3-1, impacts would be further reduced to the maximum extent feasible.

3.4 BIOLOGICAL RESOURCES

<i>Would the Project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				■

3.4(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?*

Determination: Less Than Significant with Mitigation Incorporated.

Source: MSHCP Consistency Analysis and Habitat Assessment, LSA, May 2015

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts related to impacts to candidate, sensitive, or special status species. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.4-1 The Project is required to pay Fish and Wildlife fees to California Department of Fish and Wildlife.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The project site is highly disturbed due to past and current land use practices. The resulting disturbance caused the vegetation on the project site to be dominated by ruderal vegetation. The east side of the project site consists solely of Russian thistle (*Salsola tragus*) and the west side of the project consists primarily of non-native grasslands where red brome (*Bromus madritensis*), ripgut brome (*Bromus diandrus*) and wild oat (*Avena fatua*) are dominant.

The project is located within the Pass Area Plan of the Multiple Species Habitat Conservation Plan (MSHCP), but is not located within a Criteria Area or adjacent to a Criteria Area or Conservation Area. However, as the subject site not within or adjacent to a Criteria Area, the project is not subject to the Urban/Wildlife Interface Guidelines. Riverine resources are present. The project site is within the MSHCP survey area for Narrow and Endemic Plant Species Habitat Assessment (NEPSSA) and burrowing owl. A survey for burrowing owl was conducted on May 5 and 6, 2015. Suitable habitat for burrowing owl is present on site, specifically within the open areas surrounded by low-lying ruderal vegetation. No burrowing owls or burrowing owl sign (e.g., whitewash, pellets, scat, tracks, and/or feathers) were observed during the survey, and no burrows that could have been occupied by burrowing owl were found. Mitigation is required.

Mitigation Measure (MM)

MM BIO-1: Pre-Construction Burrowing Owl Survey. Per the Multiple Species Habitat Conservation Plan, an additional pre-construction Burrowing Owl survey will be required within 30 days prior to beginning of site grading.

- a. *In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow California Department of Fish and Wildlife relocation protocol. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow California Department of Fish and Wildlife relocation protocol. The biologist shall confirm in writing to the Planning Department that the species has fledged or been relocated prior to the issuance of a grading permit.*

With implementation of Mitigation Measure BIO-1, impacts related to candidate, sensitive, or special status species are less than significant.

3.4(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 Wildlife or U.S. Fish and Wildlife Service?*

Determination: No Impact.

Source: MSHCP Consistency Analysis and Habitat Assessment, LSA, May 2015

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The Project site is almost entirely covered by disturbed, ruderal vegetation. Sporadic ornamental plant and tree species were also found on site, with small isolated polygons of California buckwheat, California sage brush and three Mexican elderberry trees located along the southwestern area. No indication of riparian habitat, wetland waters of the U.S. were found or other sensitive natural communities was noted due to the highly disturbed nature of the site. As such, there is no impact and no mitigation measures are required.

3.4(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?*

Determination: No Impact.

Source: MSHCP Consistency Analysis and Habitat Assessment, LSA, May 2015

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

Based on a field survey, the Project site does not contain any wetlands. Three drainage courses were identified by fieldwork investigation of the site. The entire site was surveyed on foot for potential wetlands and non-wetland jurisdictional waters as well as streambed and riparian

resources. Drainages D1 and D2 drain southeast through the project site. Both convey flows through the site into Montgomery Creek Channel which borders the southern boundary of the site. The third drainage course appears to be an erosional feature associated with water towers north of the project site and not a relatively permanent water course that the Army Corp. of Engineers, (ACOE) would typically regulate. The Montgomery Creek Channel conveys flows under Interstate 10 to Smith Creek. Smith Creek flows into the San Geronio River, to the Whitewater River, which is a direct tributary to the Salton Sea. The drainage feature do not qualify as wetlands.. As such, there are no impacts and no mitigation measures are required.

3.4(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?*

Determination: No Impact.

Source: MSHCP Consistency Analysis and Habitat Assessment, LSA, May 2015

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project related to this issue.

Impact Analysis

The Project site consists of approximately 34.6 gross acres and lies adjacent to sites zoned for Low Density Residential to the east, west and south, and Open Space Parks to the north. The Project site is almost entirely covered by disturbed, ruderal vegetation. Sporadic ornamental plant and tree species were also found on site. No indication of wildlife was noted due to the highly disturbed nature of the site. As such, there are no impacts and no mitigation measures are required.

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

Determination: Less Than Significant Impact With Mitigation Incorporated.

Source: MSHCP Consistency Analysis and Habitat Assessment, LSA, May 2015

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site is almost entirely covered by disturbed, ruderal vegetation. Sporadic ornamental plant and tree species were also found on site, with small isolated polygons of California buckwheat, California sage brush and three Mexican elderberry trees located along the southwestern area.

The City of Banning's General Plan Biological Resources Element includes provisions to provide for the preservation and protection of the natural environment and many biological resources. Biological resources represent the plants and wildlife species and ecosystems and habitats that contribute to the area's natural setting. As set forth in Government Code Section 65302(d), the City is required to include an element that provides for the conservation and preservation of wildlife resources. Wildlife common to suburban areas was observed using the site in the field survey investigation conducted on May 5, 2015. The project's Multiple Species Habitat Conservation Plan (MSHCP) cites that the project is not located within a Criteria Area or adjacent to a Criteria Area or Conservation Area. Thus the project is not subject to the Urban/Wildlands Interface Guidelines. Based on General Plan policies Policy 2, Program 2.A, the following mitigation measure is intended to reduce impacts:

- *Biological Resource Policy 2, Program 2.A* The City shall evaluate projects based on their impact on existing habitat and wildlife, and for the land's value as viable open space.

Mitigation Measures (MM)

MM BIO-2.Native Plan Recovery: Developer shall recover native and drought tolerant plant materials, and incorporate them into project landscaping, to provide or enhance habitat for local species to the extent possible.

With implementation of Mitigation Measures BIO-1 and BIO-2, impacts will be less than significant.

3.4(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?

Determination: No Impact

Source: MSHCP Consistency Analysis and Habitat Assessment, LSA, May 2015

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP, a regional Habitat Conservation Plan was adopted on June 17, 2003. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to sensitive species.

Based on the Biological Resources Walkover Review and a review of the MSHCP Consistency Analysis and Habitat Assessment Study prepared by LSA, May 2015:

- The Project site is not located within an MSHCP Criteria Area (area proposed for conservation).
- The Project site does not contain MSHCP riparian/riverine areas or vernal pools.
- The Project site does not impact any MSHCP Narrow Endemic Plant Species.
- The Project site is not required to comply with the Urban/Wildland Interface Guidelines.
- No large burrows were found in the area and the particularly dense ruderal vegetation suggest poor habitat for burrowing owl. However, their presence cannot be ruled out because burrowing owls have been known to occupy disturbed sites. Mitigation is required.

Mitigation Measures (MM)

Mitigation Measure BIO-1 under Issue 3.4(a) above shall apply.

With implementation of Mitigation Measure BIO-1, impacts related to conflicts with the provisions of the City's General Plan Biological Element are less than significant.

3.5 CULTURAL RESOURCES

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

3.5(a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?

Determination: No Impact.

Source: Cultural Resources Assessment, Banning Tract 36939, LSA, May 2015, City of Banning General Plan

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Historic resources generally consist of buildings, structures, improvements, and remnants associated with a significant historic event or person(s) and/or have a historically significant style, design, or achievement. Damaging or demolition of historic resources is typically considered to be a significant impact. Impacts to historic resources can occur through direct impacts, such as destruction or removal, and indirect impacts, such as a change in the setting of a historic resource.

CEQA Guidelines §15064.5(a) clarifies that historical resources include the following:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
2. A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements [of] section 5024.1(g) of the Public Resources Code.

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.

The site is highly disturbed by activities involving the removal of the citrus grove. There is a corrugated metal shed structure that is in a dilapidated condition. The majority of the site is covered by disturbed, ruderal vegetation. Sporadic ornamental plant and tree species were also found on site. Given the current conditions of the site, it does not appear that any surface cultural resources are present on the site. In addition, the site also does not appear on the Riverside County Historic Resources Survey Architectural Survey Forms provided by the Riverside County Parks Department.

Therefore, there will be no impact to historical resources as a result of the Project and no mitigation measures are required.

3.5(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?

Determination: Less Than Significant Impact with Mitigation Incorporated.

Source: Cultural Resources Assessment, Banning Tract 36939, LSA, May 2015, City of Banning General Plan

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Archaeological sites are locations that contain resources associated with former human activities, and may contain such resources as human skeletal remains, waste from tool manufacture, tool concentrations, and/or discoloration or accumulation of soil or food remains.

During grading activities, it is possible that subsurface archaeological resources may be uncovered. The following mitigation measure is required.

Mitigation Measures (MM)

MM CR-1: Archaeological Monitoring. Prior to the issuance of a grading permit, the Project Proponent shall implement the following program:

- a) *A qualified archaeological monitor shall be retained by the Project Proponent to conduct monitoring of all grading and trenching activities and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.*

- b) During grading operations, a professional archaeological monitor shall observe the grading operation until such time as monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure CR-2 shall apply.

MM CR-2: Treatment Plan. If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Proponent, and the City of Banning Community Development Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is two (2) to five (5) percent of the volume of the cultural deposit). The treatment plan shall require monitoring by the appropriate Native American Tribe(s) during data recovery excavations of archaeological resource(s) of prehistoric origin, and shall require that all recovered artifacts undergo laboratory analysis. At the completion of the laboratory analysis, any recovered archaeological resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American Tribe(s) if that is recommended by the City of Banning. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City of Banning Community Development Department.

With implementation of Mitigation Measures CR-1 and CR-2, impacts will be less than significant.

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

Determination: Less Than Significant Impact with Mitigation Incorporated.

Sources: Cultural Resources Assessment, Banning Tract 36939, LSA, May 2015, City of Banning General Plan

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine- to medium grained marine, lake, and stream deposits, such as limestone, siltstone, sandstone, or shale, and in ancient soils. They are also found in coarse-grained sediments, such as conglomerates or coarse alluvium sediments. Fossils are rarely preserved in igneous or metamorphic rock units. Fossils may occur throughout a sedimentary unit and, in fact, are more likely to be preserved subsurface, where they have not been damaged or destroyed by previous ground disturbance, amateur collecting, or natural causes such as erosion.

The Project site has been graded and the potential for paleontological resources to be present at the Project site is considered low. Regardless, there is a potential to uncover paleontological resources during additional excavation and/or grading activities on the Project site. Therefore, the following mitigation measure is required.

Mitigation Measures (MM)

MM CR-3: Paleontological Monitoring. Prior to the issuance of grading permits, the Project Proponent shall implement the following program:

- a) A qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.*
- b) The qualified paleontologist shall be empowered to temporarily halt or redirect grading activities if/when paleontological resources are discovered.*
- c) In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area.*
- d) The qualified paleontologist shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly removed and the area cleared.*
- e) If the discovery is significant the qualified paleontologist shall notify the Project Proponent and the City immediately.*
- f) In consultation with the Project Proponent and the City, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find, a local qualified repository, and preparation of a report summarizing the find.*

Based on the analysis above, with implementation of Mitigation Measure CR-3, impacts will be less than significant.

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

Determination: Less Than Significant Impact.

Sources: California Health and Safety Code §7050.5, Public Resources Code §5097 et. seq.

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to disturbing human remains. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.5-1 The project is required to comply with the applicable provisions of California Health and Safety Code §7050.5, Public Resources Code §5097 et. seq., and provisions of AB 52 concerning consideration of Tribal Cultural Values in determination of project impacts and mitigation.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. As noted in the response to Issue 3.5 (a) above, the Project site has been graded and the potential for uncovering human remains at the Project site is considered low. Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction.

In the event that human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq. California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner.

If the Coroner determines the remains to be Native American, the California Native American Heritage Commission (NAHC) must be contacted and the NAHC must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Based on the analysis above, with implementation of PPP 3.5-1, impacts would be less than significant and no mitigation measures are required.

3.6 GEOLOGY AND SOILS

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) 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.		■		
2) Strong seismic ground shaking?			■	
3) Seismic-related ground failure, including liquefaction?			■	
4) 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-site or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?		■		
d. Be located on expansive soil, as defined in the Uniform Building Code, creating substantial risks to life or property?		■		
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				■

3.6 (a) (1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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.

Determination: Less Than Significant Impact with Mitigation Incorporated

Source: RMA Group Geologic Fault Investigation of Alquist-Priolo Zone Report, April 8, 2014

Plans, Policies, or Programs (PPP)

PPP 3.6 -1 In accordance with state law, all development proposals within designated Alquist-Priolo Earthquake Fault Zones shall be accompanied by appropriate geotechnical analysis.

Project Design Features (PDF)

Fault Setback Zone. In accordance with the Alquist-Priolo Act, no structures shall be constructed upon or encroach over the Fault Setback Zone.

Impact Analysis

The Project site Geologic Fault Investigation Report prepared by RMA, dated April 2014, determined that a segment of the San Geronio Pass fault passes through the northern portion of the project site, northwest portion and northeastern part of the site and closely parallels the northern boundary of the tract. The San Geronio Pass Fault Zone is a series of north-dipping reverse and thrust faults connected by strike tear faults, resulting to a surface trace that appears like an irregular, saw tooth. This east-west trending fault zone contains faults that were formed during the Pleistocene Epoch, of which some have been active in the later Holocene Epoch.

The City of Banning's General Plan Geotechnical Element in compliance to Government Code Section 65302(g) addresses the need to protect the community from unreasonable risks that could result from seismically induced hazards, such as surface rupture, ground shaking, ground failure, and other known geologic risks. The State Geologist has issued Alquist-Priolo Earthquake Fault Zone mapping for the Banning General Plan planning area. The City implements and enforces the regulations and guidelines set forth in the Alquist-Priolo Earthquake Fault Zoning Act, CEQA Statutes and Guidelines, Uniform/International Building Code, zoning ordinance, and other applicable legislation to manage geotechnical hazards. In accordance with the Geotechnical Element of the Banning General Plan Goals, Policies and Programs, all development proposals within designated Alquist-Priolo Earthquake Fault Zones shall be accompanied by appropriate geotechnical analysis. Based on the geotechnical analysis prepared by the RMA Group in 2014, the following mitigate measure is recommended to reduce impacts:

Mitigation Measure (MM)

MM GEO-1 Fault Setback Zone. Fault Setback Zone. No human structures for human habitation can be built within this zone, however other land uses are permitted.

3.6 (a) (2) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

Determination: Less Than Significant Impact with Mitigation

Source: RMA Group Geologic Fault Investigation of Alquist-Priolo Zone Report, April 8, 2014

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to seismic ground shaking. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.6-2 The project is required to comply with the California Building Standards Code and City Building Code to preclude significant adverse effects associated with seismic hazards and shall.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The site is expected to experience strong ground shaking from regional seismic activity. Ground shaking should be mitigated by implementation of building code standards and other site specific measures obtained from geotechnical studies of the site. Based on the mitigation pursuant to the RMA Group Study dated April 8, 2014, impacts resulting from seismic impacts to structure will be less than significant with mitigation.

MM GEO-2 Recommended Fault Setback Zone Boundaries. The Project shall adhere to the recommendations and requirements cited in the RMA Group Report dated April 8, 2014 with regard to Fault Setback Zone Boundaries.

3.6 (a) (3) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

Determination: Less Than Significant Impact.

Source: RMA Group Geologic Fault Investigation of Alquist-Priolo Zone Report, April 8, 2014

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to seismic ground shaking. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.6-2 The project is required to comply with the California Building Standards Code and City Building Code to preclude significant adverse effects associated with seismic hazards.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Liquefaction is a phenomenon in which loose, saturated, relatively cohesion-less soil deposits lose shear strength during strong ground motions. The factors controlling liquefaction are:

- Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause soils to liquefy and temporarily behave as a dense fluid. For liquefaction to occur, the following conditions have to occur: Intense seismic shaking;
- Presence of loose granular soils prone to liquefaction; and

- Saturation of soils due to shallow groundwater.

According to the RMA Group Geologic Fault Investigation study dated April 2014, the project site is not situated within a known liquefaction hazard area and borings drilled to a maximum depth of 41.5 feet during the preparation of the RMA Study did not encounter groundwater. Consequently, the potential for soil liquefaction at the site appears unlikely.

3.6 (a) (4) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

Determination: No Impact.

Source: RMA Group Geologic Fault Investigation of Alquist-Priolo Zone Report, April 8, 2014

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Generally, a landslide is defined as the downward and outward movement of loosened rock or earth down a hillside or slope. Landslides can occur either very suddenly or slowly, and frequently accompany other natural hazards such as earthquakes, floods, or wildfires. Landslides can also be induced by the undercutting of slopes during construction, improper artificial compaction, or saturation from sprinkler systems or broken water pipes.

Due to the relatively low gradient of the site, the massive nature of subsurface soils, the strength of these soils and the absence of known landslides within or immediately adjacent to the site, the potential for land sliding at the site was judged to be low. Based on the RMA Group Geologic Fault Investigation Report dated April 2014, with implementation of PPP 3.6-1, impacts would be less than significant and no mitigation measures are required.

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

Determination: Less Than Significant Impact with Mitigation Incorporated.

Sources: Project Application Materials.

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts related to soil erosion. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.6-3 Prior to grading permit issuance, the Project Proponent shall prepare a *Storm water Pollution Prevention Plan*. Project contractors shall be required to ensure

compliance with the Storm water Pollution Prevention Plan and permit periodic inspection of the construction site by City of Banning staff and the State Water Resources Control Board staff.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Soils in the project area have already been disturbed by previous activities. Therefore, the loss of topsoil is not a potential impact.

The eastern third of the project site was previously graded in preparation for construction of a residential subdivision that was not completed. Lots were never finish graded, structures were not built and streets not paved. Several canyons drain off the Banning Bench into the site. The RMA Group Geologic Fault Investigation Study, dated April 2014 cites that debris basins or catchment areas should be evaluated during planning and implemented during development of the tracts as needed. With the following mitigation, impacts should be less than significant.

MM GEO-3. Debris and Catch basins. The Project shall adhere to the recommendations and requirements cited in the RMA Group Report dated April 8, 2014 with regard to the design of catch and debris basins for Lot "B" and "C" and design requirements of the City of Banning Engineering and Public Works Department and WQMP report.

3.6(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 offsite landslide, lateral spreading, subsidence, liquefaction or collapse?*

Determination: Less Than Significant Impact.

Source: RMA Group Geologic Fault Investigation of Alquist-Priolo Zone Report, April 8, 2014, Banning General Plan, Application Materials.

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to an unstable geologic unit. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.6-1 The project is required to comply with the California Building Standards Code and City Building Code to preclude significant adverse effects associated with seismic hazards.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site is flat and gently sloping and contains no substantial natural or man-made slopes. There is no evidence of on-site landslides on or near the Project site, nor are there any exposed boulders that could result in rock fall hazards. As such, there will be no impacts associated with landslides and rock fall hazards.

Based on the RMA GeoScience Geotechnical Investigation Report dated, June 19, 2015, Soil classification and expansion index indicates that near surface soils have a very low expansion potential. Expansion testing performed in accordance with ASTM D4829 indicates that earth materials underlying the site have an expansion classification of 0. Moreover, due to the relatively low gradient of the site, the dense nature of the older alluvium in the Banning Bench deposits, and absence of known landslides within or immediately adjacent to the site, the potential for land sliding at the site is judged to be low.

However, given the lack of geotechnical reports detailing the construction of the existing fill placed at the eastern half of the site the fill is considered undocumented. The following mitigation are recommended to reduce impacts to a level less than significant.

MM GEO-4. Fill in Graded Eastern Portion of Site. The existing undocumented fill is not adequate for purposes intended and will need to be removed and recompacted.

3.6(d) *Be located on expansive soil, as defined in the Uniform Building Code, creating substantial risks to life or property?*

Determination: Less than Significant Impact.

Source: RMA Group Geologic Fault Investigation of Alquist-Priolo Zone Report, April 8, 2014, Banning General Plan

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to expansive soils. These measures will be included in the Project's Mitigation, Monitoring, and Reporting Program:

PPP 3.6-1 The project is required to comply with the California Building Standards Code and City Building Code to preclude significant adverse effects associated with strong seismic ground shaking.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. The following mitigation will reduce impacts to less than significant.

With implementation of MM GEO-4, impacts associated with expansive soils will be less than significant.

MM GEO-5 General Earthwork and Grading. All Earthwork and grading to be performed in accordance with the 2013 California Building Code and all applicable governmental agency requirements.

3.6(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?*

Determination: No Impact.

Source: RMA Group Geologic Fault Investigation of Alquist-Priolo Zone Report, April 8, 2014, Banning General Plan

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, Programs, or Standard Conditions applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project does not propose the use of septic tanks or alternative waste water disposal systems. The Project would install domestic sewer infrastructure and connect to the City of Banning Sewer District's existing sewer conveyance and treatment system. As such, there are no impacts and no mitigation measures are required.

3.7 GREENHOUSE GAS EMISSIONS

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			■	

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

Determination: Less Than Significant Impact.

Source: LSA Associates, Air Quality and Climate Change Study, TTM 36939, September 24, 2015

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to greenhouse gas emissions. These measures will be included in the Project’s Mitigation Monitoring and Reporting Program:

PPP 3.7-1 Prior to issuance of the first residential building permit, the Project Applicant shall submit energy usage calculations in the form of a Title 24 Compliance Report to the City of Banning Building & Safety Department showing that the Project will be constructed in compliance with the most recently adopted edition of the applicable California Building Code Title 24 requirements.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

An individual project cannot generate enough Green House Gases (GHG) emissions to influence global climate change. The Project participates in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of GHGs, which when taken together may have a significant impact on global climate change.

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation GHG emissions:

- **Construction Activities:** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment.
- **Gas, Electricity, and Water Use:** Natural gas use results in the emission of two GHGs: CH₄ (the major component of natural gas) and CO₂ (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy-intensive.
- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH₄ from the anaerobic decomposition of organic materials. CH₄ is 25 times more potent a GHG than CO₂. However, landfill CH₄ can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

Table 10 lists the annual GHG emissions for each of the planned construction phases and shows that the GHG emissions would be highest during the grading phase, at approximately 120 MT. Total construction GHG emissions thru phase 1 of the construction period are estimated to be 320 MT of CO₂e. Each additional phase would contribute additional GHG emissions, approximately the same as shown for Phase 1 or the sum of 89 MT of CO₂e for construction of the homes (6.0 +83) plus 5.6 MT of CO₂e for the architectural coating processes, or 95 MT of CO₂e.

Long-term operation of the proposed project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with on-site residences. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for heating, and other sources. Increases in stationary-source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

Table 10 Long-term Operational Localized Impact (lbs/day)

Construction Phase	Total Regional Pollutant Emissions (MT/yr)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Site Preparation	39	0.011	0	39
Grading	120	0.035	0	120
Phase 1 of Home Construction	88	0.019	0	89
Architectural Coating	6.1	0.00063	0	6.1
Paving	62	0.018	0	62
Total	320	0.084	0	320

The GHG emission estimates presented in Table 10 show the emissions associated with the level of development envisioned by the full proposed project of 98 homes at build out. It is not known how

many homes would be built in each phases (depend on market demand at the time), thus it is not known how many phases there will be. Assuming a conservative 20 homes per phase would result in five phases. Thus the amortized construction GHG emissions shown in Table 11 reflect this total. As shown in Table 11, the project will produce 2,000 MT/yr of CO₂e. which is 0.002 million metric tons per year (MMT/yr) of CO₂e. For comparison, the existing emissions from the entire SCAG region are estimated to be approximately 176.79 MMT/yr of CO₂e, and the existing emissions for the entire state are estimated at approximately 496.95 MMT/yr of CO₂e.

Table 11: Long-Term Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT/yr)					
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction Emissions amortized over 30 Years	0	53	53	0.014	0	53
Operational Emissions						
Area Sources	0	25	25	0.0021	0.00043	25
Energy Sources	0	390	390	0.013	0.0053	390
Mobile Sources	0	1,400	1,400	0.047	0	1,400
Waste Sources	23	0	23	1.4	0	52
Water Usage	2.0	37	39	0.21	0.0053	45
Total Project Emissions	25	1,900	1,900	1.7	0.011	2,000

Because climate change impacts are cumulate in nature, no typical single project can result in emissions of such a magnitude that it, in and of itself, would be significant on a project basis. The project's operational emissions of 2,000 MT/yr of CO₂e are less than the SCAQMD-recommended interim threshold of 3,500 MT/yr of CO₂e for residential uses. Therefore, the proposed project would not result in a significant impact on GHG emissions.

CO Hot Spot Analysis

Given the relatively low level of CO concentrations in the project area, project-related vehicles are not expected to result in the CO concentrations exceeding the State or federal CO standards. Because no CO hot spot would occur, there would be no project-related impacts on CO concentrations.

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

Determination: Less Than Significant Impact.

Source: Air Quality and Climate Change Study for Banning TTM 36939 (LSA Project No. DFD1505), September 24, 2015

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs related to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project's is consistent with the Scoping Plan because its individual greenhouse gas emissions are below significance thresholds and the Project is required to implement such greenhouse as Title 24 Energy Efficiency Requirements. As such, impacts are less than significant and no mitigation measures are required.

Based on the analysis above, with implementation of PPP 3.7-1, impacts would be less than significant.

3.8 HAZARDS AND HAZARDOUS MATERIALS

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		■		

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

Determination: Less than Significant.

Source: City of Banning General Plan, Hazardous and Toxic Materials Element.

Plans, Policies, or Programs (PPP)

The transport, use, or disposal of hazardous materials in the unlikely event these materials are uncovered shall adhere to the regulations pertaining regulating the handling and transport of these items. The following PP applies to the Project and would reduce impacts relating to this issue. This measure will be included in the Project's Mitigation Monitoring and Reporting Program (MMRP).

PPP 3.8-1 The Project is subject to all applicable federal, state, and local laws and regulations regarding hazardous materials, including but not limited to requirements imposed by the Environmental Protection Agency, California Department of Toxic Substances Control, South Coast Air Quality Management District, and the Colorado River Basin Regional Water Quality Control Board.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Existing Site Conditions

The construction of single family homes on the proposed project site will not result in significant impacts associated with hazardous materials. The City implements the standards of the Household Hazardous Waste programs through its waste provider. These regulations and standards ensure that impacts to surrounding areas, or within the project itself, are less than significant. Not Mitigation Measures are proposed.

Operational Activities

The Project site would be developed with residential land uses which are land uses not typically associated with the transport, use, or disposal of hazardous materials. Although residential land uses may utilize household products that contain toxic substances, such as cleansers, paints, adhesives, and solvents, these products are usually in low concentration and small in amount and would not pose a significant risk to humans or the environment during transport to/from or use at the Project site.

3.8(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?

Determination: Less Than Significant Impact.

Sources: City of Banning General Plan, Hazardous and Toxic Materials Element.

Plans, Policies, or Programs (PPP)

There are numerous regulations pertaining to the accidental release of hazardous materials. The following PPP applies to the Project and would reduce impacts relating to this issue. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.8-1 The Project is subject to all applicable federal, state, and local laws and regulations regarding hazardous materials, including but not limited requirements imposed by

the Environmental Protection Agency, California Department of Toxic Substances Control, South Coast Air Quality Management District, and the Colorado River Basin Regional Water Quality Control Board.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Accidents involving hazardous materials that could pose a significant hazard to the public or the environment would be highly unlikely during the construction and long-term operation of the Project and are not reasonably foreseeable. The transport, use, and handling of hazardous materials on the Project site during construction is a standard risk on all construction sites, and there would be no greater risk for upset and accidents than would occur on any other similar construction site.

Upon build-out, the Project site would operate as a residential community, which is a land use type not typically associated with the transport, use, or disposal of hazardous materials that could be subject to upset or accident involving the release of hazardous materials into the environment.

Based on the analysis above, with implementation of PPP 3.8-1, impacts would be less than significant and no mitigation measures are required.

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

Determination: Less Than Significant Impact.

Sources: Project Application Materials, Google Earth.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site is located just over a half mile from Calvary Christian School. As noted in the responses to Issue 3.8 (b). The Project site would be developed with residential land uses which is a land use not typically associated with the transport, use, or disposal of hazardous materials nor does such use emit hazardous emissions or handle hazardous or acutely hazardous materials. Therefore, impacts are less than significant.

3.8(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?

Determination: No Impact.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur and no mitigation measures are required.

3.8(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?

Determination: Less Than Significant Impact.

Plans, Policies, or Programs (PPP)

There are no Project Design Features applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

This property is not located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property will not be subject to some of the annoyances associated with proximity to airport operations (for example: noise, vibration, or odors).

3.8(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?

Determination: No Impact.

Source: Google Earth. Site Reconnaissance.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site is not located within the vicinity of a private airstrip. No impact would occur and no mitigation measures are required.

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

Determination: Less Than Significant Impact.

Sources: Banning General Plan, Public Services and Facilities, Chapter VI.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Access to the Project site is proposed from Wilson Street, and both Sunset and Sunrise Avenues Drive which will connect to proposed interior street. These three roadways are fully improved. The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, the Project would be required to maintain adequate emergency access for emergency vehicles via Sunrise and Sunset Avenues, and Wilson Street connecting roadways as required by the City. Furthermore, the Project would not result in a substantial alteration to the design or capacity of any public road that would impair or interfere with the implementation of evacuation procedures. Because the Project would not interfere with an adopted emergency response or evacuation plan, impacts are less than significant and no mitigation measures are required.

3.8 (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?

Determination: Less than Significant with Mitigation

Source: Banning General Plan, Public Services and Facilities, Chapter VI.

Plans, Policies, or Programs (PPP)

PPP 3.8 -2 Residents are required to comply with fuel modification zone requirements adjacent to wildland areas. Fuel modification zones includes both the thinning of native combustible vegetation, as well as the removal and replacement of native vegetation with fire-resistant plan species. "A and B" Zones shall be irrigated and landscaped with fire-resistive drought tolerant plants affecting properties tangent to Lot "A". A mitigation measure will be included that requires that the home shall maintain a minimum 70 foot Fuel Modification Zone.

MM HAZ -1 Fuel Modification Zone: *Parcels adjacent to Lot "A" shall maintain a Fuel Modification Zone of 70 feet.*

MM HAZ -2 Hazard Plan: *The Applicant shall submit a Hazard Analysis Prior to issuance of Building Permits*

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The property is located in a fire hazard zone. The guidelines for vegetation management in defensible areas are designed to be a fire prevention partnership between property owners and the City and County to prevent fires. Space near structures that provide natural landscape compatibility with wildlife, water conservation and ecosystem health, defined as a Fuel Modification Zone provides immediate benefits to protect structures and property from wildfires. With implementation of MM HAZ-1, I and MM HAZ -2, impacts should be less than significant.

3.9 HYDROLOGY AND WATER QUALITY

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 the site or area, including through the alteration of the course of stream or river, in a manner, which would result in substantial erosion or siltation on- or offsite?			■	
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or offsite?			■	
e. Create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems or provide substantial			■	

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
additional sources of polluted runoff?				
f. Otherwise substantially degrade water quality?			<input checked="" type="checkbox"/>	
g. Place housing within a 100-year flood hazard as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?				<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				<input checked="" type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?				<input checked="" type="checkbox"/>

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

Determination: Less Than Significant Impact.

Source: Tentative Tract Map 36939, Drainage Study, WQMP

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to water quality and waste discharge requirements. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

- PPP 3.9-1. Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System permit from the State Resources Control Board. Evidence that a National Pollutant Discharge Elimination System permit has been issued shall be provided to the City of Banning prior to issuance of the first grading permit.
- PPP 3.9-2. Prior to grading permit issuance, the Project Proponent shall prepare a Storm water Pollution Prevention Plan. Project contractors shall be required to ensure compliance with the Storm water Pollution Prevention Plan and permit periodic inspection of the construction site by City of ~~Jurupa-Valley~~ Banning staff or its designee to confirm compliance.
- PPP 3.9-3. During construction, Project contractors shall be required to ensure compliance with the Project's Water Quality Management Plan associated with the Project and permit periodic inspection of the construction site by City of Banning staff or its designee to confirm compliance.
- PPP 3.9-4. The Project shall be in compliance with Chapter 13.24, Storm Water Management System, City of Banning Municipal Code.

Project Design Features (PDF)

The following is incorporated into the Project by the applicant, and would reduce impacts related to water quality and discharge requirements. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

- PDF 3.9-1. Tentative Tract Map No. 36939 provides for 53,146 square feet for water quality basin and infiltration. These areas shall be designed to manage water quality runoff to the satisfaction of the City Engineer.

Impact Analysis

Construction

Construction of the Project would involve clearing, grading, paving, utility installation, building construction, and the installation of landscaping, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures.

Pursuant to the requirements Chapter 13.24 of the City of Banning Municipal Code, the Project would be required to obtain a National Pollutant Discharge Elimination System Municipal Stormwater Permit for construction activities. The National Pollutant Discharge Elimination System permit is required for all Projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one acre of total land area.

In addition, the Project would be required to comply with the Colorado River Basin Regional Water Quality Control Board's Water Quality Control Program within the Whitewater River Watershed. Compliance with the National Pollutant Discharge Elimination System permit and the Colorado River Basin Water Quality Control Program involves the preparation and implementation of a Storm Water Pollution Prevention Plan for construction-related activities, including grading. The Storm Water Pollution Prevention Plan would specify the Best Management Practices that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property.

Operation

Storm water pollutants commonly associated with the land uses proposed by the Project (i.e., residential) include sediment/turbidity, nutrients, trash and debris, oxygen-demanding substances, organic compounds, bacteria and viruses, oil and grease, pesticides, and metals.

Pursuant to the requirements of the City's National Pollutant Discharge Elimination System permit, a Water Quality Management Plan is required for managing the quality of storm water or urban runoff that flows from a developed site after construction is completed and the facilities or structures are occupied and/or operational. A Water Quality Management Plan describes the Best Management Practices that will be implemented and maintained throughout the life of a project to prevent and minimize water pollution that can be caused by storm water or urban runoff.

Based on the analysis above, with implementation of PPP 3.9-1 through PPP 3.9-4 and PDF 3.9-1, impacts would be less than significant and no mitigation measures are required.

3.9(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)?

Determination: Less Than Significant Impact.

Source: Tentative Tract Map 36939, Drainage Study, WQMP

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The sole source of potable water supply is provided by the City of Banning Water Utility Department. More than 30,000 residents in Banning, depend on the Water Utility Department to provide water service to their homes and businesses. By supplying local groundwater pumped from City owned wells the department is able to meet the daily demands of these customers. The department provides plan reviews, design and construction management, for Water Utility projects.

The City's Water Utility Department does not have an immediate concern with water supply reliability. Because the District's water supply is groundwater, which is not subject to seasonal or year-to-year climatic change, it is not subject to short-term water shortages resulting from temporary dry weather conditions. The Water Utility Department and other groundwater users in the White Water River have been implementing ongoing groundwater management practices to extend the useful life of the groundwater resource to meet current and future demands. In the foreseeable future, the Water Utility Department will continue to be reliant on local groundwater supplies. The Water Utility Department will develop additional groundwater extraction and groundwater treatment facilities as needed to ensure a continuous and adequate water supply for its service area.

Based on the above analysis, the Project's demand for domestic water service would not 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.

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

Determination: Less Than Significant Impact.

Source: Tentative Tract Map 36939, Drainage Study, WQMP

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to soil erosion. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.9-4 The Project shall be in compliance with Chapter 13.24 Storm Water Management System of the Banning Municipal Code.

Project Design Features (PDF)

The following is incorporated into the Project by the applicant, and would reduce impacts related to soil erosion. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PDF 3.9-1 Tentative Tract Map No. 36939 provides for 53,146 square feet for water quality basin and infiltration. These areas shall be designed to manage water quality runoff to the satisfaction of the City Engineer.

Impact Analysis

The Construction of single family homes on the Project site will result in an increase in impermeable surfaces, and therefore an increase in runoff. The proposed Project site is located immediately north of the Montgomery Creek Channel. In accordance with approval of the Banning City Engineer, it will be acceptable to drain to the street via an under sidewalk drain that has been appropriately sized. The WQMP basins must be designed to retain a 100 year, three (3) hour storm event.

Based on the analysis above, with implementation of PPP 3.9-4 and PDF 3.9-1, impacts would be less than significant and no mitigation measures are required.

3.9(d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on-or offsite?

Determination: Less Than Significant Impact.

Source: Tentative Tract Map 36939, Drainage Study, WQMP

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to flooding. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.9-4 The Project shall be in compliance with Chapter 13.24 Storm Water Management System.

Project Design Features (PDF)

The following is incorporated into the Project by the applicant, and would reduce impacts related to flooding. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PDF 3.9-1 Tentative Tract Map No. 36939 provides for 53,146 square feet for water quality basin and infiltration. These areas shall be designed to manage water quality runoff to the satisfaction of the City Engineer.

Impact Analysis

Based on the analysis above, with implementation of PPP 3.9-1 through PPP 3.9 -4 and PDF 3.9-1, impacts would be less than significant and no mitigation measures are required.

3.9(e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Determination: Less than Significant Impact.

Source: Tentative Tract Map 36939, Drainage Study, WQMP

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to drainage capacity and additional sources of polluted runoff. These measures would be included in the Project's Mitigation Monitoring and Reporting Program:

- PPP 3.9-1. Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System permit from the State Water Resources Control Board. Evidence that a National Pollutant Discharge Elimination System permit has been issued shall be provided to the City of Banning prior to issuance of the first grading permit.
- PPP 3.9-2 Prior to grading permit issuance, the Project Proponent shall prepare a Storm Water Pollution Prevention Plan (SWPPP). Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Banning staff or its designee to confirm compliance.
- PPP 3.9-3 During construction, Project contractors shall be required to ensure compliance with Storm Water Pollution associated with the Project and permit periodic inspection of the construction site by City of Banning staff or its designee to confirm compliance.
- PPP 3.9-4 The Project shall be in compliance with Chapter 13.24 Storm Water Management System of the City of Banning Municipal Code.

Project Design Features (PDF)

The following is incorporated into the Project by the applicant, and would reduce impacts related to drainage capacity and additional sources of polluted runoff. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

- PDF 3.9-1 Tentative Tract Map No. 36939 provides for 53,146 square feet for water quality basin and infiltration. These areas shall be designed to manage water quality runoff to the satisfaction of the City Engineer.

Impact Analysis

Water runoff will be directed to the on-site water quality basin and an infiltration pit before discharging into the storm drain system.

Based on the analysis above, with implementation of PPP 3.9-1 through PPP 3.9-4 and PDF 3.9-1, impacts would be less than significant and no mitigation measures are required.

3.9(f) Otherwise substantially degrade water quality?

Determination: Less Than Significant Impact.

Sources: Project Application Materials.

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to water quality. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

- PPP 3.9-1. Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System permit from the State Water Resources Control Board. Evidence that National Pollutant Discharge Elimination System permit has been issued shall be provided to the City of Banning prior to issuance of the first grading permit.
- PPP 3.9-2. Prior to grading permit issuance, the Project Proponent shall prepare a Storm Water Pollution Prevention Plan. Project contractors shall be required to ensure compliance with the Storm water Pollution Prevention Plan and permit periodic inspection of the construction site by City of Banning staff or its designee to confirm compliance.
- PPP 3.9-3. During construction, Project contractors shall be required to ensure compliance with the Project's SWPPP associated with the Project and permit periodic inspection of the construction site by City of Banning staff or its designee to confirm compliance.
- PPP 3.9-4. The Project shall be in compliance with Chapter 13.24 Storm Water Management System of the City of Banning Municipal Code.

Project Design Features (PDF)

The following is incorporated into the Project by the applicant, and would reduce impacts related to water quality. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

- PDF 3.9-1. Tentative Tract Map No. 36939 provides for 53,146 square feet for water quality basin and infiltration. These areas shall be designed to manage water quality runoff to the satisfaction of the City Engineer.

Impact Analysis

There are no conditions associated with the proposed Project that could result in the substantial degradation of water quality beyond what is described above in Responses 3.9 (a), 3.9(c), and 3.9 (e).

Based on the analysis above, with implementation of PPP 3.9-1 through PPP 3.9-4 and PDF 3.9-1, impacts would be less than significant and no mitigation measures are required.

3.9(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?

Determination: No Impact.

Source: FEMA FIRM Panel No. 06065C0706G.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The site is not located in a flood zone as designated by FEMA

3.9(h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Source: FEMA FIRM Panel No. 06065C0706G.

Determination: No Impact.

Plans, Policies, Programs (PPP)

There are no Plans, Policies, Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Refer to Issue 3.9(g) above. The Project area is not within a 100-year flood hazard. No Impact would occur and no mitigation measures are required.

3.9(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?*

Source: FEMA FIRM Panel No. 06065C0706G, Banning General Plan

Determination: No Impact.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

As noted Issue 3.9(g), the Project site is not subject to flooding. No dams, levees or water bodies exist in the immediate vicinity of the Project site that could adversely affect the site should a structural failure occur. No impact would occur and no mitigation measures are required.

3.9(j) *Inundation by seiche, tsunami, or mudflow?*

Determination: No Impact.

Sources: Project Application Materials, Google Earth

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site would not be subject to inundation by a seiche, mudflow, and/or tsunami. No impact would occur and no mitigation measures are required.

3.10 LAND USE AND PLANNING

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		☐		

3.10(a) Physically divide an established community?

Determination: No Impact.

Sources: Project Application Materials, Google Earth

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

An example of a Project that has the potential to divide an established community includes the construction of a new freeway or highway through an established neighborhood. The Project site is an in-fill development consisting of 34.6 acres and located within proximity of residential development. Therefore, no impacts would occur with respect to dividing an established community.

3.10(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?

Determination: Less Than Significant Impact.

Source: City of Banning General Plan, Zoning Code.

Plans, Policies, or Programs (PPP)

The applicable plans and policies relating to a 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 the zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect are described in the analysis below.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

As demonstrated throughout this Initial Study Checklist/Mitigated Negative Declaration, the Project would otherwise not conflict with any applicable goals, objectives, and policies of the General Plan, or the City of Banning Zoning Ordinance. Additionally, with Mitigation Measure BIO-1, as set forth in this Initial Study/Mitigated Negative Declaration, the Project would not conflict with any applicable policy document, including, without limitation, the Western Riverside Multiple Species Habitat Conservation Plan, South Coast Air Quality Management District's Air Quality Management Plan, Southern California Association of Government's 2012, 2035 Regional Transportation Plan/Sustainable Communities Strategy, and Government's 2008 Regional Transportation Plan. The purposes of these plans are to avoid or mitigate an environmental effect.

In conclusion, the Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating adverse environmental effects and impacts would be less than significant.

3.10(c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Determination: Less Than Significant With Mitigation Incorporated.

Source: MSHCP Consistency Analysis and Habitat Assessment, Tract 36939, LSA, May 2015.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies or Programs relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP, a regional Habitat Conservation Plan was adopted on June 17, 2003. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides

coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to sensitive species. According to the MSHCP:

- The Project site is not located within an MSHCP Criteria Area (area proposed for conservation).
- The Project site does not contain MSHCP riparian/riverine areas or vernal pools.
- The Project site will not impact any MSHCP Narrow Endemic Plant Species.
- The Project site is not required to comply with the MSHCP Urban/Wildland Interface Guidelines.
- No large burrows were found in the area and the particularly dense ruderal vegetation suggest poor habitat for burrowing owl. However, their presence cannot be ruled out because burrowing owls have been known to occupy disturbed sites. Mitigation is required.

Mitigation Measures (MM)

Mitigation Measure BIO-1 in Section 3.4, Biological Resources of this Initial Study/Mitigated Declaration shall apply.

With implementation of Mitigation Measure BIO-1, impacts will be less than significant.

3.11 MINERAL RESOURCES

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				☐

3.11(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?

Determination: No Impact.

Sources: City of Banning General Plan, Environmental Resources, Chapter IV

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

No mineral resource extraction activity is known to have ever occurred on the property. According to mapping conducted by the California Geological Survey which maps areas known as Mineral Resources Zones (MRZs), the proposed Project site is mapped within MRZ-3, which is defined as "areas with no known significant mineral deposits."

The Project site is not located within an area of known to be underlain by regionally- or locally important mineral resources, or within an area that has the potential to be underlain by regionally or locally-important mineral resources, as disclosed by the General Plan. Accordingly, implementation of the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California. Accordingly, no impact would occur.

3.11(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?

Determination: No Impact.

Sources: City of Banning General Plan, Environmental Resources, Chapter IV

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Refer to the Issue 3.11(a), above. The General Plan does not identify any locally important mineral resource recovery sites on-site or within close proximity to the Project site, nor are any mineral resource recovery operations located on-site or in the surrounding area.

3.12 NOISE

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			■	
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			■	
c. A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?			■	
d. 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 or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?				■
f. For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?				■

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

Determination: Less Than Significant Impact.

Sources: Project Application Materials, Noise Element of the Banning General Plan, Banning Zoning Code, Chapter 8.44, Noise Regulations of the Municipal Code.

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to noise. These measures will be included in the Project’s Mitigation Monitoring and Reporting Program:

PPP 3.12-1 In order to ensure compliance with the Banning Municipal Code Chapter 8.44 Noise Regulations, prior to the issuance of a grading permit, the developer is required to submit a construction-related noise mitigation plan to the City for review and approval. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project. In addition, the plan shall require that the following notes are included on grading plans and building plans. Project contractors shall be required to ensure compliance

with the notes and permit periodic inspection of the construction site by City of Banning staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.

a) All construction activities shall comply with Chapter 8.44 (Noise Regulations) of the City of Banning Municipal Code, including but not limited to the requirement that haul truck deliveries shall be limited to between the hours of 6:00am to 6:00pm during the months of June through September and 7:00am to 6:00pm during the months of October through May.

b) Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.

c) All stationary construction equipment shall be placed in such a manner so that emitted noise is directed away from any sensitive receptors adjacent to the Project site.

d) Construction equipment staging areas shall be located the greatest distance between the staging area and the nearest sensitive receptors.

PPP 3.12-2 In order to ensure compliance with City of Banning's Noise Ordinance, prior to issuance of any residential building permit, an interior noise analysis shall be completed to the satisfaction of the City Building and Safety Department demonstrating that proposed building materials will achieve interior noise levels less than 45 dBA CNEL.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Development of the Project site as a residential community has the potential to expose persons to or result in elevated noise levels during both short-term construction activities and under long-term conditions. Short-term (i.e., construction) and long-term (i.e., operational) noise impacts associated with the Project are discussed below.

Short-term Construction Noise

The most significant source of short-term noise impact is related to noise generated during construction activities on the Project site which would result in potential noise impacts to nearby sensitive receptors. Construction is performed in discrete steps, each of which has its own mix of equipment and consequently its own noise characteristics. Thus noise levels will fluctuate depending upon construction phase, equipment type, duration of equipment use, distance between the noise source and receptor, and the presence or absence of noise attenuation structures.

As shown on Table 12 below; noise levels generated by heavy construction equipment can range from approximately 75 dBA to 99 dBA when measured at 50 feet.

Table 12. Typical Construction Equipment Noise Levels

Type of Equipment	Range of Sound Levels Measured (dBA at 50 feet)
Pile Drivers	81 to 96
Rock Drills	83 to 99
Jack Hammers	75 to 85
Pneumatic Tools	78 to 88
Pumps	68 to 80
Dozers	85 to 90
Tractors	77 to 82
Front-End Loaders	86 to 90
Graders	79 to 89
Air Compressors	76 to 86
Trucks	81 to 87
<i>Source: "Noise Control for Buildings and Manufacturing Plants", Bolt, Beranek & Newman, 1987, as cited in the General Plan EIR</i>	

However, these noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 75 dBA for a jack hammer measured at 50 feet from the noise source to the receptor would be reduced to 69 dBA at 100 feet from the source to the receptor, and would be further reduced to 63 dBA at 200 feet from the source to the receptor.

Chapter 8.44 of the City of Banning Municipal Code (Noise Regulations) includes a provision that exempts construction activities from any maximum noise level standard, provided that construction activities occur between the hours of 7:00 A.M. and 6:00 P.M. The person engaged in such activity is hereby permitted to exceed sound levels otherwise set forth in this chapter for the duration of the activity during the above described hours for purposes of construction. However, nothing contained herein shall permit any person to cause sound levels to, at any time exceed fifty-five dBA for intervals of more than fifteen minutes per hour as measured in the interior of the nearest occupied residence or school. If the building official should determine that the public health and safety will not be impaired by the construction related noise, the building inspector may issue a permit for construction within the hours of 6:00 P.M. and 7:00 A.M., upon application being made at the time the permit for the work is awarded or during the progress of the work. The building official may place such conditions on the issuance of the permit as to him or her shall seem appropriate to maintain the public health and safety.

Noise Impacts to the Project

The Project is considered a “sensitive receptor” because it is a residential development. Impacts to the Project would be significant if the exterior area of the homes (i.e. yards) would be exposed to noise levels in excess of 55 dBA . For the interior area of the homes impacts would be significant if exposed to noise levels in excess of 45 dBA.

The Project site is located in an area largely characterized by urban development. Residential land uses surround the site on all sides. Noise producing land uses that impact residential uses include, but are not limited to, agriculture uses, industrial uses, commercial uses, and noise from major highways and roads.

The Project site is located adjacent to Golden West Avenue and Opal Street, which are both classified as “Local Streets” and are not considered a major highway or roadway that produces significant levels of traffic noise. As such, impacts are considered to be less than significant.

Noise Impacts Generated by the Project

As established by the General Plan performance standards, project-related noises, as projected to any portion of any surrounding property containing a habitable dwelling, hospital, school, library or nursing home, shall not exceed 55 equivalent level dBA (dBA Leq) between 7 a.m. and 10 p.m. or 45 dBA Leq between 10 p.m. and 7:00 a.m. for a cumulative period of more than fifteen (15) minutes per hour.

The primary source of noise generated by the Project will be from the vehicle traffic generated by the new homes to the nearby residential uses. The Project would generate an estimated additional 933 total trip-ends per day with 73 trips in the AM Peak Hour and 98 trips in the PM Peak Hour.

The City of Banning considers a project to result in a significant traffic-related noise impact if traffic generated by that project would cause or contribute to exterior noise levels at sensitive receptor locations in excess of 55 dBA CNEL and the project’s contribution to the noise environment equals 3.0 dBA CNEL or more. (A change of 3.0 dBA is considered “barely perceptible” by the human ear and changes of less than 3.0 dBA CNEL generally cannot be perceived except in carefully controlled laboratory environments). Due to the low traffic volume and speeds, traffic noise from the Project will not make a significant contribution to the noise environment.

Based on the analysis above, with implementation of PPP 3.12-1 and PPP 3.12-2 impacts would be less than significant.

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

Determination: Less Than Significant Impact.

Source: Project Application Materials, Noise Element of the Banning General Plan, Banning Zoning Code, Chapter 8.44, Noise Regulations of the Municipal Code.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Construction Vibration

Under existing conditions, there are no known sources of ground-borne vibration or noise that affect the Project site. The Project would not generate ground-borne vibration or ground-borne noise, except, potentially, during the construction phase from the use of heavy construction equipment. The Project will not employ any pile driving, rock blasting, or rock crushing equipment during construction activities, which are the primary sources of ground-borne noise and vibration during construction.

Operational Vibration

There are no conditions associated with the long-term operation of the proposed Project that would result in the exposure of on- or off-site residents to excessive ground-borne vibration or noise. The proposed Project would develop the subject property as a residential community and would not include nor require equipment, facilities, or activities that would generate ground-borne vibration or ground-borne noise. In addition, the Project site is not located in the vicinity of a railroad line or any other use associated with ground-borne vibration or ground-borne noise; therefore, the Project would not expose future on-site residents to substantial ground-borne vibration or noise.

Based on the above analysis, the Project would not expose on- or off-site sensitive receptors to substantial ground-borne vibration or ground-borne noise. Impacts are less than significant and no mitigation is required.

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

Determination: Less Than Significant Impact.

Source: Project Application Materials, Noise Element of the Banning General Plan, Banning Zoning Code, Chapter 8.44, Noise Regulations of the Municipal Code.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

As discussed above under Issue 3.12(a), the only potential for the Project to create a permanent increase in ambient noise levels is the result of future traffic generated by the proposed Project that has the potential to cause or contribute to elevated traffic-related noise volumes at offsite locations.

The analysis presented under Issue 3.12(a) concluded that the Project's incremental noise contributions to study area roadways would be considered "barely perceptible" (i.e., less than 3.0 dBA CNEL). As such, offsite transportation-related noise impacts would be less than significant and no mitigation is required.

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

Determination: Less Than Significant Impact.

Sources: Project Application Materials, Noise Element of the Banning General Plan, Banning Zoning Code, Chapter 8.44, Noise Regulations of the Municipal Code.

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to temporary periodic increases in noise. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.12-1 In order to ensure compliance with Municipal Code Chapter 8.44, Noise Regulations, prior to the issuance of a grading permit, the developer is required to submit a construction-related noise mitigation plan to the City for review and approval. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project. In addition, the plan shall require that the following notes are included on grading plans and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Banning staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.

a) All construction activities shall comply with Chapter 8.44 (Noise Regulations) of the Municipal Code, including but not limited to the requirement that haul truck deliveries shall be limited to between the hours of 7:00am to 6:00pm during the months of June through September and 7:00am to 6:00pm during the months of October through May.

b) Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.

c) All stationary construction equipment shall be placed in such a manner so that emitted noise is directed away from any sensitive receptors adjacent to the Project site.

d) Construction equipment staging areas shall be located the greatest distance between the staging area and the nearest sensitive receptors.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

As discussed above under Issue 3.12(a), the only potential for the Project to create a substantial temporary or periodic increase in ambient noise levels is during its construction phase. The analysis presented under Issue 3.12(a) concluded that the Project would result in elevated noise levels during construction but were less than significant.

Based on the analysis above, with implementation of PPP 3.12-1, impacts would be less than significant and no mitigation measures are required.

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

Determination: No Impact.

Source: Project Application Materials, Noise Element of the Banning General Plan, Banning Zoning Code, Chapter 8.44, Noise Regulations of the Municipal Code.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project is not located within an airport's sphere of influence or Avigation easement and there are no Project issues related to this matter.

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

Determination: No Impact.

Source: Google Earth.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

There are no private airfields or airstrips in the vicinity of the Project site. Accordingly, the Project would have no potential to expose future residents in the Project area to excessive noise levels associated with a private airstrip. No impact would occur and no mitigation measures are required.

3.13 POPULATION AND HOUSING

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			☐	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				☐
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				☐

3.13(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)?*

Determination: Less than Significant Impact.

Sources: Project Application City of Banning General Plan, Housing Element.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project would be developed with 98 single-family detached residential homes. Pursuant to population estimates prepared by the State Department of Finance, single-family detached units within the City are occupied by an average of 2.9 persons per dwelling unit (*City of Banning General Plan, Housing Element, Page III-127*). Therefore, using population generation estimates provided by the State, the Project could increase the City of Banning's population by up to 284 new residents if all the new residents currently reside outside the City limits.

Typically, population growth would be considered a significant impact pursuant to CEQA if it directly or indirectly affects the ability of agencies to provide needed public services and requires the expansion or new construction of public facilities and utilities.

Section 3.14, Public Services, of this Initial Study Checklist demonstrates that the impacts on public services is less than significant so the public service providers ability to provide services will not be reduced. As such, impacts are less than significant and no mitigation measures are required.

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

Determination: No Impact.

Sources: Project Application City of Banning General Plan, Housing Element

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site is vacant and contains no housing. As such, there are no impacts that would require the construction of replacement housing elsewhere. No mitigation measures are required.

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

Determination: No Impact.

Sources: Project Application City of Banning General Plan, Housing Element

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, Programs, or Standard Conditions applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project site is vacant and contains no housing. As such, there are no impacts that would require the construction of replacement housing elsewhere.

3.14 PUBLIC SERVICES

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No impact
a. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire protection?			■	
2) Police protection?			■	
3) Schools?			■	
4) Parks?			■	
5) Other public facilities?			■	

3.14(a) *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

FIRE PROTECTION

Determination: Less Than Significant Impact.

Sources: City of Banning General Plan, Police and Fire Protection Element

Plans, Policies, or Programs (PPP)

There are no Project Design Features applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Buildout of the site will have a less than significant impact on public services. The proposed Project will be served by the City Police Department and Riverside County Fire Department under contract. The project will be required to pay the mandates school fees, development impact fees and park in lieu fees in place at the time of issuance of building permits. Payment of these fees and future revenue stream from property tax will lower potential impacts associated with additional services less than significant impact.

POLICE PROTECTION

Determination: Less Than Significant Impact.

Sources: City of Banning General Plan, Police and Fire Protection Element.

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to police protection. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.14-1 The Project shall comply with applicable City's Development Impact Fees which requires payment of a development mitigation fee to assist in providing funds to offset the incremental increase in the demand for public services, parks and open space that would be created by the Project. Prior to the issuance of building permits the Project Applicant shall pay fees in accordance with the City of Banning Municipal Code Requirements.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The City of Banning Police Department provides community policing to the Project area. The Banning Police Station is located at 125 East Ramsey, approximately two miles from the Project site. The Banning Police Department current level of law enforcement staffing is approximately 1.4 sworn officers for every 1,000 residents. Banning has historically maintained a goal of 1.8 police officers per 1,000 residents. The Banning Police Department has a total of 35 sworn positions, of which three are grant positions and 16 unsworn positions for a total of 51 positions. At full buildout, the Project would introduce approximately 284 new residents to the Project area. The Project's buildout would not affect or alter the current ratio of sworn officers per 1,000 residents. No additional police staffing or the construction of new or expanded police facilities is required.

The Project would be required to comply with the provisions of the City's Development Impact Fee Ordinance, which requires a fee payment to assist the City in providing for public services, including police protection services. Payment of the Development Impact Fee would ensure that the Project provides its fair share of funds for additional police protection services, which is intended, to offset the incremental increase in the demand that would be created by the Project.

Based on the above analysis, with implementation of PPP 3.14-2, impacts related to police protection would be less than significant and no mitigation measures are required.

SCHOOLS

Determination: Less Than Significant Impact.

Sources: City of Banning General Plan, Police and Fire Protection Element

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to schools. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.14-2 Prior to the issuance of building permits, the Project Applicant shall pay required development impact fees to the Banning Unified School District following protocol for impact fee collection.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The construction of 98 residential homes as proposed by the Project would have an incremental increase in the population in the local area and would generate additional demands to the existing public school system by generating additional students to be served by the Banning Unified School District. The Project would be required to contribute fees to the Banning Unified School District in accordance with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50). Pursuant to Senate Bill 50, payment of school impact fees constitutes complete mitigation for Project-related impacts to school services.

Based on the above analysis, with implementation of PPP 3.14-2, impacts related to schools would be less than significant and no mitigation measures are required.

PARKS

Determination: Less Than Significant Impact.

Source: City of Banning General Plan Parks and Recreation Element, Open Space and Conservation Element

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to parks. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.14-3 Prior to the issuance of a building permit, the Project Applicant shall pay required park development impact fees to the City of Banning Recreation and Park District.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project proposes the construction of 98 residential units. Based on population estimates prepared by the State Department of Finance, the Project is estimated to provide housing for up to 284 residents (2.9 persons per household x 98 = 284). The Project does not propose any park land so it will be subject to the park land impact fee.

Based on the above analysis, with implementation of PPP 3.14-3, impacts related to parks would be less than significant and no mitigation measures are required.

OTHER PUBLIC FACILITIES

Determination: Less Than Significant Impact.

Source: City of Banning General Plan, Public Building and Facilities Element

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to public services. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.14-2 above is applicable to the Project.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Development of the Project would result in an increase in the population of the Project area and would have an incremental increase the demand for public services, including public health services and library services. However, the population increase generated by the Project would not require the construction of new or expanded public facilities.

The Project would be required to comply with the provisions of the City's Development Impact Fee, which requires a fee payment to assist the City in providing public services. Payment of the Development Impact Fee would ensure that the Project provides fair share of funds for additional public services. These funds may be applied to the acquisition and/or construction of public services and/or equipment.

Based on the above analysis, with implementation of PPP 3.14-1 and 3.14-2, above, impacts related to public services would be less than significant and no mitigation measures are required.

3.15 RECREATION

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			☐	
b. Does the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			☐	

Impact Analysis

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

Determination: Less than Significant Impact.

Sources: City of Banning General Plan Parks and Recreation Element

Plans, Policies, or Programs (PPP)

There are no Project Design Features applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project's 284 estimated residents would not substantially increase the use of existing public park facilities and would not require the modification of existing parks or modification of new park facilities.

With implementation of PDF 3.14-1, impacts related to recreational facilities would be less than significant and no mitigation measures are required.

3.15(b) *Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment?*

Determination: Less than Significant Impact.

Source: Project Application Materials, City of Banning Parks and Recreation Element

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project does not propose any on-site recreational facilities nor does it required the construction or expansion of recreational facilities given its limited population generation (284 residents).

Based on the above analysis, impacts related to parks and recreational facilities would be less than significant and no mitigation measures are required.

3.16 TRANSPORTATION/TRAFFIC

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			■	

3.16(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?*

Determination: Less Than Significant Impact.

Sources: Focused Traffic Impact for Banning TTM 36939 (LSA Project No. DFD1502), July 28, 2015.

Plans, Policies, or Programs (PPP)

The following apply to the Project and would reduce impacts relating to transportation and traffic. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.16-1 Prior to the issuance of any building permits, the Project Proponent shall make pay the City's Traffic Control Facility Fee per household unit constructed.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Motorized Vehicle Travel

Trips generated by the Project's proposed land uses have been estimated based on trip generation rates identified in the Focused Traffic Impact Study prepared by LSA, July 28, 2015, shown in Table 12.

Table 12. Trip Generation Rates

Land Use Type	Units	AM Peak Hour			PM Peak Hour			Daily
		Total	In	Out	Total	In	Out	
Single-Family Detached Housing Trips/Unit Land Use Category: 210	98	0.75 73	0.19 18	0.56 55	1.00 98	0.63 62	0.37 36	9.52 933

Source: LSA Associates, Inc. Focused Traffic Impact Study, TTM 36939, July 28, 2015

The Project is estimated to generate the following number of trips:

Based on the Banning General Plan Amendment Change in Level of Service Policy, dated September 2012, the City of Banning establishes Level of Service (LOS) D as the minimum LOS to be maintained on all roadway segments and intersections. Trip generation for the proposed project was calculated using rates from the Institute of Transportation Engineers (ITE) Trip Generation (9th Edition) for Land Use 210 Single-Family Detached Housing. The project trip generation would generate 73 trips in the a.m. peak hour, 98 trips in the p.m. hour and 933 daily trips.

Based on the project's trip generation, under existing and opening year conditions, the proposed intersection of Sunset Avenue/Dawn Lane and roadway segment on Sunset Avenue between Wilson Street and the proposed Dawn Lane operate at satisfactory LOS or better.

Mass Transit and Pedestrian Facilities

Transit Service

The Project area is currently served by the Banning Transit Services, which provides fixed route bus service along three (3) routes. The Project is not proposing to construct any improvements and will not interfere with the existing bus service. As such, the Project as proposed will not conflict with an applicable plan, ordinance or policy applying to transit services.

Bicycle & Pedestrian Facilities

The Project is not proposing to construct any improvements that will interfere with bicycle and pedestrian use. The Project will not conflict with an applicable plan, ordinance or policy applying to non-motorized travel. Impacts are less than significant.

Based on the above analysis, with implementation of PPP 3.16-1 would be less than significant and no mitigation measures are required.

3.16(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?*

Determination: Less Than Significant Impact.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project proposes only 98 lots and would generate less than 933 daily trips on intersections in the vicinity of the Project site. As such, the Project is not forecast to deteriorate the minimum Level of Service in the Project area as required by the General Plan. Therefore, the Project will not be in conflict with the City of Banning's Congestion Management Program. Impacts are less than significant and no mitigation measures are required.

3.16(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?*

Determination: Less Than Significant Impact.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project does not include any air travel component (e.g., runway, helipad, etc.) Accordingly, the Project would not have the potential to affect air traffic patterns, including an increase in traffic

levels or a change in flight path location that results in a substantial safety risk. Therefore, impacts are less than significant.

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

Determination: Less Than Significant Impact.

Source: Project Application Materials, Focused Traffic Impact for Banning TTM 36939 (LSA Project No. DFD1502), July 28, 2015

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The residential land uses proposed Project would be compatible with existing development in the surrounding area; therefore, implementation of the Project would not create a transportation hazard as a result of an incompatible use.

The Project would provide adequate vehicular and pedestrian safety and ensure that no hazardous transportation design features would be introduced by the Project. Accordingly, the Project would not substantially increase hazards due to a design feature or incompatible use. Impacts would be less than significant.

3.16(e) Result in inadequate emergency access?

Determination: Less Than Significant Impact.

Source: Project Application Materials, Focused Traffic Impact for Banning TTM 36939 (LSA Project No. DFD1502), July 28, 2015

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Project would result in a new residential community, which would increase the need for emergency access to-and-from the site. Adequate emergency access would be provided to the Project site via Wilson Street. During the course of the required review of the Project, the Project's transportation design was reviewed by the City's Public Works/Engineering Department, County Fire Department,

and City of Banning Police Department to ensure that adequate access to and from the site would be provided for emergency vehicles. With the City/County requirements for emergency vehicle access, impacts would be less than significant and no mitigation measures are required.

3.16(f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Determination: Less Than Significant Impact.

Source: General Plan Circulation Element, Project Application Materials, Focused Traffic Impact for Banning TTM 36939 (LSA Project No. DFD1502), July 28, 2015

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project as proposed will not conflict with an applicable plan, ordinance or policy applying to transit services. Impacts are less than significant.

3.17 UTILITIES AND SERVICE SYSTEMS

<i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed 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, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?			■	
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?			■	

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

Determination: Less Than Significant Impact.

Source: City of Banning General Plan, Water, Wastewater and Utilities Element

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to wastewater treatment requirements. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

- PPP 3.17-1 As per Title 16 of the City of Banning Municipal Code Subdivision section, prior to recordation of a Final Map, improvement plans shall be submitted to the City Engineer that provide for sewage disposal by connection to an existing collection

system capable of accepting the waste load. The collection system shall meet the City of Banning Utility Department standards and requirements.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Wastewater treatment and collection services would be provided to the Project site by the City of Banning Public Works and Utilities Department. The Banning Public Works and Utilities Department is required to operate all of its treatment facilities in accordance with the waste treatment and discharge standards and requirements set forth by the Colorado River Basin Regional Water Quality Control Board.

Wastewater generated by the Project will be treated at the Banning Waste Water Treatment Plant. The Project would not install or utilize septic systems or alternative wastewater treatment systems, therefore, the Project would have no potential to exceed the applicable wastewater treatment requirements established by the Colorado River Basin Regional Water Quality Control Board or Banning Waste Water Treatment Plan specifications. Accordingly, impacts would be less than significant.

3.17(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?*

Determination: Less Than Significant Impact.

Sources: Project Application Materials, Water & Sewer Master Plans, General Plan.

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

The Project would construct an on-site network of water and sewer pipes which would connect to the existing 18 inch water line in Wilson Street and an 8-inch sewer line in Sunrise Avenue. An 18-inch water line exists on Sunset and 12-inch sewer line. The installation of water and sewer lines as proposed by the Project would result in physical impacts to the surface and subsurface of the Project site. These impacts are considered to be part of the Project's construction phase and are evaluated throughout this Initial Study Checklist. In instances where impacts have been identified for the Project's construction phase, Plans, Policies, Programs, or Standard Conditions (PPP), Project Design Features (PDF), or Mitigation Measures (MM) are required to reduce impacts to less-than-significant levels. Accordingly, additional measures beyond those identified throughout this Initial Study Checklist would not be required.

Based on the above analysis, impacts would be less than significant and no mitigation measures are required.

3.17(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?*

Determination: Less Than Significant Impact.

Sources: City of Banning General Plan, Water, Wastewater and Utilities Element

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, or Programs applicable to the Project relating to this issue

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Drainage patterns will generally follow the existing frontage Wilson Street public street gutter and remain as in the existing condition.

The construction of the on-site drainage facilities would result in physical impacts to the surface and subsurface of the Project site. The Project will provide for drainage to the street via an under sidewalk drain that has been appropriately sized. Project engineers shall be required to design the WQMP basins to retain the 100yr – 3 hour storm event provided on site. These impacts are part of the Project's construction phase and are evaluated in the appropriate sections of this Initial Study/Mitigated Negative Declaration document. In instances where impacts have been identified for the Project's construction phase, Plans, Policies, Programs, or Standard Conditions (PPP), Project Design Features (PDF), or Mitigation Measures are required to reduce impacts to less-than-significant levels. Accordingly, additional measures beyond those identified throughout this Initial Study Checklist would not be required.

Based on the above analysis, impacts would be less than significant and no mitigation measures are required.

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

Determination: Less Than Significant Impact.

Sources: City of Banning General Plan, Water, Wastewater and Utilities Element

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to water supply requirements. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.17-2 Prior to recordation of a Final Map, required improvement plans shall be submitted to the satisfaction of the City Engineer that provide for the installation of a domestic water supply and distribution system that meets the requirements per the City of Banning Public Services and Utility requirements.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Utilities are available at the project site. The service providers for water, sewer, electricity and other utilities have facilities in the immediate vicinity of the site, and will collect connection and usage fees to balance for the cost of providing services. The project will control on-site storm water to the satisfaction of the City Engineer (please see Hydrology, above). The City's solid waste hauler will continue to implement the requirements of AB 939, requiring the reduction of the solid waste stream. The construction of the proposed project is expected to have less than significant impacts on utility providers.

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

Determination: Less Than Significant Impact.

Sources: City of Banning General Plan, Water, Wastewater and Utilities Element

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to water supply requirements. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.17-3 Prior to the issuance of a grading permit, the Project Proponent shall be required to provide written verification to the City of Banning Public Works Department that adequate capacity exists at the City of Banning Water Control Plant to serve the Project. All water and sewer connection fees shall be paid prior to the issuance of a building permit.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Sanitary sewer service to the Project site would be provided by the Banning Waste Water Treatment Plant.

Based on the above analysis, with implementation of PPP 3.17-3, impacts would be less than significant and no mitigation measures are required.

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

Determination: Less Than Significant Impact.

Sources: (City of Banning General Plan)

Plans, Policies, or Programs (PPP)

There are no Plans, Policies, Programs, or Standard Conditions applicable to the Project relating to this issue

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Impact Analysis

Construction Related Impacts

Waste generated during the construction phase of the Project would primarily consist of discarded materials from the construction of streets, common areas, infrastructure installation, and other project-related construction activities. The City of Banning contracts with Waste Management Inland Empire for solid waste and disposal services. Construction debris and waste is taken to the Lamb Canyon Sanitary Land fill, El Sobrante Landfill and the Badlands Landfill for disposal.

The California Integrated Waste Management Board (CIWMB) database cites that Lamb Canyon Sanitary Landfill occupies an area of 1,088 acres for all of its land fill operations and has a total permitted disposal volume of 23,601,596 cubic yards and permit to accept a maximum of 1,900 ton of solid waste per day. CIWMB estimates that that the Lamb Canyon Sanitary Landfill had a remaining capacity of 16,926,000 cubic yards in 1998. The El Sobrante Landfill operated by Waste Management encompasses a total of 1,322 acres and has a total permitted disposal volume of 184,930,000 cubic yards. On a daily basis, this landfill is permitted to accept a maximum of 10,000 tons of solid waste. CIWMB estimates that as of 2001, the El Sobrante Landfill has an estimated remaining capacity of 3,674,267 cubic yards.

Operational Related Impacts

Solid waste generated during long-term operation of the Project would be disposed at the Lamb Canyon Sanitary Landfill and/or the El Sobrante Landfill. During long-term operation, the Project's solid waste would be a minuscule amount of the daily permitted disposal capacity at the Lamb Canyon Sanitary Landfill and El Sobrante Landfill.

These landfills receive well below their maximum permitted daily disposal volume, and solid waste generated by the Project is not anticipated to cause these landfills to exceed their maximum permitted daily disposal volume. Because the proposed Project would generate a relatively small amount of solid waste per day, as compared to the permitted daily capacities for Lamb Canyon Sanitary Landfill and the El Sobrante Landfill, these regional landfill facilities would have sufficient daily capacity to accept solid waste generated by the Project.

Based on the above analysis, impacts would be less than significant and no mitigation measures are required.

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

Determination: Less Than Significant Impact.

Sources: City of Banning General Plan

Plans, Policies, or Programs (PPP)

The following applies to the Project and would reduce impacts relating to solid waste. This measure will be included in the Project's Mitigation Monitoring and Reporting Program:

PPP 3.17-4 The California Waste Management Act (AB 939) requires municipalities to reduce the amount of waste it sends to landfills by 50%. The Project shall participate in

established Citywide recycling programs in response to AB 92. Individuals may also participate through privately run recycling operators.

Impact Analysis

The California Integrated Waste Management Act established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the Act established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted.

The Project's Proponent would be required to coordinate with the waste hauler to develop collection of recyclable materials for the Project on a common schedule as set forth in applicable local, regional, and State programs. Recyclable materials that would be recycled by the Project include paper products, glass, aluminum, and plastic.

Additionally, the Project's waste hauler would be required to comply with all applicable local, State, and Federal solid waste disposal standards, thereby ensuring that the solid waste stream to the landfills that serve the Project are reduced in accordance with existing regulations.

Based on the above analysis, with implementation of PPP 3.17-4, impacts would be less than significant and no mitigation measures are required.

3.18 MANDATORY FINDINGS OF SIGNIFICANCE

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

Impact Analysis

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

Determination: Less Than Significant Impact with Mitigation Incorporated.

Source: This Initial Study Checklist.

As noted in the analysis throughout this Initial Study Checklist/Mitigated Negative Declaration document, the following apply to the Project and would reduce impacts relating to this issue. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

Plans, Policies, or Programs (PPP)

PPP 3.4-1, PPP 3.4-2, and PPP 3.5-1 shall apply.

Project Design Features (PDF)

There are no Project Design Features applicable to the Project relating to this issue.

Mitigation Measures (MM)

Mitigation Measures BIO-1 through BIO-3, CR-1, CR-2, and CR-3 shall apply.

Impact Analysis

All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants and animals, and historical and pre-historical resources were evaluated as part of this Initial Study Checklist.

In instances where impacts have been identified, the Plans, Policies, or Programs, Project Design Features, or Mitigation Measures listed above are required to reduce impacts to less than significant levels. Therefore, Project would not substantially degrade the quality of the environment.

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

Determination: Less Than Significant With Mitigation Incorporated.

Source: This Initial Study Checklist.

As noted in the analysis throughout this Initial Study Checklist/Mitigated Negative Declaration document, the following apply to the Project and would reduce impacts relating to this issue. These measures will be included in the Project’s Mitigation Monitoring and Reporting Program:

Plans, Policies, or Programs (PPP)

All Plans, Policies, or Programs (PPP) identified in this Initial Study Checklist/Mitigated Negative Declaration shall apply.

Project Design Features (PDF)

All Project Design Features (PDF) identified in this Initial Study Checklist/Mitigated Negative Declaration shall apply.

Mitigation Measures (MM)

All Mitigation Measures (MM) identified in this Initial Study Checklist/Mitigated Negative Declaration shall apply.

Impact Analysis

As discussed throughout this Initial Study Checklist, implementation of the proposed Project has the potential to result in effects to the environment that are individually limited, but cumulatively considerable. In instances where impacts have been identified, the Plans, Policies, or Programs, Project Design Features, or Mitigation Measures, listed above are required to reduce impacts to less than significant levels. Therefore, the Project would not contribute to environmental effects that are individually limited, but cumulatively considerable.

3.18(c) *Does the Project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?*

Determination: Less Than Significant Impact.

As noted in the analysis throughout this Initial Study Checklist/Mitigated Negative Declaration document, the following apply to the Project and would reduce impacts relating to this issue. These measures will be included in the Project's Mitigation Monitoring and Reporting Program:

Plans, Policies, or Programs (PPP)

The following shall apply:

PPP 3.1-1 through 3.1.3
PPP 3.3-1 and 3.3-2
PPP 3.4-1
PPP 3.5-1
PPP 3.6-1 through 3.6-3
PPP 3.7-1
PPP 3.8-1 and 3.8-2
PPP 3.9-1 through 3.9-4
PPP 3.12-1 and 3.12-2
PPP 3.14-1 through 3.14-3
PPP 3.17-1 through 3.17-4

Project Design Features (PDF)

The following shall apply:

PDF 3.9-1

Mitigation Measures (MM)

The following shall apply:

MM-BIO -1 and MM BIO-2
MM CR-1, MM CR-2, AND MM CR-3
MM GEO-1 through MM GEO-5
MM HAZ-1 and MM HAZ -2

Impact Analysis

The Project's potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this Initial Study Checklist/Mitigated Negative Declaration.

In instances where impacts have been identified, the Plans, Policies, or Programs, Project Design Features are required to reduce impacts to less-than-significant levels. Therefore, the Project would not result in environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

4.0 REFERENCES

California Air Resources Board (CARB) Handbook, 2009.

<http://www.arb.ca.gov/homepage.htm>

California Environmental Quality Act (CEQA) Guidelines. http://opr.ca.gov/m_ceqa.php

California Environmental Quality Act (CEQA) Air Quality Handbook.

http://opr.ca.gov/m_ceqa.php

City of Banning General Plan, 2006 www.ci.banning.ca.us

City of Banning General Plan EIR, 2006 www.ci.banning.ca.us

California Department of Toxic Substances Control, www.dtsc.ca.gov

Countywide Integrated Waste Management Plan www.rivcowom.org

Flood Insurance Rate Maps, Federal Emergency Management Agency, <https://msc.fema.gov>

South Coast Air Quality Management District, www.aqmd.gov.

South Coast Air Quality Management District, Final 2012 Air Quality Management Plan

www.aqmd.gov

Southern California Association of Governments, 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy.

<http://rtpscsc.scag.ca.gov/Pages/default.aspx>

Western Riverside County Multiple Species Habitat Conservation Plan.

<http://www.rctlma.org/mshcp/>

5.0 REPORT PREPARATION PERSONNEL

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Appendix A

**MSHCP CONSISTENCY ANALYSIS AND
HABITAT ASSESSMENT**

**BANNING TRACT 32429 PROJECT
CITY OF BANNING
RIVERSIDE COUNTY, CALIFORNIA**

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LSA Project No. DFD1502

LSA

May 2015

**MSHCP CONSISTENCY ANALYSIS AND
HABITAT ASSESSMENT**

**BANNING TRACT 36939 PROJECT
CITY OF BANNING
RIVERSIDE COUNTY, CALIFORNIA**

LSA

May 2015

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1.0 INTRODUCTION

LSA Associates, Inc. (LSA) has conducted a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the approximately 35-acre Banning Tract 36939 Project site located in the City of Banning, Riverside County California. This report includes a focused survey for burrowing owl (*Athene cunicularia hypugea*); a habitat assessment for MSHCP plants, specifically Narrow Endemic Plant Species Survey Area (NEPSSA) species; and analysis of other constraints, specifically with regard to nesting birds.

2.0 PROJECT LOCATION AND DESCRIPTION

The project site consists of the following Assessor's Parcel Numbers (APNs): 535-430-001 through 535-430-021, 535-431-001 through 535-431-015, 535-432-001 through 535-432-017, 535-070-004, and 535-070-006. It is located northeast of the intersection of Wilson Avenue and Sunset Avenue, as depicted on the U.S. Geological Survey (USGS) 7.5-minute *Beaumont, California* quadrangle in projected Section 5, Township 3 South, Range 1 East (Figure 1).

The project proposes to construct 98 single-family residential units. Figure 2 depicts the proposed project's site plan.

3.0 BACKGROUND

3.1 Western Riverside County Multiple Species Habitat Conservation Plan

The MSHCP provides for the assembly of a Conservation Area consisting of Core Areas and Linkages for the conservation of Covered Species (Riverside County 2003). Covered Species are 146 species of plants and animals of various federal and state listing statuses. The Conservation Area is to be assembled from portions of the MSHCP Criteria Area, which consists of quarter-section (i.e., 160-acre) Criteria Cells, each with specific criteria for species conservation within that cell. The MSHCP provides an incentive-based program, the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) for adding land to the MSHCP Conservation Area. If it is determined that all or a portion of the property is needed for inclusion in the MSHCP Conservation Area, then various incentives may be available to the property owner in exchange for the conveyance of a property interest.

The MSHCP requires focused surveys for certain plant and animal species for project sites located within designated plant and animal survey areas when potential suitable habitat is present. For instance, surveys for Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) may be required in areas having Delhi soils. The MSHCP also requires that an assessment be completed to determine the effects of the project on riparian/riverine areas and vernal pools, and associated protected species in accordance with MSHCP Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools.

Projects located in proximity to an MSHCP Conservation Area may result in edge effects that could adversely affect biological resources within the MSHCP Conservation area. These edge effects must be addressed according to the Urban/Wildlands Interface Guidelines (MSHCP Section 6.1.4).

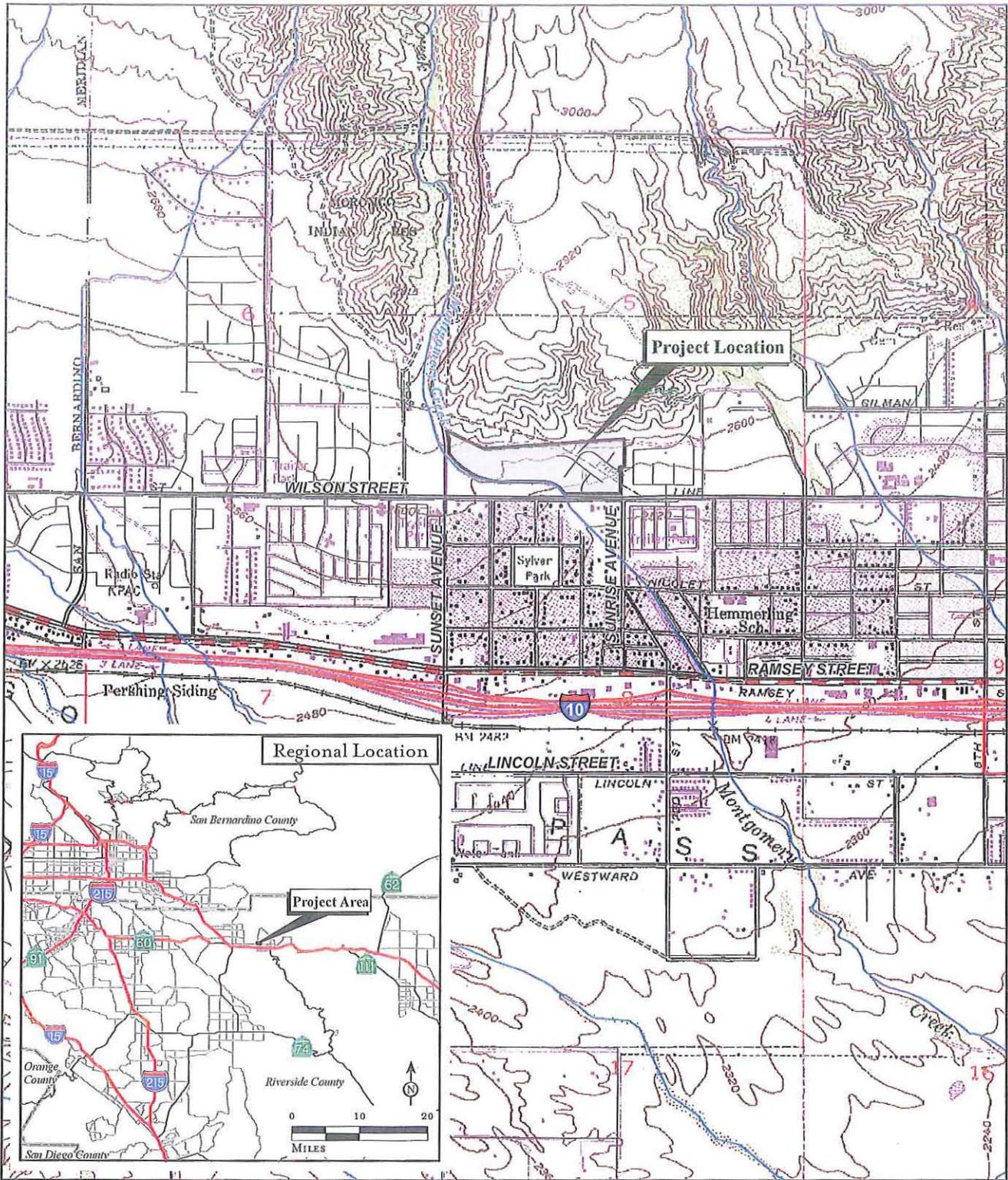
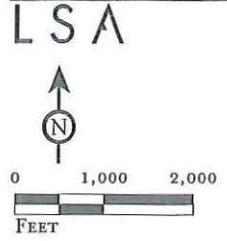


FIGURE 1



Banning Tract 36939
 Biological Resources Assessment

Regional and Project Location

SOURCE: USGS 7.5' Quad: Beaumont, 1988, CA; County of Riverside, 2015; National Hydrography Dataset, 2010.
 I:\DFD1502\Reports\Bio\fig1_RegLoc.mxd (7/24/2015)



FIGURE 2

Banning Tract 36939
 MSHCP Consistency Report

Site Plan

Project Boundary

0 150 300
 FEET

SOURCE: Google Earth, 2014; Soil Data Mart, 2005.

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3.2 Jurisdictional Waters and Streambeds

The U.S. Army Corps of Engineers (USACE), under Section 404 of the Federal Clean Water Act (CWA), regulates discharges of dredged or fill material into “waters of the United States.” These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a connection to interstate or foreign commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or it may be indirect (through a connection identified in USACE regulations). The USACE typically regulates as non-wetland waters of the U.S. any body of water displaying an “ordinary high water mark” or OHWM. In order to be considered a jurisdictional wetland under Section 404, an area must possess hydrophytic vegetation, hydric soils, and wetland hydrology.

The California Department of Fish and Wildlife (CDFW), under Sections 1600 et seq. of the California Fish and Game Code, regulates alterations to lakes, rivers, and streams. A stream is defined by the presence of a channel bed and banks, and at least an occasional flow of water. The CDFW also regulates habitat associated with the streambed, such as wetland, riparian shrub, and woodlands.

The Regional Water Quality Control Board (RWQCB) is responsible for the administration of Section 401 of the CWA, through water quality certification of any activity that may result in a discharge to jurisdictional waters of the U.S. The RWQCB may also regulate discharges to “waters of the State,” including wetlands, under the California Porter-Cologne Water Quality Control Act.

3.3 Migratory/Nesting Birds

The burrowing owl and other nesting bird species are protected by California Fish and Game Code Sections 3503 and 3503.5 and by the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711), which make it unlawful to take, possess, or needlessly destroy the nest or eggs of any migratory bird or bird of prey.

4.0 METHODS

4.1 Literature Review

A literature review was conducted to determine the existence or potential occurrence of special-status plant and animal species on the project site and in the project vicinity. Database records for the *Beaumont, California* USGS 7.5-minute series quadrangle and surrounding quadrangles were searched on May 1, 2015, using the CDFW California Natural Diversity Data Base *Rarefind 5* online application (<https://map.dfg.ca.gov/rarefind/>) and the California Native Plant Society’s *Inventory of Rare and Endangered Plants* (<http://www.cnps.org/inventory>). The Riverside County Integrated Project (RCIP) Conservation Summary Report (http://onlineservices.rctlma.org/content/rcip_report_generator.aspx) was queried to determine habitat assessment and potential survey requirements for the site, as well as Volume 1, Parts 1 and 2 of the MSHCP (Riverside County Transportation and Land Management Agency 2003). Soil information was taken from electronic data provided by Soil Data Mart (Natural Resource Conservation Service 2003). Current and historical aerial photographs were also reviewed in Google Earth (Google Earth 2015).

4.2 Field Surveys

A general reconnaissance-level field survey was conducted on May 5, 2015, by LSA Senior Biologists Claudia Bauer and Sarah Barrera between the hours of 1115 and 1305. The weather during the survey was cool with clear skies with the exception of some scattered high clouds, temperature in the mid-60 degrees Fahrenheit, and mild winds (approximately 8 miles per hour). During the survey, the biologists assessed habitat for the burrowing owl, NEPSSA plants, and other special status species identified in the literature review. The site was also evaluated for the presence of nesting habitat for migratory birds. The survey area included the proposed project footprint as shown in previously referenced Figure 2.

The entire survey area was surveyed on foot. Notes were taken on general site conditions, vegetation, and suitability of habitat for various special-interest elements. All plant and animal species observed or otherwise detected during this field survey were noted and are listed in Appendix A.

MSHCP Plants Habitat Assessment. A habitat assessment for NEPSSA plants, specifically Area 8 species, was conducted during the May 5, 2015, field survey. Habitat requirements for these species were reviewed prior to the site visit. During the survey, the site was analyzed for the presence of suitable habitats and/or soils to support these species.

Burrowing Owl Survey. A survey was conducted for the burrowing owl in conjunction with the general biological field survey on May 5, 2015. The survey was conducted by walking over suitable habitat within the project site in transects spaced at approximately 50 feet, which allowed for 100 percent visual coverage. Any potential burrowing owl burrows encountered during the survey were examined for owl sign (e.g., feathers, pellets, whitewash, and prey remnants).

5.0 EXISTING SETTING

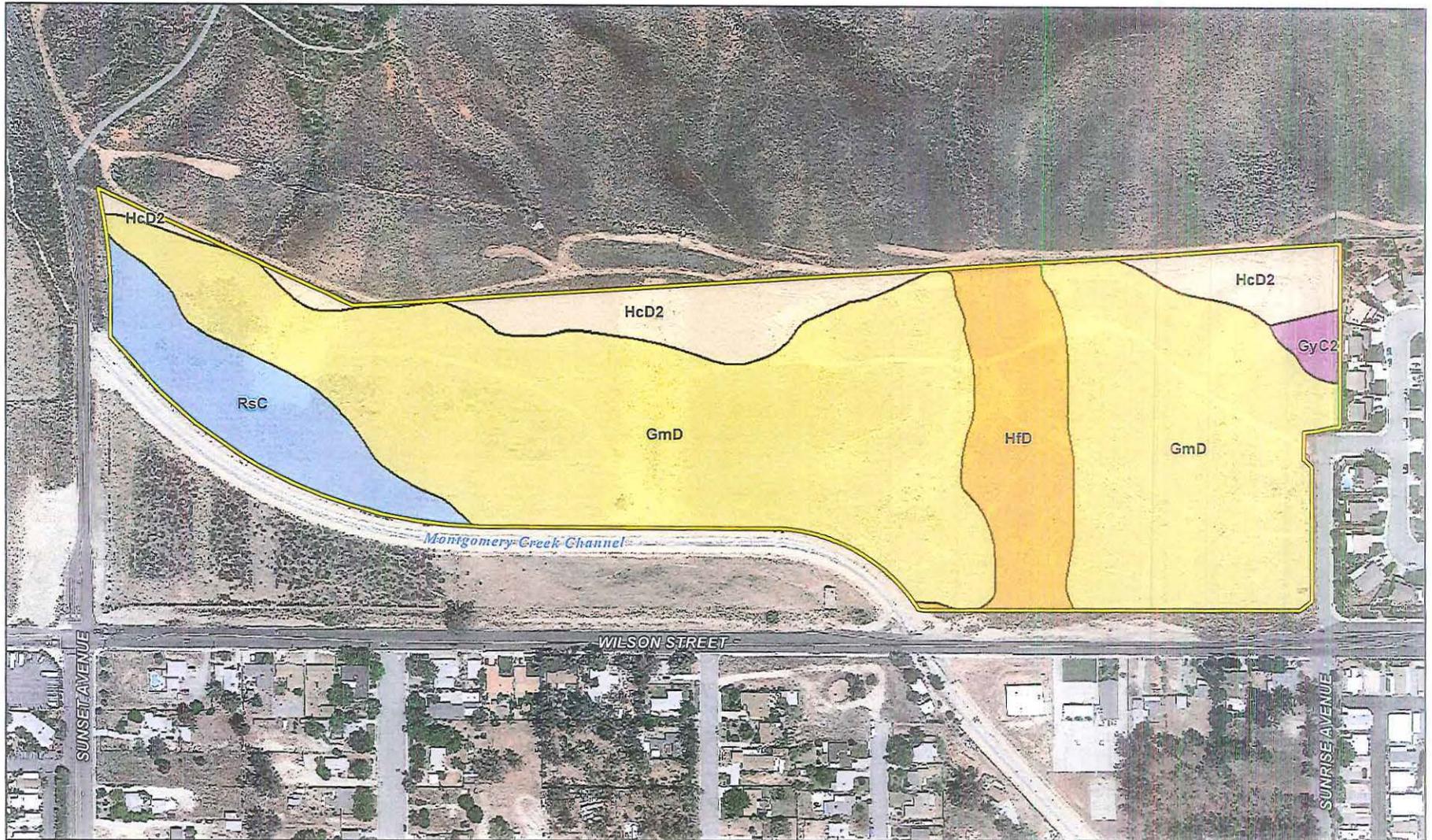
5.1 Existing and Adjacent Land Use

The project site is situated at the northeast corner of Wilson Avenue and Sunset Avenue in the City of Banning. The site is undeveloped, but the eastern half of the project site had previously been graded for home sites as late as 2009. The entire project site has been dormant since that time. The site is bordered on the west and north by undeveloped open space, and to the east and south by single-family homes and rural residences.

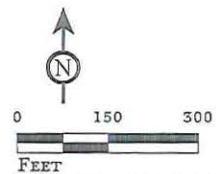
5.2 Topography and Soils

The historical topography of the project site is relatively flat with slight, hilly undulations. The site slopes gently to the south. This topography still exists at the west end of the project site; however, the east end of the project site has been graded for home sites and the topography has been altered to have elevated plateaus for tiered lots. The general elevation of the site ranges from approximately 2,550 to 2,650 feet above mean sea level.

The soils within the project site, as shown in Figure 3, include the following:



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SOURCE: Google Earth, 2014; Soil Data Mart, 2003.
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-  Project Boundary
- Soil Types**
-  GmD: Gorgonio gravelly loamy fine sand, 2 to 15 percent slopes
-  GyC2: Greenfield sandy loam, 2 to 8 percent slopes, eroded
-  HcD2: Hanford coarse sandy loam, 8 to 15 percent slopes, eroded
-  HfD: Hanford sandy loam, 2 to 15 percent slopes
-  Rsc: Riverwash

FIGURE 3

*Banning Tract 36939
 MSHCP Consistency Report*

Soils

- Gorgonio gravelly loamy fine sand, 2 to 15 percent slopes;
- Greenfield sandy loam, 2 to 8 percent slopes, eroded;
- Hanford coarse sandy loam, 8 to 15 percent slopes, eroded;
- Hanford sandy loam, 2 to 15 percent slopes; and
- Riverwash.

5.3 Vegetation

The study area is highly disturbed due to past and current land use practices. As a result of the disturbance caused by these land use practices, the vegetation on the project site is dominated by ruderal vegetation. The east side of the project site consists almost solely of Russian thistle (*Salsola tragus*) and the west side of the project site consists primarily of non-native grasslands where red brome (*Bromus madritensis*), ripgut brome (*Bromus diandrus*), and wild oat (*Avena fatua*) are dominant. Small isolated polygons of California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*) are dispersed within the non-native grasses on the western half of the project site. Three Mexican elderberry (*Sambucus mexicana*) trees are located along the southwestern boundary of the site. A complete list of plant species observed on the site is included as Appendix A.

Figure 4 shows vegetation and land use. Site photographs are provided as Figure 5.

5.4 Wildlife

Wildlife common to suburban areas was observed using the site. Some species observed include red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), and California ground squirrel (*spermophilus beecheyi*). A complete list of wildlife species observed on the site is included as Appendix A.

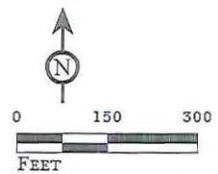
6.0 RESULTS AND RECOMMENDATIONS

6.1 MSHCP Consistency Analysis

The proposed project is located within the Pass Area Plan of the MSHCP, but is not located within a Criteria Area or adjacent to a Criteria Area or Conservation Area. Thus, the proposed project is not subject to the Urban/Wildlands Interface Guidelines. Riverine resources are present. The project site is within the MSHCP survey areas for NEPSSA plants and burrowing owl. Figure 6 shows the MSHCP survey areas and field survey area for the burrowing owl. Table A provides a summary of MSHCP consistency requirements as they apply to the project site. The riverine resources and the results of the MSHCP plants habitat assessment and burrowing owl survey are discussed in detail below.



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SOURCE: Google Earth, 2014

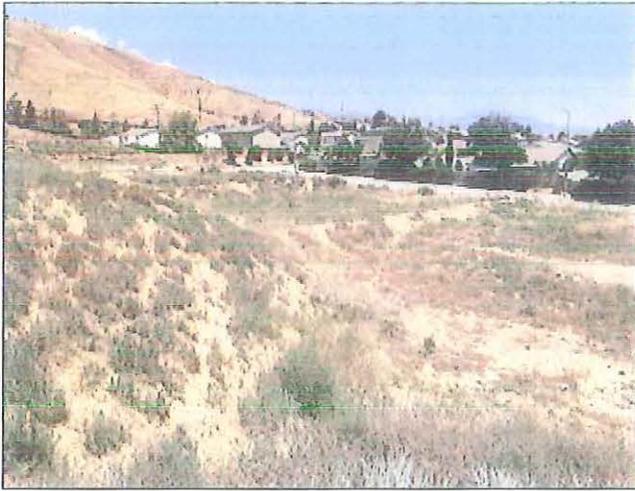
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-  Project Boundary
-  Drainage Feature
-  Photo Location
- Vegetation and Land Use**
-  California Buckwheat Scrub
-  Mexican Elderberry Tree
-  Ruderal/Disturbed
-  Ruderal/Non-native Grassland

FIGURE 4

Banning Tract 36939
MSHCP Consistency Report

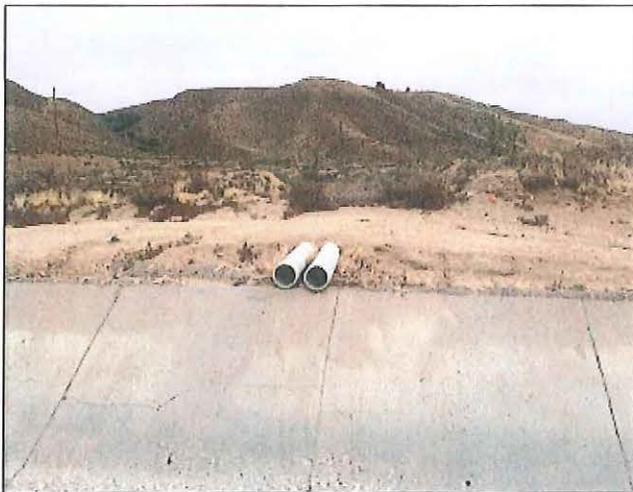
Vegetation, Land Use and Photograph Locations



PHOTOGRAPH 1: View facing northeast, along the eastern edge of the project site.



PHOTOGRAPH 2:
View facing north
where drainage feature
D-2 leaves the site.



PHOTOGRAPH 3: View facing northeast of two culvert pipes. Channelized Montgomery Creek is in the foreground.



PHOTOGRAPH 4: View facing east along an access road.

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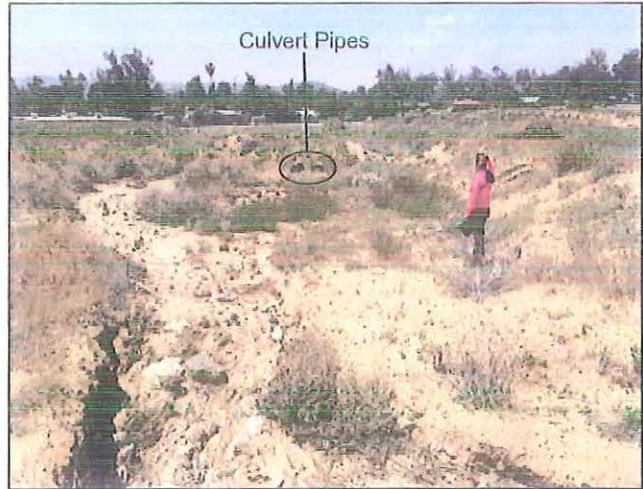
FIGURE 5A

Banning Tract 36939
MSHCP Consistency Report

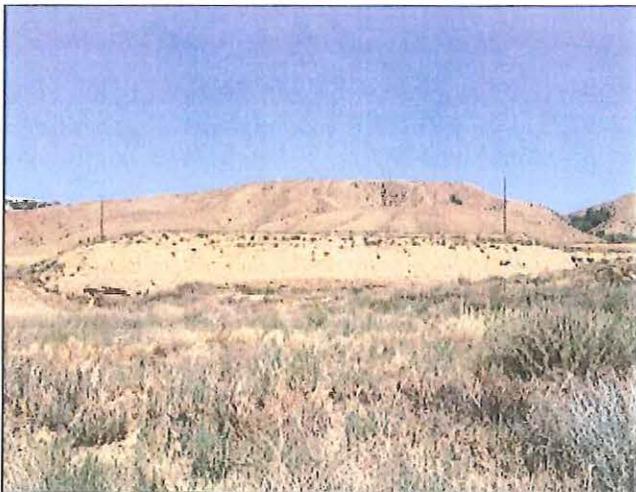
Site Photographs



PHOTOGRAPH 5: View facing south where the access road crosses drainage feature D-1.



PHOTOGRAPH 6: View facing southwest of two corrugated plastic culvert pipes in drainage feature D-1.



PHOTOGRAPH 7: View facing northwest from the southeastern part of the project site.



PHOTOGRAPH 8: View facing west from the central part of the project site.

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FIGURE 5B

Banning Tract 36939
MSHCP Consistency Report

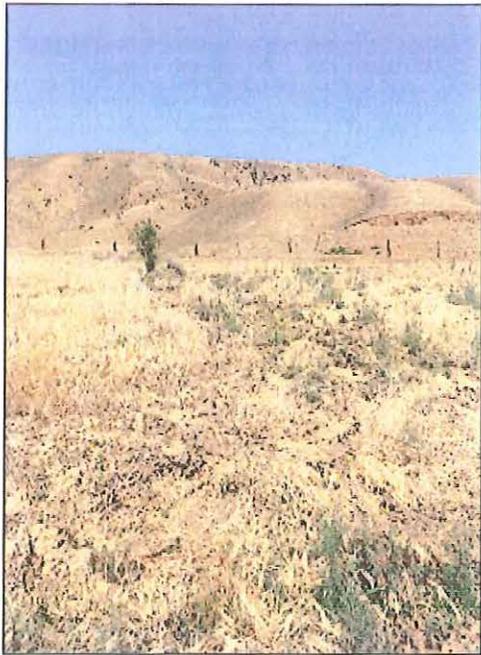
Site Photographs



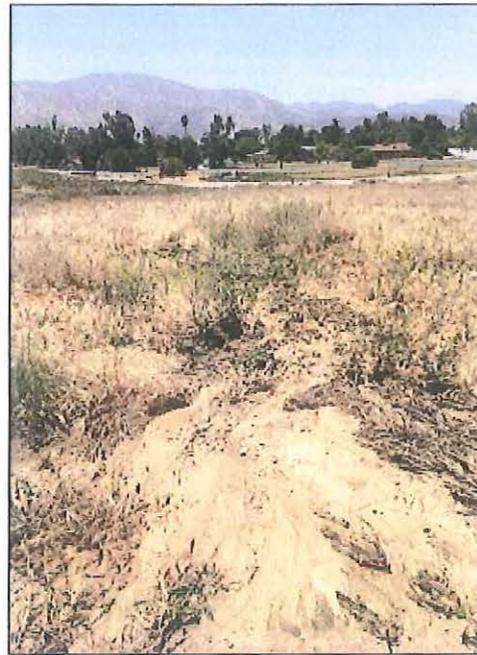
PHOTOGRAPH 9: *View facing southwest from the northern edge of the project site.*



PHOTOGRAPH 10: *View facing southwest of ruderal grassland habitat. California buckwheat is also visible.*



PHOTOGRAPH 11: *View facing north along drainage feature D-2.*



PHOTOGRAPH 12: *View facing south along drainage feature D-2.*

LSA

FIGURE 5C

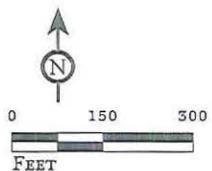
*Banning Tract 36939
MSHCP Consistency Report*

Site Photographs



FIGURE 6

LSA



-  Project Boundary
-  Burrowing Owl Survey Area
-  Narrow Endemic Plants Survey Area

Banning Tract 36939
MSHCP Consistency Report

MSHCP Survey Areas

SOURCE: Google Earth, 2014; Riverside County, 2005
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Table A: MSHCP Consistency Checklist

MSHCP Compliance	Yes	No
Is project a covered activity?		✓
Is project located in a Criteria Area or Public/Quasi-Public Land?		✓
Located in Criteria Area Plant Survey Area?		✓
Located in Criteria Area Amphibian Survey Area?		✓
Located in Criteria Area Mammal Survey Area?		✓
Is the project located adjacent to MSHCP Conservation Areas?		✓
Is project located in Narrow Endemic Survey Area?	✓	
Are riverine/riparian/wetland habitats or vernal pools present?	✓	
Is the project located in Burrowing Owl Survey Area?	✓	

MSHCP Plant Species Survey Area. Suitable soils and/or habitat conditions for the two target Area 8 NEPSSA species—many-stemmed dudleya (*Dudleya multicaulis*) and Yucaipa onion (*Allium marvinii*)—do not occur on site; therefore, focused surveys are not required. In addition, neither of these species was observed during the May 2015 field survey. Appendix B details habitat suitability for both of these species within the study area.

Burrowing Owl. The project site falls within the MSHCP burrowing owl survey area. Burrowing owls are found in open, dry grasslands, agricultural and range lands, and desert habitats often associated with burrowing animals. They can also inhabit grass, forb, and shrub stages of pinyon, and ponderosa pine habitats. They nest in abandoned burrows of ground squirrels or other animals, in pipes, under piles of rock or debris, and in other similar features.

A survey for burrowing owl was conducted on May 5 and 6, 2015. Suitable habitat for burrowing owl is present on site, specifically within the open areas surrounded by low-lying ruderal vegetation. However, no burrowing owls or burrowing owl sign (e.g., whitewash, pellets, scat, tracks, and/or feathers) were observed during the survey, and no burrows that could have been occupied by burrowing owl were found; therefore, no additional site visits were required for the survey.

Burrowing owls do not currently inhabit the site. Although there are mammal burrows on the site, none shows sign of occupation by burrowing owl. However, the site does provide suitable habitat for this species. Per the MSHCP 30-day Pre-construction Burrowing Owl Survey Guidelines (revised August 17, 2006), an additional pre-construction survey will be required within 30 days prior to beginning of site grading. If burrowing owls are found to be present, for compliance with the MSHCP, project-specific mitigation would be developed and authorized through consultation with the City of Banning and the CDFW.

6.2 Jurisdictional Waters and Streambeds

Three potentially jurisdictional drainages were identified on the proposed project site. The drainages are identified as D-1, D-2, and D-3 in previously referenced Figure 4. All three drainages enter the site at the northern boundary and travel south toward Montgomery Creek. At the time of the survey,

the drainages were dry; however, evidence of recent water flows was observed. D-1 and D-2 traverse the length of the site. D-1 exits the site through a concrete headwall along Wilson Street. D-2 exits the site and flows into Montgomery Creek. D-3 does not exit the site and dissipates into a stand of California buckwheat scrub.

These drainages are potential jurisdictional streambeds of the CDFW and may be jurisdictional waters of the U.S. regulated by the USACE and RWQCB. A formal jurisdictional delineation is needed to determine the extent of the potential streambed of CDFW and/or jurisdictional waters of the U.S., and to evaluate any potential impacts to streambed/jurisdictional waters as a result of the proposed project.

Any project-related effects to potentially jurisdictional streambeds will require the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) report for compliance with the MSHCP. In addition, permits would be required from the USACE, RWQCB, and CDFW. Any necessary mitigation would be determined through the DBESP and permitting process with the USACE and CDFW.

6.3 Migratory/Nesting Birds

Trees, shrubs, and other vegetation may provide nest sites for birds, and burrowing owls may nest in abandoned ground squirrel burrows, pipes, or similar features. To avoid any potential effects to nesting birds protected by the MBTA and the California Fish and Game Code, vegetation-clearing and preliminary ground-disturbance work should be completed outside of bird breeding season (typically February 15 through August 31). In the event that initial groundwork cannot be conducted outside the bird breeding season, pre-construction surveys would be required within 30 days prior to construction. Should nesting birds be found, an exclusionary buffer will be established by the biologist. The buffer may be up to 500 feet in diameter, depending on the species of nesting bird found. This buffer will be clearly marked in the field by construction personnel under guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active.

6.4 Stephens' Kangaroo Rat

The project site is considered to have low quality habitat for the Stephens' kangaroo rat (SKR). SKR are found in transitional plant communities between grassland and coastal sage scrub, with perennial vegetation cover of less than 50 percent and well-drained soils with compaction characteristics suitable for burrow construction (neither sandy nor too hard). Potential SKR burrows were observed on site during the May 5 survey. Stephens' kangaroo rat is an MSHCP covered species. Because the site is outside the boundaries of the SKR Habitat Conservation Plan (HCP), but within the MSHCP Plan Area boundaries, the MSHCP will provide Take Authorization for SKR. Since the SKR is a Covered Species under the MSHCP, mitigation requirements will be met through compliance with the MSHCP. These requirements include payment of the MSHCP mitigation fee. Focused surveys are not required.

7.0 CONCLUSIONS

The project area is vegetated by highly disturbed, ruderal vegetation. Impacts to these plant communities are not considered significant. Indirect impacts to surrounding areas as a result of the project may include, but are not limited to, increased dust, storm water runoff, noise, and lighting. Because of the small scale of the project, the developed state of the project site and surrounding area, and with the application of standard best management practices, substantial indirect impacts are not anticipated.

The following will be required for compliance with the MSHCP and other regulatory agencies for any project effects to potential jurisdictional waters:

- The project is not anticipated to have any effects to MSHCP NEPPSA plants due to lack of suitable habitat. Thus, no further study for MSHCP NEPPSA plants is required.
- To avoid potential effects to the burrowing owl, the avoidance and minimization measures identified in Section 6.1 would need to be implemented.
- To avoid potential effects to nesting migratory birds and raptors protected by the MBTA and the California Fish and Game Code, vegetation-clearing and preliminary ground-disturbance work should be completed outside of bird breeding season (typically February 15 through August 31). In the event that initial groundwork cannot be conducted outside the bird breeding season, focused surveys would be required. Should nesting birds be found, an exclusionary buffer will be established by the project biologist.
- A formal jurisdictional delineation is needed to determine the extent of the potential streambed of CDFW and/or jurisdictional waters of the U.S., and to evaluate any potential impacts to streambed/jurisdictional waters as a result of the proposed project. For any project effects to potential jurisdictional waters, the preparation of a DBESP will be required for compliance with the MSHCP, as well as permits from the USACE, RWCQB, and CDFW. Any necessary mitigation would be determined through the DBESP and permitting process with the USACE and CDFW.

8.0 REFERENCES

- California Department of Fish and Wildlife, Natural Diversity Database. 2015 *Rarefind 5* online application (<https://map.dfg.ca.gov/rarefind/>). Accessed May 1, 2015.
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APPENDIX A
LIST OF PLANT AND WILDLIFE SPECIES OBSERVED

Appendix A: List of Plant and Wildlife Species Observed

Scientific Name	Common Name
MAGNOLIOPHYTA: MAGNOLIOPSIDA	DICOT FLOWERING PLANTS
Adoxaceae	Moschatel family
<i>Sambucus mexicana</i>	Mexican elderberry
Asteraceae	Sunflower family
<i>Artemisia californica</i>	California sagebrush
<i>Baccharis salicifolia</i>	Mule fat
<i>Corethrogyne filaginifolia</i>	California aster
<i>Heterotheca grandiflora</i>	Telegraph weed
<i>Lepidospartum squamatum</i>	Scalebroom
<i>Oncosiphon piluliferum</i> (non-native species)	Stinknet
<i>Osteospermum</i> sp. (non-native species)	Daisybush
<i>Pluchea sericea</i>	Arrowweed
Brassicaceae	Mustard family
<i>Hirschfeldia incana</i> (non-native species)	Shortpod mustard
<i>Sisymbrium orientale</i> (non-native species)	Indian hedgemustard
Chenopodiaceae	Saltbush family
<i>Atriplex canescens</i>	Fourwing saltbush
<i>Atriplex subrecta</i> (non-native species)	Peregrine saltbush
<i>Salsola tragus</i> (non-native species)	Russian thistle
Cucurbitaceae	Gourd family
<i>Cucurbita palmata</i>	Coyote melon
Euphorbiaceae	Spurge family
<i>Croton setigerus</i>	Dove weed
Fabaceae	Pea family
<i>Acmispon glaber</i>	Deerweed
<i>Melilotus officinalis</i> (non-native species)	Yellow sweetclover
Geraniaceae	Geranium family
<i>Erodium cicutarium</i> (non-native species)	Redstem stork's bill
Lamiaceae	Mint family
<i>Salvia aptana</i>	White sage
Polygonaceae	Buckwheat family
<i>Eriogonum elongatum</i>	Long-stemmed eriogonum
<i>Eriogonum fasciculatum</i>	California buckwheat
Solanaceae	Potato family
<i>Datura stramonium</i> (non-native species)	Jimsonweed
<i>Nicotiana glauca</i> (non-native species)	Tree tobacco
MAGNOLIOPHYTA: LILIOPSIDA	MONOCOT FLOWERING PLANTS
Poaceae	Grass family
<i>Avena</i> sp. (non-native species)	Oat
<i>Bromus madritensis</i> ssp. <i>rubens</i> (non-native species)	Red brome
<i>Hordeum marinum</i> (non-native species)	Mediterranean barley

Appendix A: List of Plant and Wildlife Species Observed

Scientific Name	Common Name
<i>Schismus barbatus</i> (non-native species)	Common Mediterranean grass
AVES	BIRDS
Accipitridae	Kites, Hawks, and Eagles
<i>Buteo jamaicensis</i>	Red-tailed hawk
Falconidae	Falcons
<i>Falco sparverius</i>	American kestrel
Fringillidae	Finches
<i>Carpodacus mexicanus</i>	House finch
<i>Spinus psaltria</i>	Lesser goldfinch
Emberizidae	Emberizines
<i>Aimophila ruficeps</i>	Rufous-crowned sparrow
Columbidae	Pigeons and Doves
<i>Zenaidura macroura</i>	Mourning dove
Mimidae	Mockingbirds and Thrashers
<i>Mimus polyglottos</i>	Northern mockingbird
Trochilidae	Hummingbirds
<i>Archilochus alexandri</i>	Black-chinned hummingbird
Icteridae	Blackbirds, Orioles and Allies
<i>Icterus bullockii</i>	Bullock's oriole
<i>Sturnella neglecta</i>	Western meadowlark
Sylviidae	Old World Warblers and Gnatcatchers
<i>Poliophtila caerulea</i>	Blue-gray gnatcatcher
Tyrannidae	Tyrant Flycatchers
<i>Tyrannus verticalis</i>	Western kingbird
Corvidae	Crows and Ravens
<i>Corvus corax</i>	Common raven
REPTILIA	REPTILES
Phrynosomatidae	Phrynosomatid Lizards
<i>Uta stansburiana</i>	Common side-blotched lizard
MAMMALIA	MAMMALS
Felidae	Cats
<i>Lynx rufus</i>	Bobcat
Leporidae	Rabbits and Hares
<i>Sylvilagus audubonii</i>	Desert cottontail
Sciuridae	Squirrels
<i>Spermophilus beecheyi</i>	California ground squirrel

APPENDIX B

MSHCP NARROW ENDEMIC PLANT SURVEY SPECIES

Appendix B: MSHCP Narrow Endemic Plant Survey Species (NEPSSA)

Species	MSHCP Habitat	Blooming Period	Habitat Suitability
<i>Vernonia ovata</i> <i>Allium marvini</i>	Clay soils in openings in chaparral at 760 to 1,065 meters (2,500-3,500 feet) elevation.	Perennial bulb April–May	None. Suitable soils (clay) and vegetation are not present.
Many-stemmed dudleya <i>Dudleya multicaulis</i>	Clay soils in open areas of barrens, rocky places, ridgelines, chaparral, coastal sage scrub, and southern needlegrass grasslands. Visible population size varies considerably year-to-year depending on rainfall patterns. The MSHCP account for this species states that “Many-stemmed dudleya is associated with openings in chaparral, coastal sage scrub, and grasslands underlain by clay and cobbly clay soils of the following series: Altamont, Auld, Bosanko, Claypit, and Porterville.”	Perennial May–June	None. Clay soils and suitable vegetation are not present.

MSHCP = Multiple Species Habitat Conservation Plan

Appendix B

CULTURAL RESOURCES ASSESSMENT

**BANNING TRACT 36939
CITY OF BANNING
RIVERSIDE COUNTY, CALIFORNIA**

LSA

May 2015

CULTURAL RESOURCES ASSESSMENT
BANNING TRACT 36939
CITY OF BANNING
RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

Diversified Pacific
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Prepared by:

Riordan Goodwin
LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, California 92507
(951) 781-9310

LSA Project No. DFD1502

National Archaeological Database Information (NADB):

Type of Study: Reconnaissance Survey

Sites Recorded: None

USGS 7.5' Quadrangle: Beaumont, California

Acreage: 34.6 acres

Key Words: Perris, Phase I Survey, Negative Results

LSA

May 2015

MANAGEMENT SUMMARY

LSA Associates, Inc. (LSA) was retained by Diversified Pacific to conduct a cultural resources assessment for Tract 36939 in the City of Banning, Riverside County, California. This cultural resources assessment was completed pursuant to the California Environmental Quality Act (CEQA).

A cultural resources records search, additional research, and a field survey were conducted for the project area. Although no previously documented or undocumented cultural resources were identified as a result of these efforts, a historic trail may have once transected the project area, which is itself bracketed by historic period ranches, one dating to the mid-19th century. Despite severe disturbance and in part due to poor visibility at the time of the survey, the project area retains some potential for significant resources. Therefore, archaeological monitoring on a part-time basis is recommended. In the event previously undocumented archaeological resources are identified during earthmoving activities, further construction work in the area should be diverted or halted until the nature and significance of the find can be assessed.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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INTRODUCTION

LSA Associates, Inc. (LSA) was retained by Diversified Pacific to conduct a cultural resources assessment for Tract 36939 in the City of Banning, (City) in Riverside County (County), California. This assessment documents the potential for cultural resources to be present within the project area and whether the proposed project will affect those resources. This assessment addresses the requirements of the California Environmental Quality Act ([CEQA]; as amended January 1, 2015); Public Resources Code (PRC), Division 13 (Environmental Quality), Chapter 2.6 Section 21083.2 (Archaeological Resources) and Section 21084.1 (Historical Resources); and the Guidelines for CEQA (as amended December 1, 2014), California Code of Regulations (CCR) Title 14, Chapter 3, Article 5 Section 15064.5 (Determining the Significance of Impacts on Historical and Unique Archaeological Resources).

The project area is on the northeast corner of Sunset Avenue and Wilson Street. It is bounded by open, undeveloped land to the north and west and residential development to the south and east. Specifically, it is located in the southwestern portion of Section 5 in Township 3 South, Range 1 East, San Bernardino Baseline and Meridian, as shown on the *Beaumont, California* 7.5-minute topographic quadrangle map (United States Geological Survey [USGS] 1988) (Figure 1). The project area encompasses Assessor's Parcel Numbers (APNs) 535-430-001 through 021, 535-431-001 through 015, 535-432-001 through 017, 535-070-004, and 535-070-008.

NATURAL SETTING

The natural setting of the project vicinity is presented based on the underlying theoretical assumption that humans and human societies are in continual interaction with the physical environment. Being an integral part of the ecological system, humans adapt to the environment through technological and behavioral changes. Locations of archaeological sites are based on the constraints of these adaptations, whether it is proximity to a particular resource, topographical restrictions, or shelter and protection. Sites will also contain an assemblage of artifacts and ecofacts consistent with the particular interaction.

Biology

At an average elevation of 2,580 feet (ft) above mean sea level (amsl), the project is within the Sonoran Life Zone of California (Schoenherr 1992), which ranges from below sea level to an elevation of approximately 3,500 ft amsl. Although the native vegetation of the project area has been largely displaced by agriculture activities, common wild plants observed included buckwheat, fiddleneck, ground wreath, gypsum weed, mustard, Sahara mustard, Russian thistle, sage, hare oat, and seasonal grasses. Common animals include deer, coyotes, foxes, rabbits, rodents, ravens, raptors, reptiles, and insects.

Geology

The project is situated in the Peninsular Ranges Geomorphic Province of California that encompasses western Riverside County (California Geological Survey 2002). Crystalline rocks in the Banning area include granitic rocks of the Southern California batholith and Paleozoic metasedimentary rocks

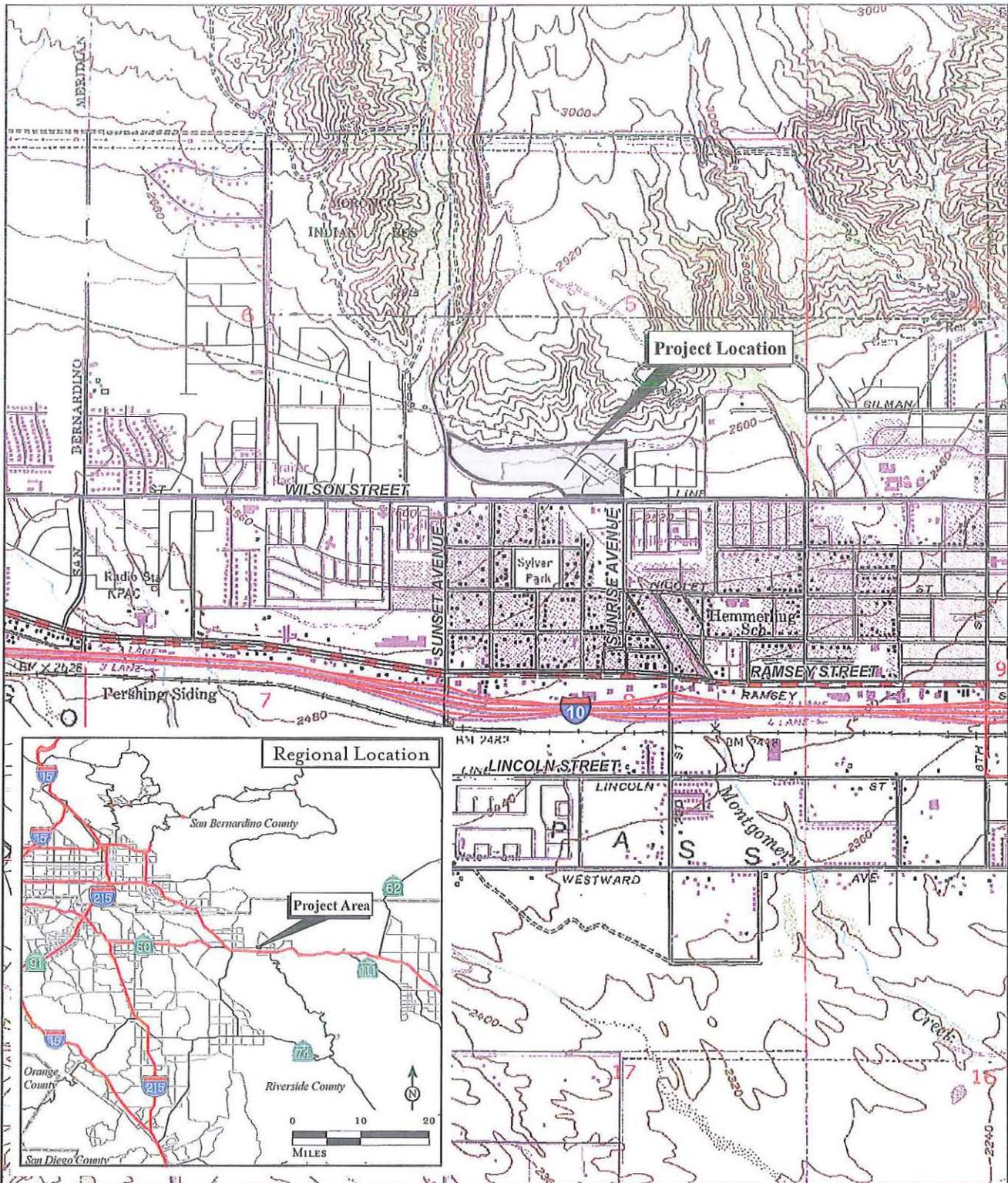
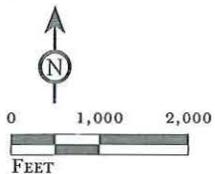


FIGURE 1

LSA



SOURCE: USGS 7.5' Quad: Beaumont, 1988, CA; County of Riverside, 2015.

I:\DFD1502\Reports\Cultural\fig1_RegLoc.mxd (7/24/2015)

Banning Tract 36939
Cultural Resources Assessment

Regional and Project Location

(Dibblee 2003; Rogers 1965). These granitic rocks have intruded and metamorphosed the Paleozoic rocks to form gneissic and schistose rocks (Dibblee 2003; Rogers 1965). The granitic outcroppings were often used by Native Americans for food processing.

Hydrology

The project region is characterized by an arid climate, with dry, hot summers and moderate winters. Rainfall averages 5–15 inches annually (Beck and Haase 1974). Precipitation usually occurs in the form of winter rain, with warm monsoonal showers in summer. The project area was once transected by ephemeral drainages that would have been appealing to prehistoric inhabitants and made nearby bedrock outcrops attractive for resource processing (USGS 1954).

CULTURAL SETTING

Prehistory

The description of various prehistoric stages or chronologies identifying cultural evolution in the Southern California area has been attempted numerous times. Several of these chronologies are reviewed in Moratto (1984). No single description is universally accepted. The various chronologies are based primarily on material developments identified by researchers familiar with sites in a region, and variation exists essentially due to the differences in those items found at the sites. Small differences occur over time and space, which combine to form patterns that are variously interpreted.

Currently, two primary regional culture chronology syntheses (Wallace 1955, 1978; Warren 1968) are commonly referenced in the archaeological literature. The first, Wallace (1955, 1978), is among the most widely used prehistoric chronology for Southern California. It describes four cultural horizons or time periods: Horizon I – Early Man (9000–6500 BC), Horizon II – Milling Stone Assemblages (6500–2000 BC), Horizon III – Intermediate Cultures (2000 BC–AD 200), and Horizon IV – Late Prehistoric Cultures (AD 200–historic contact). This chronology was refined (Wallace 1978) using absolute chronological dates unavailable in 1955. One issue with Wallace’s chronology is artifacts specified as diagnostic are not necessarily so. For instance, groundstone, which is characteristic of Milling Stone sites, is also found at Late sites; therefore, groundstone does not necessarily indicate a specific time period.

The second cultural chronology (Warren 1968) is based broadly on Southern California prehistoric cultures, including those of Santa Barbara, San Diego, and the inland desert areas, and was also revised (Warren 1984; Warren and Crabtree 1986). Warren’s chronology includes five periods in prehistory: Lake Mojave (7000–5000 BC), Pinto (4000–3000 BC), Gypsum (1000 BC–AD 1), Saratoga Springs (AD 500–1000), and Protohistoric (AD 1500–historic). Warren views cultural continuity and change in terms of various significant environmental shifts, fitting what is known as the cultural ecological approach. Changes in settlement pattern and subsistence focus are viewed as cultural adaptations to a changing environment. In general, this pattern begins with gradual environmental warming in the late Pleistocene, continues with the desiccation of the desert lakes, followed by a brief return to pluvial conditions, and concludes with a general warming and drying trend, with periodic reversals that continue to the present (Warren 1986).

Ethnohistory

The project is located within the traditional cultural territory of the Cahuilla (Kroeber 1925; Bean and Shipek 1978). Like other Native American groups in Southern California, the Cahuilla were semi-nomadic, hunter-gatherers who subsisted by exploitation of seasonably available plant and animal resources and were first encountered by the Spanish missionaries in the late 18th century. The first written accounts of the Cahuilla are attributed to the mission fathers, and later documentation was by Barrows (1900), Hooper (1920), Strong (1929), Bean (1972), and many others.

History

In California, the historic era is generally divided into three periods: the Spanish Period (1769–1821), the Mexican Period (1821–1848), and the American Period (1848–present). Exploration of the Riverside County area began slowly until Lieutenant Pedro Fages, then the military governor of San Diego, crossed through the San Jacinto Valley in 1772.

During the Spanish Period, Riverside County proved to be too far inland to include any missions or *asistencias* within its limits, although both San Luis Rey and San Juan Capistrano claimed a large part of southwestern Riverside County. Missions San Juan Capistrano and San Luis Rey were established in 1776 and 1798, respectively.

In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions reorganized as parish churches, lost their vast land holdings, and released their neophytes. During the Mexican Period, 16 ranchos were granted in Riverside County, including Rancho *San Jacinto Nuevo*, which included the project area (Beck and Haase 1974).

Bradshaw Trail. With the assistance of Native Americans, William Bradshaw mapped the ancient trail that now bears his name. It crossed through the area along the contours of the San Gorgonio foothills and was part of a major transit corridor between the Colorado River and the Southern California coast from before the Spanish Period into the late-19th century (Brumgardt 1976; Gunther 1984).

Gilman Ranch (33-1701). An important station along the Bradshaw Trail was the Gilman Ranch, which had originally been established in the mid-1850s by Jose Pope. Pope raised cattle and built an adobe that ultimately served as the first stage stop. The ranch subsequently changed hands twice and was briefly known as Chapin's sheep (sic) Ranch prior to Bradshaw acquiring it from Newton Noble in the late 1860s. The ranch is still extant as a Riverside County historical park and is located approximately 0.25 mile east of the project area.

City of Banning. Settlement of the Banning area began in the 1860s, and the community was first known as Moore City, named by Ransom Moore, who came to the Banning area in the mid-1860s (Lech 2004). In the mid- to late 1870s, growth in the area began shifting toward Banning due in part to the failure of lumber production in nearby Hall City (present-day Cabazon). In 1877, the community's post office and railroad station were built and the community was named after General

Phineas Banning, a railroad owner/executive who occasionally pastured sheep in the Banning area (Gunther 1984; Salley 1977). In 1884, the Banning Land and Water Company and the San Jose Water Company initiated development of the community with large-scale agricultural cultivation, residential subdivisions, and consolidation of access to water sources (Lech 2004). Banning began to prosper, with agriculture as the foundation of the local economy. By the time of its incorporation as a City in 1913, Banning had around 1,500 inhabitants with approximately 4,000 acres under cultivation (McGroarty 1914).

In addition to successful agriculture, a flourishing health industry began developing in Banning in the early 1900s as people came to the area seeking a better climate for ailments such as tuberculosis (Hughes 1938). Although the economy was principally driven by agriculture, the establishment of several sanitariums offering health treatments became a contributing factor to the growth of Banning (Hughes 1938).

During World War II, Banning had a 1,000-bed hospital, an artillery range, and an airfield that contributed to the training effort run by General George C. Patton at the nearby Desert Training Center. After the war, many people moved to Banning, and new residential subdivisions became part of the community. Commercial and industrial development have gradually replaced the ranches that once dominated the area, but Banning still retains some of its rural character.

METHODS

Records Search

On April 24, 2015, LSA Cultural Resources Manager/Archaeologist Gini Austerman completed a cultural resources records search for the project area and a 1-mile radius around it at the Eastern Information Center (EIC) of the California Historical Resources Information System (CHRIS) located at the University of California, Riverside. The EIC is the State-designated repository for records pertaining to cultural resources in Riverside County. The objectives of this research were (1) to establish the status and extent of previously recorded cultural resources sites, surveys and studies, (2) to note the likelihood of encountering cultural resources and their type(s) based on previously recorded resources within 1 mile of the project area, and (3) to uncover relevant historical contexts. Data sources consulted at the EIC include archaeological site records, historic USGS topographic maps, reports from previous studies, and the State Historic Resource Inventory (HRI) for Riverside County, which contains listings for the National Register of Historic Places (National Register), California Register of Historical Resources (California Register), California Historical Landmarks (SHL), and California Points of Historical Interest (SPHI).

Additional Research

On April 30, 2015, LSA Senior Cultural Resources Manager/Archaeologist Riordan Goodwin reviewed historic-period maps and online aerial photographs (Google Earth 2003, 2005, USGS 19).

Field Survey

On May 1, 2015, Mr. Goodwin and Ms. Austerman conducted a reconnaissance pedestrian survey of the project area and surveyed the entire project area in systematic parallel transects spaced by

approximately 15 meters (approximately 50 feet). Special attention was given to (1) areas of exposed soil for evidence of artifacts on the surface, (2) areas of rodent back dirt where buried artifacts and or midden may have been brought to the surface, and (3) exposed soil profiles for evidence of cultural stratigraphy. The purpose of this survey was to identify and document any cultural resources that might be exposed and locate areas within the project area that might be sensitive for cultural resources prior to the beginning of ground-disturbing activities.

RESULTS

Records Search

Data from the EIC indicate there have been 21 previous cultural resources studies conducted within a one-mile radius of the project, none of which are located within the project area. Also indicated is the presence of 54 previously documented resources, including prehistoric resources (two habitation sites, 33-00099 and 33-15905; and an isolated artifact, 33-15244); two historic period resources (St. Boniface School, 33-4213; and a 1940s water conveyance feature, 33-6017); and 49 built environment resources. The built environment resources include two historic ranches, one of which is listed in the National Register (33-1701, the Gilman Ranch), and the Brinton Ranch (33-15241), dating to the 1940s. In addition, one historic transmission line (33-15035/22389) and 46 residences are within the study area, as detailed in Table A. The Brinton Ranch is the closest resource, located across Sunset Avenue on the west side of the project area.

Table A: Results of Records Search

Archaeological Sites	Built Environment	Reports
33-00099, 33-04213, 33-6017, 33-15905, 33-15244.	33-1701, 33-9100, 33-9147, 33-15305/22389, 33-15241, 33-15809 through 33-15831, and 33-17729 through 33-17739.	RI-0598, RI-0816, RI-0817, RI-1476, RI-2065, RI-2066, RI-21996, RI-3039, RI-3852, RI-4168, RI-4720, RI-5266, RI-56786, RI-7339, RI-7868, RI-7970, RI-8011, RI-8012, RI-8315, RI-8409, and RI-8449.

Other Resources

Although not documented as a separate resource within the study area, the Bradshaw Trail once ran through the Gilman Ranch and may have transected or bounded the project area (Riverside County Parks Department, n.d.).

Additional Research

Review of historic aerials and topographic maps indicated there were no historic buildings within the project area (Historic Aerials 1966; USGS 1950–1964).

Field Survey

Visibility was poor (approximately 15 percent) with the majority of the project area obscured by vegetation. The eastern half of the project has been disrupted by grading of residential pads and a

subsurface gas pipeline. The western portion has been severely disturbed by earthmoving and agricultural or possibly vegetation-abatement disking. Soils are silty loam.

Remnants of a concrete irrigation standpipe system were identified along the northern project boundary. This is a ubiquitous and temporally ambiguous type of water conveyance system in this region; it lacks physical integrity, any associated artifacts or features, and does not warrant formal documentation or further consideration in the CEQA process.

No trace of the Bradshaw Trail was identified.

RECOMMENDATIONS

A cultural resources records search, additional research, and a field survey were conducted for the project area. Although no previously documented or undocumented cultural resources were identified as a result of these efforts, the historic Bradshaw Trail may have once transected the project area, which is itself bracketed by historic period ranches, one of which, the Gilman Ranch, dates to the mid-19th century. Despite severe disturbance and in part due to poor visibility at the time of the survey, the project area retains some potential for significant resources. Therefore, archaeological monitoring on a part-time basis is recommended. In the event previously undocumented archaeological resources are identified during earthmoving activities, further work in the area should be diverted or halted until the nature and significance of the find can be assessed by a qualified archaeologist.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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APPENDIX A
RECORDS SEARCH RESULTS BIBLIOGRAPHY

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-00598	NADB-R - 1080640; Voided - MF-0524	1979	Alan Davis	Environmental Impact Evaluation: An Archaeological Assessment of an Unnumbered Parcel North of Banning Riverside, Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00816	NADB-R - 1080871; Voided - MF-0739	1980	Paul G. Chace and Don Laylander	An Archaeological and Historical Assessment of Areas 1 and 4 of Amendment Number 1 to the Banning Downtown Redevelopment Project	Paul G. Chace and Associates, Escondido, CA	
RI-00817	NADB-R - 1083810; Voided - MF-0739	1990	Philip de Barros and Paul Farnsworth	Archaeological Investigations of the St. Boniface Indian School and Cemetery Site, Banning, California	Chambers Group, Inc., Santa Ana, CA	33-000099, 33-004213
RI-01476	NADB-R - 1081737; Other - NPS PX 8100-2-0088; Voided - MF-1550	1982	NAPTON, L. KYLE and E.A. GREATHOUSE	CULTURAL RESOURCE INVESTIGATIONS - MORONGO INDIAN RESERVATION, CALIFORNIA	AMERICAN INDIAN RESOURCE ORGANIZATION, INC., Mesa, AZ	33-002320
RI-02065	NADB-R - 1082499; Submitter - 820; Voided - MF-2263	1986	SWOPE, KAREN K.	PRELIMINARY REPORT ON ARCHAEOLOGICAL TEST EXCAVATIONS AND DATA RECOVERY AT THE POPE ADOBE, GILMAN RANCH COUNTY HISTORIC PARK (CA-RIV-1701), BANNING, RIVERSIDE COUNTY, CALIFORNIA	ARCHAEOLOGICAL RESEARCH UNIT, U.C. RIVERSIDE	33-001701
RI-02066	NADB-R - 1082500; Submitter - 828; Voided - MF-2263	1987	SWOPE, KAREN	ARCHAEOLOGICAL INVESTIGATIONS AT THE POPE ADOBE, BANNING, RIVERSIDE COUNTY, CALIFORNIA	ARCHAEOLOGICAL RESEARCH UNIT, U.C. RIVERSIDE	33-001701
RI-02199	NADB-R - 1082628; Voided - MF-2383	1986	CRAMER, KEVIN	ST. BONIFACE INDIAN INDUSTRIAL SCHOOL	BOY SCOUTS OF AMERICA; TROOP 38 (COUNTY UNKNOWN)	
RI-02263	NADB-R - 1082701; Voided - MF-2458	1987	SCHAEFER, JERRY	A REMOTE ROCK SHELTER IN THE BIG MARIA MOUNTAINS, RIVERSIDE COUNTY, CALIFORNIA	ASM AFFILIATES, INC	33-003151
RI-03039	NADB-R - 1083587; Voided - MF-3263	1990	WHITE, ROBERT S.	AN ARCHAEOLOGICAL ASSESSMENT OF THE "SUNSET CROSSING" PROJECT, A 294.8 ACRE PARCEL AS SHOWN ON TPM 25541, LOCATED IMMEDIATELY SOUTH OF THE I-10 FREEWAY AT SUNSET AVENUE IN BANNING, RIVERSIDE COUNTY, CALIFORNIA.	ARCHAEOLOGICAL ASSOCIATES, LTD.	
RI-03852	NADB-R - 1084726; Submitter - 1008; Voided - MF-4197	1993	WHITNEY-DESAUTELS, NANCY	CULTURAL RESOURCE ASSESSMENT OF THE SAN GORGONIO PASS WATER AGENCY WATER IMPORTATION PROJECT, RIVERSIDE AND SAN BERNARDINO COUNTIES, CALIFORNIA	SCIENTIFIC RESOURCE SURVEYS, INC.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-04168	NADB-R - 1085372; USFS - ARR 05-12- SJ-112; Voided - MF- 4646	1998	DIGREGORIO, LEE A.	SAN BERNARDINO NATIONAL FOREST ARCHAEOLOGICAL RECONNAISSANCE REPORT: PARADISE CORNER LAND EXCHANGE	SAN BERNARDINO NATIONAL FOREST	
RI-04720	NADB-R - 1086098	2004	MICHAEL BRANDMAN ASSOCIATES	PHASE I CULTURAL RESOURCE SURVEY AND HISTORIC SITE SIGNIFICANCE EVALUATIONS FOR THE SUNSET CROSSING PROJECT FOOTPRINT, SOUTH BANNING AREA, COUNTY OF RIVERSIDE, CALIFORNIA	MICHAEL BRANDMAN ASSOCIATES	33-009176, 33-013778, 33- 013779
RI-05166	NADB-R - 1086529	2005	WHITE, LAUIRE S.	RECORDS SEARCH RESULTS FOR SPRINT PCS FACILITY RV33XC212D (DESERT CENTER), DESERT CENTER, RIVERSIDE COUNTY, CALIFORNIA	MICHAEL BRANDMAN ASSOCIATES	
RI-05266	NADB-R - 1086629	2000	JACKSON, ADRIANNA	RECORDS SEARCH RESULTS FOR SPRINT PCS FACILITY RV37XC918D (BANNING TWIN TOWERS) EAST OF SUNSET AVENUE, NORTH OF WILSON STREET, BANNING, RIVERSIDE COUNTY, CA	MICHAEL BRANDMAN ASSOCIATES	
RI-05678	NADB-R - 1087041; Submitter - CA- 5365C	2005	BILLAT, LORNA	NEW TOWER ("NT") SUBMISSION PACKET FOR PROJECT BRIDGEPORT/CA-5365C	EARTHTOUCH, INC.	
RI-07339	Submitter - Contract No. 2083	2007	Tang, Bai "Tom", Josh Smallwood, and Melissa Hernandez	Identification and Evaluation of Historic Properties: Wastewater Treatment Plant Expansion and Recycled Water System, City of Banning, Riverside, California	CRM TECH	33-016207, 33-016208
RI-07868		2004	Foster, John M. and Linda H. Rehberger	Archaeological Investigation For Brinton Reservoir, City of Banning, California	Greenwood and Associates	
RI-07970	Submitter - LSA Project No. SCE531	2006	Roderic McLean, Shannon Carmack, Jay Michalsky, and Judith Marvin	A Study of the Past in San Timoteo Canyon and San Gorgonio Pass: Cultural Resource Assessment Oak Valley Substation Project, Riverside County	LSA Associates, Irvine, CA	33-001701, 33-004715, 33- 005018, 33-007296, 33-008344, 33-008399, 33-008400, 33- 009140, 33-009498, 33-013778, 33-013779, 33-015183, 33- 015184, 33-015185, 33-015186, 33-015187, 33-015188, 33- 015189, 33-015190, 33-015191, 33-015192, 33-015193, 33- 015194, 33

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-08011		2008	Robert McLean, Shannon Carmack, Jay Michalsky, and Judith	Final Cultural Resources Assessment, Study Of The Past In San Timoteo Canyon and San Gorgonio Pass: Oak Valley Substation Project Riverside County.	LSA Associates, Inc. Irvine, CA	
RI-08012		2008	Roderic McLean, Shannon Carmack, Phil Fulton, Maria Aron, Jay Michalsky, Daniel Ewers, Casey Tibbet, and Brook Smith	Supplemental Cultural Resource Assessment, Oak Valley Substation Project, San Bernadino and Riverside Counties	LSA Associates, Inc., Irvine, CA	33-000179, 33-000790, 33-000794, 33-002262, 33-003448, 33-003449, 33-007294, 33-009150, 33-009498, 33-013428, 33-015720, 33-015802, 33-015804, 33-015806, 33-015807, 33-015808, 33-015809, 33-015810, 33-015811, 33-015812, 33-015813, 33-015814, 33-015815, 33
RI-08315	Other - IE04452A	2009	Wayne H. Bonner and Arabesque Said	Letter Report: Cultural Resource Records Search and Site Visit Results for T-Mobile USA Candidate IE04452A, 2909 West Lincoln Street, Banning, Riverside County, California.	MBA	
RI-08409	Other - Contract No. 0311-051	2004	William T. Eckhardt, Kristen E. Walker, and Richard L. Carrico	Draft Cultural Resources Inventory of the Proposed Vista to Devers Transmission Line, Riverside and San Bernardino Counties, California.	Mooney/Hayes Associatesm LLC	33-002262, 33-004768, 33-007888, 33-013427, 33-013428, 33-013429, 33-013430, 33-013431, 33-013432, 33-013433, 33-013434
RI-08440	Other - Riverside County Case Number: CUP03602	2008	Brent Leftwich	Phase II Archaeological Assessment: CA-RIV-8953, Blythe Solar 1 Project, Riverside County, California.	URS Corporation	33-017206
RI-08449	Submitter - CRM TECH Contract #1211	2004	Bai "Tom" Tang, Michael Hogan, Josh Smallwood, and Terri Jacquemain	Cultural Resources Technical Report City of Banning General Plan.	CRM TECH	

Appendix C



LSA ASSOCIATES, INC.
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951.781.9310 TEL
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BERKELEY
CARLSBAD
FRESNO

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PALM SPRINGS
PT. RICHMOND

ROCKLIN
SAN LUIS OBISPO

July 28, 2015

Mr. Art Vela, Traffic Engineer, City of Banning
99 East Ramsey Street
Banning, California 92220

Subject: Focused Traffic Impact Study for Banning TTM 36939 (LSA Project No. DFD1502)

Dear Mr. Vela:

This focused traffic impact study has been prepared to assess the potential circulation impacts associated with the development of the proposed Banning TTM 36939 Project to be located between Sunset Avenue and Sunrise Avenue, north of the Montgomery Creek Channel in the City of Banning, Riverside County. Attachment A, Figure 1 illustrates the regional and project location. The proposed project is a 35-acre lot consisting of 98 single-family residential dwelling units.

This report is intended to satisfy the requirements established by the *City of Banning "Guidelines for the Preparation of Traffic Impact Reports/Studies,"* dated August 2005, *"Riverside County Transportation Department Traffic Impact Analysis Preparation Guide,"* dated April 2008, as well as the requirements for the disclosure of potential impacts and mitigation measures per the California Environmental Quality Act (CEQA). The City requested preparation of a traffic analysis that documents the project's trip generation and analyzes the interface between Sunset Avenue and the proposed Dawn Lane (one of the project access locations), and the roadway segment between Wilson Street and the proposed Dawn Lane. Thus, this report examines traffic operations at these locations under the following four scenarios:

- Existing Conditions;
- Existing With Project Conditions;
- Opening Year Without Project Conditions; and
- Opening Year With Project Conditions.

Traffic conditions were examined for the weekday a.m. and p.m. peak hour conditions. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

PROJECT DESCRIPTION

As previously noted, the project consists of 98 single-family residential dwelling units. The project site is located on the east side of Sunset Avenue, north of Wilson Street and the Montgomery Creek Channel, and west of Sunrise Avenue. Access to the project site is provided by three intersections, one on Sunset Avenue, one on Wilson Street, and one on Sunrise Avenue. As described earlier, this analysis documents the project's trip generation and analyzes the interface between Sunset Avenue

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and the proposed Dawn Lane (one of the project access locations), and the roadway segment between Wilson Street and the proposed Dawn Lane. Attachment A, Figure 2 illustrates the site plan. The project opening year is anticipated to be 2016.

LEVEL OF SERVICE DEFINITIONS AND PROCEDURES

Roadway operations and the relationship between capacity and traffic volumes are generally expressed in terms of levels of service (which are defined using the letter grades A through F). These levels recognize that, while an absolute limit exists as to the amount of traffic traveling through a given intersection (the absolute capacity), the conditions that motorists experience rapidly deteriorate as traffic approaches the absolute capacity. Under such conditions, congestion is experienced. There is general instability in the traffic flow, which means that relatively small incidents (e.g., momentary engine stall) can cause considerable fluctuations in speeds and delays. This near-capacity situation is labeled Level of Service (LOS) E. Beyond LOS E, capacity has been exceeded, and arriving traffic will exceed the ability of the intersection to accommodate it. An upstream queue will then form and continue to expand in length until the demand volume again declines.

A complete description of the meaning of level of service can be found in the *Transportation Research Board Special Report 209, Highway Capacity Manual*. The Manual establishes levels of service A through F as shown in Table A for intersections and levels of service A through F for roadway segments as shown in Table B. Table C defines LOS criteria for unsignalized intersections.

Table A: Intersection Level of Service Definitions

LOS	Description
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Table B: Roadway Segment Level of Service Definitions

LOS	Description
A	Primary free-flow operations at average travel speeds usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.
B	Reasonably unimpeded operations at average travel speeds usually about 70% of the free-flow speed of the arterial classification. Ability to maneuver within the traffic stream is only slightly restricted. Stopped delays are not bothersome, and driveways general are not subject to appreciate tension.
C	Traffic operations are stable. However, mid-block maneuverability may be more restricted than in LOS B. Longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50% of the average free-flow speed for the arterial classification. Motorists will experience some appreciable tension while driving.
D	Borders on a range where small increases in flow may cause substantial increases in approach delay and decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these factors. Average travel speeds are about 40% of the free-flow speed. For planning purposes, this level of service is the lowest that is considered acceptable.
E	Characterized by significant approach delays and average travel speeds of one-third or less of the free-flow speed. Typically caused by some combination of adverse progression, high signal density (more than two signalized intersections per mile), high volumes, extensive queuing, delays at critical intersections, and/or inappropriate signal timing.
F	Arterial flow at extremely slow speeds, below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized intersections, with high approach delays and extensive queuing. Adverse progression is frequently a contributor to this condition.

Table C: Level of Service Criteria for Unsignalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Consistent with the City's traffic study guidelines and the County's traffic impact analysis preparation guide, the 2010 *Highway Capacity Manual* (HCM 2010) analysis methodologies were used to determine intersection levels of service at Sunset Avenue/Dawn Lane. All levels of service were calculated using *Synchro 9.0* software, which uses the HCM 2010 methodologies. Levels of service at roadway segments were calculated using the City's roadway capacity thresholds as shown in Table D. Study area intersections and roadway segments fall under the jurisdictions of the City.

Table D: Roadway Level of Service Criteria

Roadway Classification	No. of Lanes	Two-Way Traffic Volume (ADT) ¹		
		Service Level C	Service Level D	Service Level E
Collector	2	12,800	14,400	16,000

¹ Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables. Source: City of Banning General Plan Update Traffic Study, 2004.

Based on the Banning General Plan Amendment Change in Level of Service Policy, dated September, 2012, the City of Banning establishes LOS D as the minimum level of service to be maintained on all roadway segments and intersections. Therefore, for study intersections and roadway segments, improvements are recommended when a project deteriorates the LOS to below D, or when the project causes significant impacts.

ANALYSIS METHODOLOGY

Study Area Determination

The study area was determined in consultation of City staff and includes analysis of the proposed intersection of Sunset Avenue/Dawn Lane and the roadway segment on Sunset Avenue between Wilson Street and the proposed Dawn Lane.

Attachment A, Figure 3 illustrates the analysis intersection and roadway segment.

BACKGROUND TRAFFIC VOLUMES WITHOUT PROJECT SCENARIOS

Existing Traffic Volumes

Existing a.m. and p.m. background traffic volumes for the intersection of Sunset Avenue/Dawn Lane were developed based on traffic counts collected at the intersection of Sunset Avenue/Wilson Street. The traffic counts were collected by National Data and Surveying Services in May 2015. The north leg approach and departure volumes at Sunset Avenue/Wilson Street were applied to the northbound and southbound through volumes at Sunset Avenue/Dawn Lane to develop existing a.m. and p.m. background traffic volumes. Count sheets are contained in Attachment C. Detailed volume development worksheets are included in Attachment D.

Daily tube counts were collected for the roadway segment on Sunset Avenue north of Wilson Street by National Data and Surveying Services in May 2015. Count sheets are contained in Attachment C. Detailed volume development worksheets are included in Attachment D.

Opening Year Without Project Traffic Volumes

Based on the information provided by City staff, there are no cumulative projects north of Sunset Avenue/Wilson Street that would impact the study area. Therefore, this focused traffic impact study does not include any cumulative projects. Opening year background without project traffic volumes at the intersection of Sunset Avenue/Dawn Lane and roadway segment of Sunset Avenue north of Wilson Street were developed by applying a 2 percent per annum growth rate for one year (2015 to 2016) to the existing background traffic volumes. Detailed volume development worksheets are included in Attachment D.

PROJECT TRAFFIC

Project Trip Generation, Distribution, and Assignment

Trip generation for the proposed project was calculated using rates from the Institute of Transportation Engineers (ITE) *Trip Generation* (9th Edition) for Land Use 210 Single-Family Detached Housing. The project trip generation is summarized in Attachment B, Table E, which shows the project would generate 73 trips in the a.m. peak hour, 98 trips in the p.m. peak hour, and 933 daily trips.

Generalized trip distribution patterns were developed based on the location of the proposed project in relation to surrounding land uses and the regional roadway network. Attachment A, Figure 3 illustrates the project trip distribution. The project trip assignment is the product of the project trip generation and the trip distribution percentages and is illustrated in Figure 3.

TRAFFIC VOLUMES WITH PROJECT SCENARIOS

Existing with project traffic volumes were developed by adding project trips to the existing background without project traffic volumes. Opening year with project traffic volumes were developed by adding project trips to the opening year background without project traffic volumes. Detailed volume development worksheets are included in Attachment D. Attachment A, Figure 3 illustrates the existing and opening year with project a.m. and p.m. peak hour traffic volumes.

Existing with project daily roadway segment volumes were developed by adding project trips to the existing daily background without project volumes. Opening year with project daily traffic volumes were developed by adding project trips to the opening year daily background without project volumes. With the addition of the project, the roadway segment on Sunset Avenue north of Wilson Street, has been renamed to "Sunset Avenue: Between Wilson Street and Dawn Lane."

EXISTING LEVELS OF SERVICE

Since the intersection of Sunset Avenue/Dawn Lane will not exist until the project is completed, no without project levels of service for this intersection have been reported for without project conditions.

Existing Without Project Roadway Levels of Service

A roadway segment level of service analysis was conducted using the methodologies previously discussed. Attachment B, Table F summarizes the result of this analysis and shows the study area roadway segment is currently operating at satisfactory LOS.

Existing With Project Intersection and Roadway Segment Levels of Service

Existing with project traffic volumes were developed using the approach discussed in the Traffic Volumes With Project Scenarios section. An intersection level of service analysis was conducted for existing with project conditions to determine current intersection performance at Sunset Avenue/Dawn Lane. Attachment B, Table G summarizes the results of this analysis and shows that the

intersection of Sunset Avenue/Dawn Lane is projected to operate at satisfactory LOS. Level of service calculation worksheets are contained in Attachment E.

A roadway segment level of service analysis was conducted using the methodologies previously discussed. Attachment B, Table F summarizes the result of this analysis and shows the study area roadway segment is projected to operate at satisfactory LOS.

OPENING YEAR LEVELS OF SERVICE

Since the intersection of Sunset Avenue/Dawn Lane will not exist until the project is completed, no without project levels of service for this intersection have been reported for without project conditions.

Opening Year Without Project Roadway Levels of Service

A roadway segment level of service analysis was conducted using the methodologies previously discussed. Attachment B, Table F summarizes the result of this analysis and shows the study area roadway segment is projected to operate at satisfactory LOS.

Opening Year With Project Intersection and Roadway Segment Levels of Service

Opening year with project traffic volumes were developed using the approach discussed in the Traffic Volumes With Project Scenarios section. An intersection level of service analysis was conducted for opening year with project conditions to determine intersection performance at Sunset Avenue/Dawn Lane. Attachment B, Table G summarizes the results of this analysis and shows that the intersection of Sunset Avenue/Dawn Lane is projected to operate at satisfactory LOS. Level of service calculation worksheets are contained in Attachment E.

A roadway segment level of service analysis was conducted using the methodologies previously discussed. Attachment B, Table F summarizes the result of this analysis and shows the study area roadway segment is projected to operate at satisfactory LOS.

SUMMARY

As shown in previously referenced Table A, the project would generate 933 daily trips, with 73 trips occurring during the a.m. peak hour and 98 trips occurring in the p.m. peak hour. Additionally, under existing and opening year conditions, the proposed intersection of Sunset Avenue/Dawn Lane and roadway segment on Sunset Avenue between Wilson Street and the proposed Dawn Lane operate at satisfactory LOS or better.

Please review the focused traffic impact studies outlined in this letter and the accompanying figures, tables and appendices. Should the City have any comments or require additional information, please do not hesitate to contact me at (951) 781-9310 or via email Ambarish.Mukherjee@lsa-assoc.com.

Sincerely,

LSA ASSOCIATES, INC.



Ambarish Mukherjee, AICP, EIT
Associate

Attachments:

Attachment A: Figures

- Figure 1: Regional and Project Location
- Figure 2: Site Plan with Study Area Intersection
- Figure 3: With Project Traffic Volumes

Attachment B: Tables E through G

- Table E: Project Trip Generation
- Table F: Roadway Segment Levels of Service
- Table G: Intersection Levels of Service

Attachment C: Traffic Counts

Attachment D: Volume Development Worksheets

Attachment E: Level of Service Worksheets

ATTACHMENT A: FIGURES

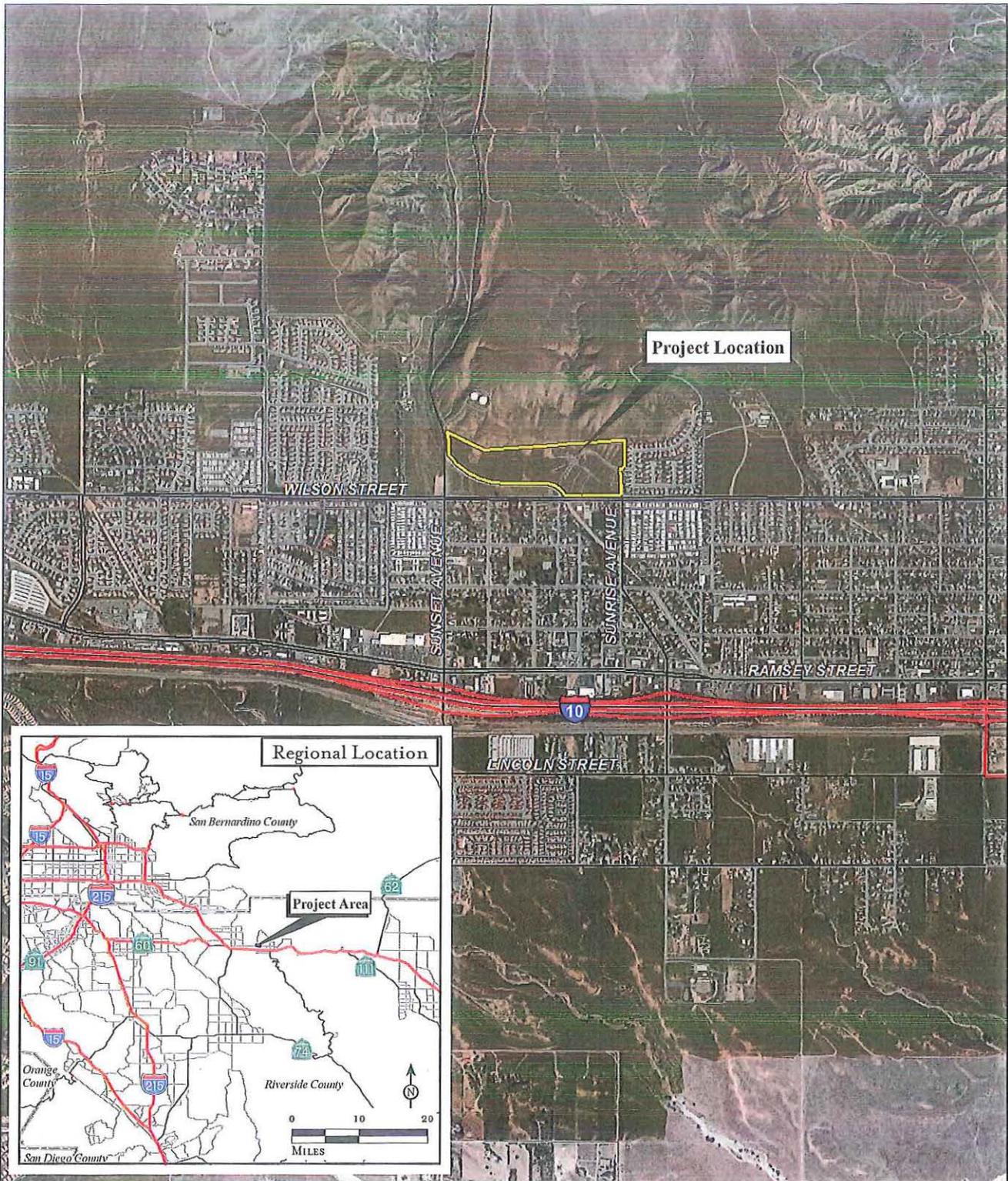
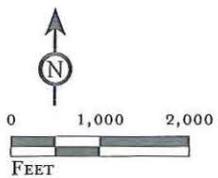


FIGURE 1

LSA

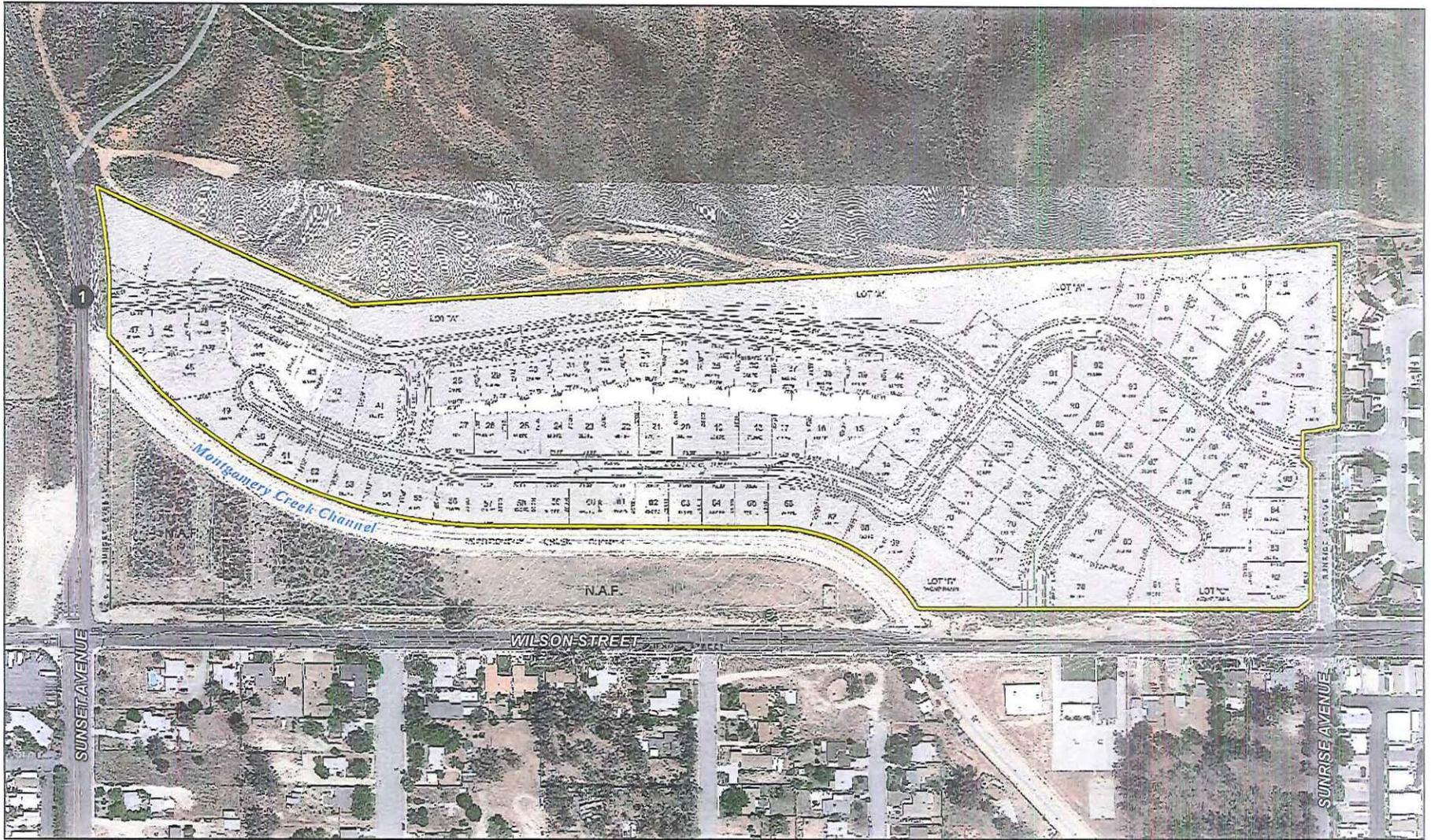


SOURCE: Bing Aerials, 2010; County of Riverside, 2015.

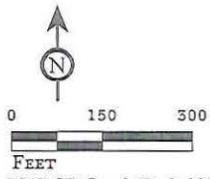
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Banning TTM 36939
 Focused Traffic Impact Study

Regional and Project Location



LSA



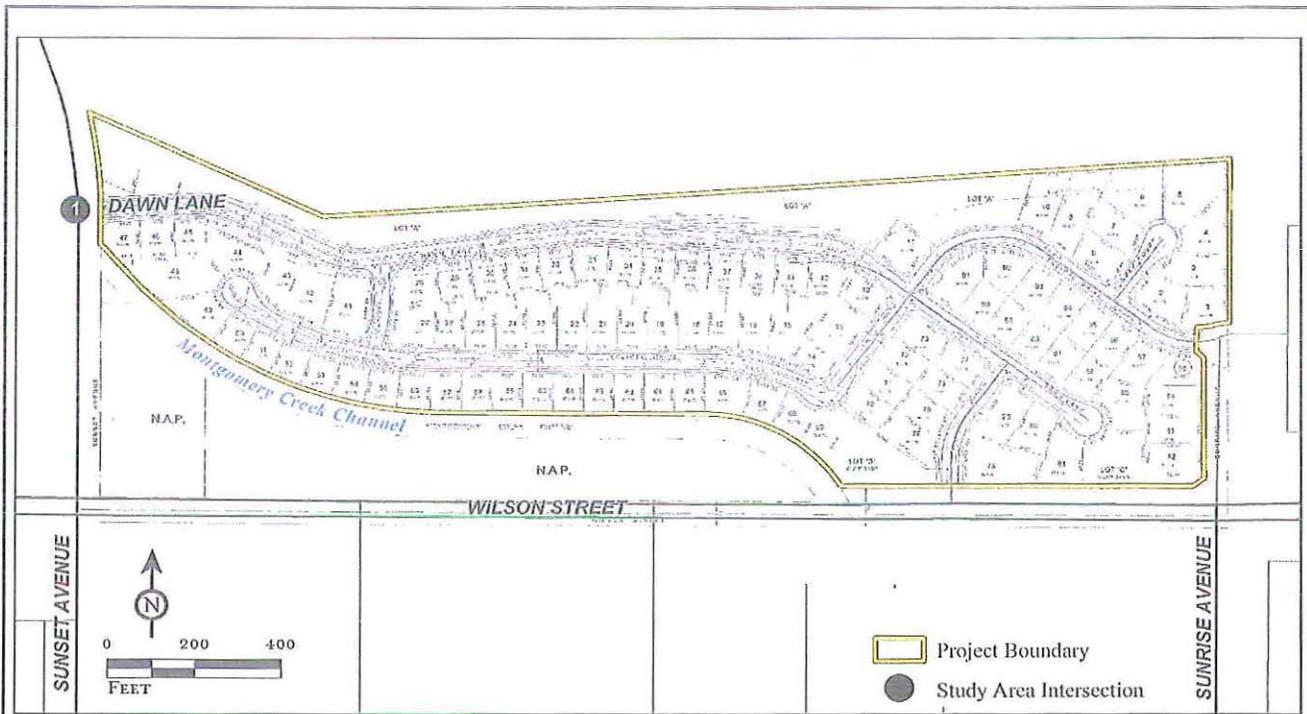
- Project Boundary
- Study Area Intersection

FIGURE 2

Banning TTM 36939
 Focused Traffic Impact Study

Site Plan with Study Area Intersection

SOURCE: Google Earth, 2014; Otte-Berkeley Groupe, Inc., 2015.
 I:\DFD1502\Reports\Traffic\fig2_SitePlan_intersection.mxd (7/28/2015)



Project Distribution and Assignment	Existing Traffic Volumes	Opening Year Traffic Volumes
<p>(50%) 50%</p>	<p>39 / 29 20 / 36</p>	<p>40 / 30 20 / 37</p>
¹ Project Trip Distribution ¹	¹ Existing Peak Hour Traffic Volumes ³	¹ OY Without Project Peak Hour Traffic Volumes ³
<p>28 / 18 9 / 31</p>	<p>39 / 29 28 / 18 20 / 36 9 / 31</p>	<p>40 / 30 28 / 18 20 / 37 9 / 31</p>
¹ Project Trip Assignment ²	¹ Existing With Project Peak Hour Traffic Volumes ³	¹ OY With Project Peak Hour Traffic Volumes ³

LSA

FIGURE 3

¹ XX% (YY%) Inbound% (Outbound%) Trip Distribution
² XX / YY AM / PM Peak Hour Project Trips
³ XX / YY AM / PM Peak Hour Volumes

Banning TTM 36939
 Focused Traffic Impact Study

ATTACHMENT B: TABLES E THROUGH G

Table E - Project Trip Generation

Land Uses	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Single-Family Residential								
Trips/Unit ¹	98.0 D.U.	0.19	0.56	0.75	0.63	0.37	1.00	9.52
Trip Generation		18	55	73	62	36	98	933
Total New Trips		18	55	73	62	36	98	933

D.U. = Dwelling Units

¹ Rates are based on Land Use 210-"Single-Family Detached Housing" from *Institute of Transportation Engineers (ITE) Trip Generation (9th Edition)*.

Table F - Roadway Segment Levels of Service

Roadway Segment	Functional Classification	Existing				Opening Year			
		Without Project		With Project		Without Project		With Project	
		Daily Volume	LOS	Daily Volume	LOS	Daily Volume	LOS	Daily Volume	LOS
Segments on Sunset Avenue Between Dawn Lane and Wilson Street	2-Lane Collector	794	B	1,260	B	810	B	1,276	B

Notes:

LOS = Level of Service

Capacity based on City of Banning General Plan Update Traffic Study, 2004.

Table G - Intersection Levels of Service

Intersection	Control	Existing								Opening Year							
		Without Project				With Project				Without Project				With Project			
		A.M Peak Hour		P.M Peak Hour		A.M Peak Hour		P.M Peak Hour		A.M Peak Hour		P.M Peak Hour		A.M Peak Hour		P.M Peak Hour	
Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS		
1 . Sunset Avenue/Dawn Lane	TWSC	<i>Future Intersection</i>		<i>Future Intersection</i>		9.0	A	9.0	A	<i>Future Intersection</i>		<i>Future Intersection</i>		9.0	A	9.0	A

Notes:

TWSC = Two-Way Stop Control

Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).

LOS = Level of Service

ATTACHMENT C: TRAFFIC COUNTS

ITM Peak Hour Summary

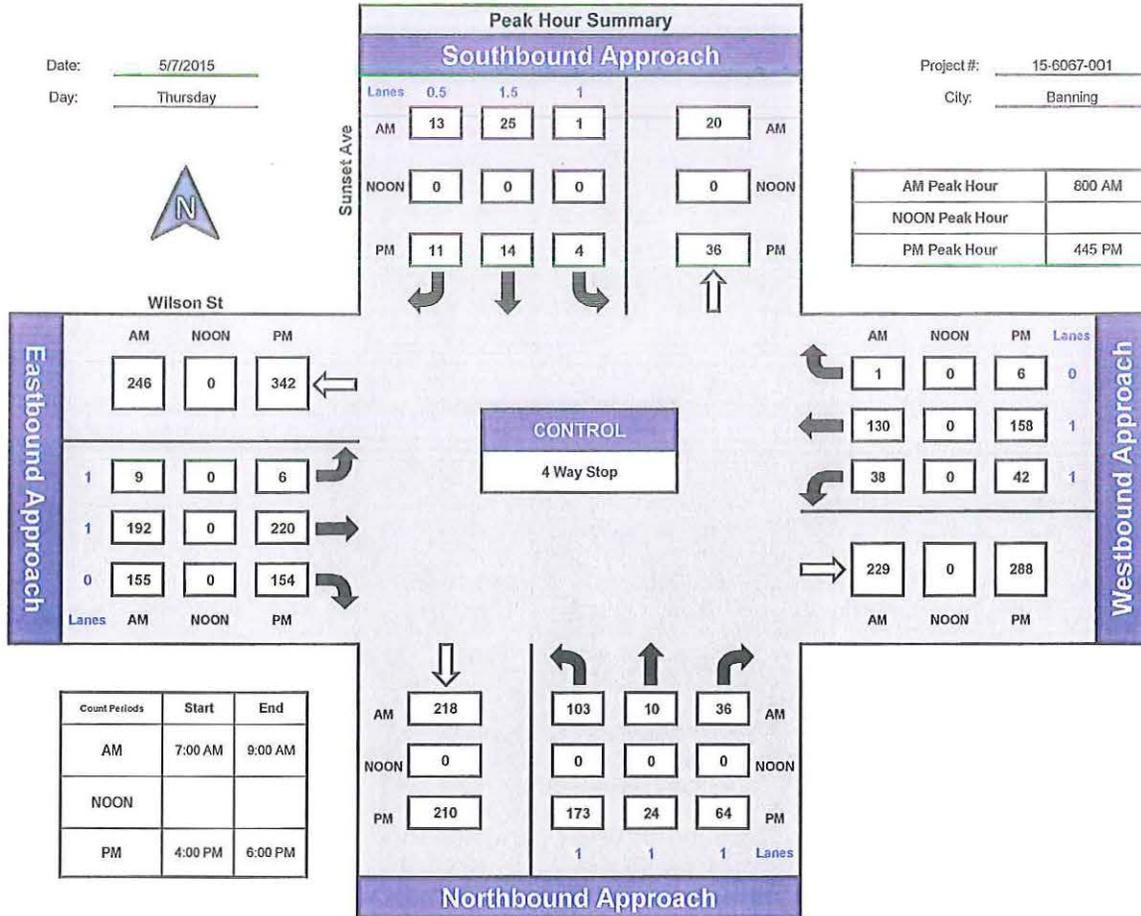
Prepared by:
NDS

National Data & Surveying Services

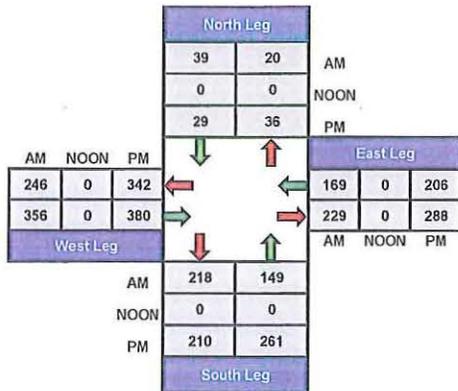
Sunset Ave and Wilson St, Banning

Date: 5/7/2015
Day: Thursday

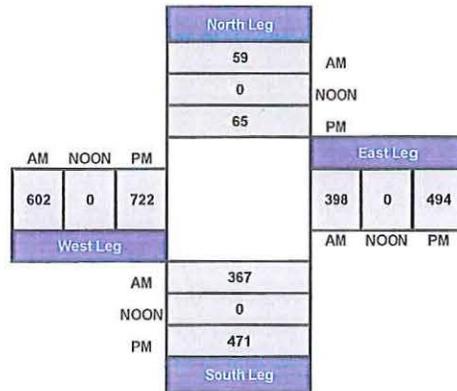
Project #: 15-6067-001
City: Banning



Total Ins & Outs



Total Volume Per Leg



VOLUME

Sunset Ave N/O Wilson St

Day: Thursday
Date: 5/7/2015

City: Banning
Project #: CA15_6068_001

DAILY TOTALS						NB	SB	EB	WB	Total	
						413	381	0	0	794	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	1	0			1	12:00	5	7			12
00:15	2	1			3	12:15	7	5			12
00:30	0	0			0	12:30	5	6			11
00:45	0	3	1	2	1	12:45	14	31	3	21	17
01:00	1	0			1	13:00	8	6			14
01:15	0	1			1	13:15	7	8			15
01:30	0	1			1	13:30	7	4			11
01:45	0	1	0	2	0	13:45	5	27	6	24	11
02:00	0	0			0	14:00	5	5			10
02:15	0	0			0	14:15	5	8			13
02:30	0	1			1	14:30	11	5			16
02:45	0	1	2		1	14:45	9	30	6	24	15
03:00	0	0			0	15:00	8	0			8
03:15	0	1			1	15:15	6	5			11
03:30	0	1			1	15:30	15	7			22
03:45	0	1	3		1	15:45	11	40	8	20	19
04:00	0	0			0	16:00	13	6			19
04:15	0	1			1	16:15	13	5			18
04:30	0	0			0	16:30	11	3			14
04:45	0	1	2		1	16:45	6	43	12	26	18
05:00	0	1			1	17:00	15	4			19
05:15	0	3			3	17:15	7	7			14
05:30	0	3			3	17:30	8	6			14
05:45	1	1	3	10	4	17:45	16	46	6	23	22
06:00	1	2			3	18:00	11	3			14
06:15	1	8			9	18:15	3	4			7
06:30	0	1			1	18:30	6	2			8
06:45	2	4	14	25	16	18:45	3	23	2	11	5
07:00	4	9			13	19:00	6	1			7
07:15	3	14			17	19:15	9	1			10
07:30	8	10			18	19:30	3	2			5
07:45	5	20	9	42	14	19:45	7	25	1	5	8
08:00	3	14			17	20:00	5	4			9
08:15	7	8			15	20:15	7	0			7
08:30	4	6			10	20:30	3	1			4
08:45	6	20	11	39	17	20:45	5	20	1	6	6
09:00	4	4			8	21:00	5	1			6
09:15	4	10			14	21:15	7	2			9
09:30	4	7			11	21:30	1	1			2
09:45	7	19	8	29	15	21:45	1	14	2	6	3
10:00	1	7			8	22:00	1	1			2
10:15	4	10			14	22:15	3	0			3
10:30	3	12			15	22:30	2	2			4
10:45	7	15	7	36	14	22:45	3	9	1	4	4
11:00	2	4			6	23:00	0	0			0
11:15	11	3			14	23:15	1	0			1
11:30	3	6			9	23:30	0	0			0
11:45	5	21	6	19	11	23:45	0	1	0		0
TOTALS	104	211			315	TOTALS	309	170			479
SPLIT %	33.0%	67.0%			39.7%	SPLIT %	64.5%	35.5%			60.3%

DAILY TOTALS						NB	SB	EB	WB	Total
						413	381	0	0	794
AM Peak Hour	11:15	06:45			07:15	PM Peak Hour	15:30	16:45		15:30
AM Pk Volume	24	47			66	PM Pk Volume	52	29		78
Pk Hr Factor	0.545	0.839			0.917	Pk Hr Factor	0.867	0.604		0.886
7 - 9 Volume	40	81	0	0	121	4 - 6 Volume	89	49	0	138
7 - 9 Peak Hour	07:30	07:15			07:15	4 - 6 Peak Hour	17:00	16:45		16:00
7 - 9 Pk Volume	23	47	0	0	66	4 - 6 Pk Volume	46	29	0	69
Pk Hr Factor	0.719	0.839	0.260	0.600	0.917	Pk Hr Factor	0.719	0.604	0.000	0.908

ATTACHMENT D: VOLUME DEVELOPMENT WORKSHEETS

Table D-1 - Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Existing	Project	Existing	Existing	Project	Existing
	Without Project	Trips	With Project	Without Project	Trips	With Project
1	Sunset Avenue/Dawn Lane					
NBL	0	0	0	0	0	0
NBT	20	0	20	36	0	36
NBR	0	9	9	0	31	31
SBL	0	0	0	0	0	0
SBT	39	0	39	29	0	29
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	0	28	28	0	18	18
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	39	0	39	29	0	29
Departure	20	0	20	36	0	36
Total	59	0	59	65	0	65
South Leg						
Approach	20	9	29	36	31	67
Departure	39	28	67	29	18	47
Total	59	37	96	65	49	114
East Leg						
Approach	0	28	28	0	18	18
Departure	0	9	9	0	31	31
Total	0	37	37	0	49	49
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	59	37	96	65	49	114
Departure	59	37	96	65	49	114
Total	118	74	192	130	98	228

Table D-2 - Opening Year Peak Hour Volume Summary

	A.M. Peak Hour						P.M. Peak Hour				
	Existing Without Project	'2015- OY Growth	OY Without Project	Project Trips	OY With Project		Existing Without Project	'2015- OY Growth	OY Without Project	Project Trips	OY With Project
1	Sunset Avenue/Dawn Lane					1	Sunset Avenue/Dawn Lane				
NBL	0	0	0	0	0	NBL	0	0	0	0	0
NBT	20	0	20	0	20	NBT	36	1	37	0	37
NBR	0	0	0	9	9	NBR	0	0	0	31	31
SBL	0	0	0	0	0	SBL	0	0	0	0	0
SBT	39	1	40	0	40	SBT	29	1	30	0	30
SBR	0	0	0	0	0	SBR	0	0	0	0	0
EBL	0	0	0	0	0	EBL	0	0	0	0	0
EBT	0	0	0	0	0	EBT	0	0	0	0	0
EBR	0	0	0	0	0	EBR	0	0	0	0	0
WBL	0	0	0	28	28	WBL	0	0	0	18	18
WBT	0	0	0	0	0	WBT	0	0	0	0	0
WBR	0	0	0	0	0	WBR	0	0	0	0	0
North Leg						North Leg					
Approach	39	1	40	0	40	Approach	29	1	30	0	30
Departure	20	0	20	0	20	Departure	36	1	37	0	37
Total	59	1	60	0	60	Total	65	2	67	0	67
South Leg						South Leg					
Approach	20	0	20	9	29	Approach	36	1	37	31	68
Departure	39	1	40	28	68	Departure	29	1	30	18	48
Total	59	1	60	37	97	Total	65	2	67	49	116
East Leg						East Leg					
Approach	0	0	0	28	28	Approach	0	0	0	18	18
Departure	0	0	0	9	9	Departure	0	0	0	31	31
Total	0	0	0	37	37	Total	0	0	0	49	49
West Leg						West Leg					
Approach	0	0	0	0	0	Approach	0	0	0	0	0
Departure	0	0	0	0	0	Departure	0	0	0	0	0
Total	0	0	0	0	0	Total	0	0	0	0	0
Total Approaches						Total Approaches					
Approach	59	1	60	37	97	Approach	65	2	67	49	116
Departure	59	1	60	37	97	Departure	65	2	67	49	116
Total	118	2	120	74	194	Total	130	4	134	98	232

ATTACHMENT E: LEVEL OF SERVICE WORKSHEETS

Intersection

Int Delay, s/veh 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	20	0	0	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	22	0	0	42

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	64	22	0 0 22 0
Stage 1	22	-	- - - -
Stage 2	42	-	- - - -
Critical Hdwy	6.4	6.2	- - 4.1 -
Critical Hdwy Stg 1	5.4	-	- - - -
Critical Hdwy Stg 2	5.4	-	- - - -
Follow-up Hdwy	3.5	3.3	- - 2.2 -
Pot Cap-1 Maneuver	947	1061	- - 1607 -
Stage 1	1006	-	- - - -
Stage 2	986	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	947	1061	- - 1607 -
Mov Cap-2 Maneuver	947	-	- - - -
Stage 1	1006	-	- - - -
Stage 2	986	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	- 1607	-
HCM Lane V/C Ratio	-	-	- -	-
HCM Control Delay (s)	-	-	0 0	-
HCM Lane LOS	-	-	A A	-
HCM 95th %tile Q(veh)	-	-	- 0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	36	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	39	0	0	32

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	71	39	0	0	39	0
Stage 1	39	-	-	-	-	-
Stage 2	32	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	938	1038	-	-	1584	-
Stage 1	989	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	938	1038	-	-	1584	-
Mov Cap-2 Maneuver	938	-	-	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	996	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	0		0		0
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1584	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection

Int Delay, s/veh 2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	28	0	20	9	0	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	0	22	10	0	42

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	69	27	0	0	32	0
Stage 1	27	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	941	1054	-	-	1593	-
Stage 1	1001	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	941	1054	-	-	1593	-
Mov Cap-2 Maneuver	941	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	986	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	9		0		0
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 941	1593	-
HCM Lane V/C Ratio	-	- 0.032	-	-
HCM Control Delay (s)	-	- 9	0	-
HCM Lane LOS	-	- A	A	-
HCM 95th %tile Q(veh)	-	- 0.1	0	-

Intersection

Int Delay, s/veh 1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	18	0	36	31	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	20	0	39	34	0	32

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	88	56	0 0 73 0
Stage 1	56	-	- - - -
Stage 2	32	-	- - - -
Critical Hdwy	6.4	6.2	- - 4.1 -
Critical Hdwy Stg 1	5.4	-	- - - -
Critical Hdwy Stg 2	5.4	-	- - - -
Follow-up Hdwy	3.5	3.3	- - 2.2 -
Pot Cap-1 Maneuver	918	1016	- - 1540 -
Stage 1	972	-	- - - -
Stage 2	996	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	918	1016	- - 1540 -
Mov Cap-2 Maneuver	918	-	- - - -
Stage 1	972	-	- - - -
Stage 2	996	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	918	1540	-
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s)	-	-	9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	20	0	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	22	0	0	43

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	65	22	0	0	22	0
Stage 1	22	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	946	1061	-	-	1607	-
Stage 1	1006	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	946	1061	-	-	1607	-
Mov Cap-2 Maneuver	946	-	-	-	-	-
Stage 1	1006	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	0		0		0
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1607	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection

Int Delay, s/veh 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	37	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	40	0	0	33

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	73	40	0 0 40 0
Stage 1	40	-	- - - -
Stage 2	33	-	- - - -
Critical Hdwy	6.4	6.2	- - 4.1 -
Critical Hdwy Stg 1	5.4	-	- - - -
Critical Hdwy Stg 2	5.4	-	- - - -
Follow-up Hdwy	3.5	3.3	- - 2.2 -
Pot Cap-1 Maneuver	936	1037	- - 1583 -
Stage 1	988	-	- - - -
Stage 2	995	-	- - - -
Platoon blocked, %	-	-	- - - -
Mov Cap-1 Maneuver	936	1037	- - 1583 -
Mov Cap-2 Maneuver	936	-	- - - -
Stage 1	988	-	- - - -
Stage 2	995	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1583	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection

Int Delay, s/veh 2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	28	0	20	9	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	0	22	10	0	43

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	70	27	0	0	32	0
Stage 1	27	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	939	1054	-	-	1593	-
Stage 1	1001	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	939	1054	-	-	1593	-
Mov Cap-2 Maneuver	939	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	9		0		0
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	939	1593	-
HCM Lane V/C Ratio	-	-	0.032	-	-
HCM Control Delay (s)	-	-	9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	18	0	37	31	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	20	0	40	34	0	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	90	57	0	0	74	0
Stage 1	57	-	-	-	-	-
Stage 2	33	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	915	1015	-	-	1538	-
Stage 1	971	-	-	-	-	-
Stage 2	995	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	915	1015	-	-	1538	-
Mov Cap-2 Maneuver	915	-	-	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	995	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	9		0		0
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	915	1538	-
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s)	-	-	9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Appendix D

JURISDICTIONAL DELINEATION REPORT

TENTATIVE TRACT 36939 PROJECT
THE CITY OF BANNING, CALIFORNIA

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LSA

July 2015

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INTRODUCTION

This report presents the results of a jurisdictional delineation conducted by LSA Associates, Inc. (LSA). The report summarizes the results of fieldwork conducted to identify the limits of potential wetlands and non-wetland waters of the United States subject to the jurisdiction of the United States Army Corps of Engineers (ACOE) and Regional Water Quality Control Board (RWQCB) pursuant to Sections 404 and 401 of the Federal Clean Water Act (CWA), respectively; and streambeds, water bodies, and associated habitat subject to California Department of Fish and Wildlife (CDFW) regulation pursuant to the California Fish and Game Code. LSA delineated three unnamed drainages located in The City of Banning, Riverside County, California (Figure 1). This report has been prepared for Diversified Pacific for purposes of identifying aquatic resource limits for design consideration with the intent of minimizing and avoiding impacts to aquatic resources to the greatest extent feasible, and for submittal to the ACOE, CDFW, and RWQCB as part of their review of applications for permit authorization, if project impacts trigger the need for such permits.

This routine jurisdictional delineation was conducted under contract with Diversified Pacific. The findings and conclusions presented in this report, including the location and extent of aquatic resources subject to regulatory jurisdiction, represent the professional opinion of LSA and should be considered preliminary until verified by representatives of the ACOE, CDFW, and RWQCB.

PROJECT LOCATION AND DESCRIPTION

The project site consists of the following Assessor's Parcel Numbers (APNs): 535-430-001 through 535-430-021, 535-431-001 through 535-431-015, 535-432-001 through 535-432-017, 535-070-004, and 535-070-006. It is located northeast of the intersection of Wilson Avenue and Sunset Avenue, as depicted on the U.S. Geological Survey (USGS) 7.5-minute *Beaumont, California* quadrangle in projected Section 5, Township 3 South, Range 1 East (Figure 1). The project proposes to construct 98 single-family residential units.

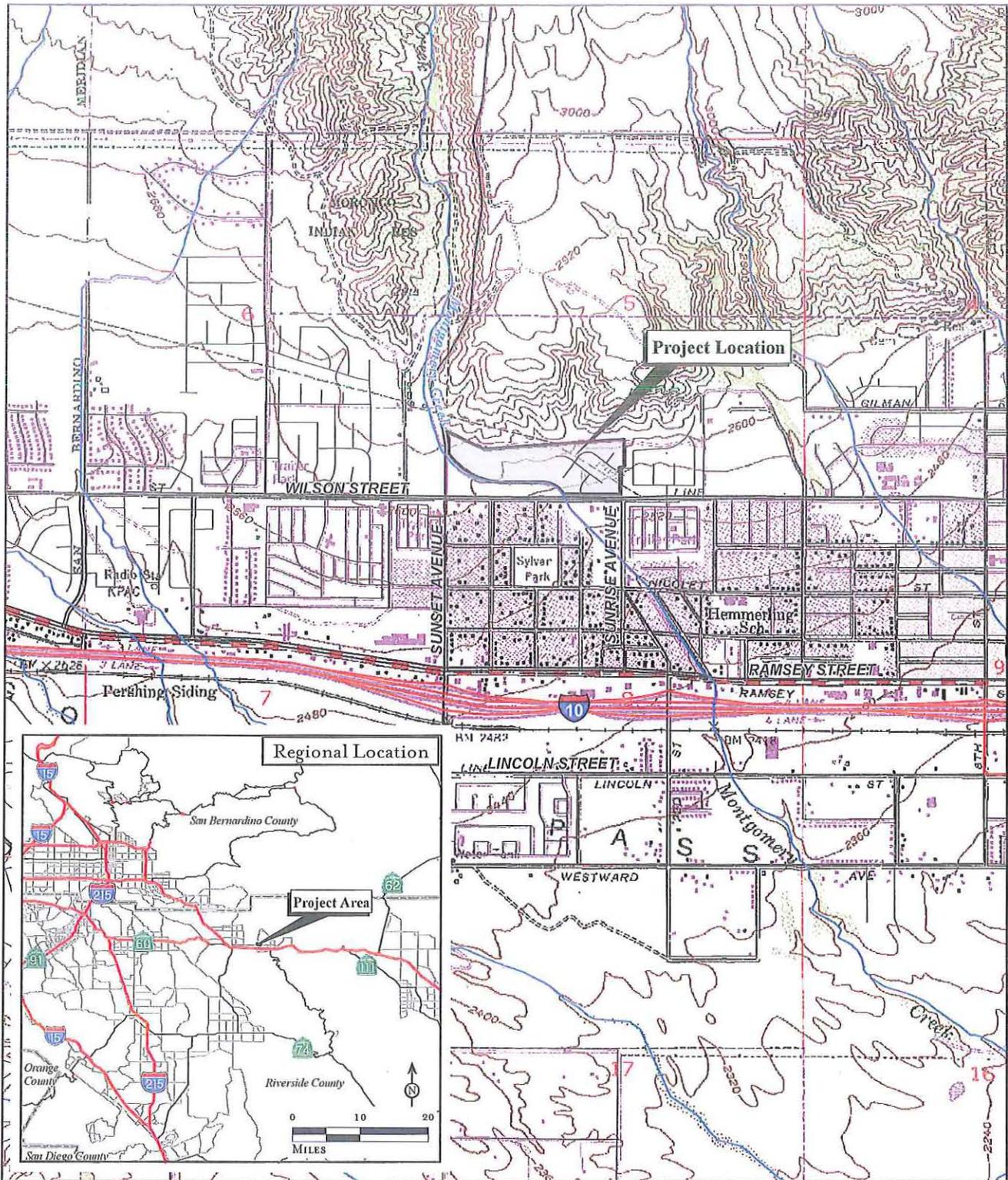


FIGURE 1

*Banning Tract 36939
Jurisdictional Delineation Report*

Regional and Project Location

SOURCE: USGS 7.5' Quad: Beaumont, 1988, CA; County of Riverside, 2015; National Hydrography Dataset, 2010.

I:\DFD1502\Reports\JuriDe\fig1_RegLoc.mxd (7/24/2015)

REGULATORY BACKGROUND

United States Army Corps of Engineers

The ACOE regulates discharges of dredged or fill material into waters of the United States. These waters include wetland and non-wetland bodies of water that meet specific criteria. ACOE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in the ACOE regulations). The following definition of waters of the United States is taken from the discussion provided at 33 Code of Federal Regulations (CFR) 328.3:

The term waters of the United States means:

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce ...;
- (2) All interstate waters including interstate wetlands;
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams) ... the use, degradation or destruction of which could affect interstate or foreign commerce ...;
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition; and
- (5) Tributaries of waters defined in paragraphs (a) (1)–(4) of this section.

The ACOE typically regulates as waters of the United States a body of water displaying an ordinary high water mark (OHWM). ACOE jurisdiction over nontidal waters of the United States extends laterally to the OHWM or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4). The OHWM is defined as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area” (33 CFR 328.3). Jurisdiction typically extends upstream to the point where the OHWM is no longer perceptible.

As discussed above, ACOE regulatory jurisdiction under Section 404 of the CWA is founded on a connection between the water body in question and interstate commerce. In the past, an indirect nexus could potentially be established if isolated waters provided habitat for migratory birds, even in the absence of a surface connection to a navigable water of the United States. The 1984 rule that enabled the ACOE to expand jurisdiction over isolated waters of this type became known as the Migratory Bird Rule. However, on January 9, 2001, the United States Supreme Court narrowly limited ACOE jurisdiction of “nonnavigable, isolated, intrastate” waters based solely on the use of such waters by migratory birds and particularly, the use of indirect indicators of interstate commerce (e.g., use by migratory birds that cross state lines) as a basis for jurisdiction. The Court’s ruling derives from the case *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, No. 99-1178 (SWANCC). The Supreme Court determined that the ACOE exceeded its statutory authority by asserting CWA jurisdiction over an abandoned sand and gravel pit in northern Illinois, which provides habitat for migratory birds.

In 2006, the United States Supreme Court further considered ACOE jurisdiction of “waters of the United States” in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (126 S. Ct. 2208), collectively referred to as *Rapanos*. The Supreme Court concluded that wetlands are “waters of the United States” if they significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as navigable. On June 5, 2007, the ACOE issued guidance regarding the *Rapanos* decision. This guidance states that the ACOE will continue to assert jurisdiction over traditional navigable waters, wetlands adjacent to traditional navigable waters, relatively permanent non-navigable tributaries that have a continuous flow at least seasonally (typically three months), and wetlands that abut relatively permanent tributaries. The ACOE will determine jurisdiction over waters that are non-navigable tributaries that are not relatively permanent and wetlands adjacent to non-navigable tributaries that are not relatively permanent only after making a significant nexus finding.

Furthermore, the preamble to ACOE regulations (Preamble Section 328.3, Definitions) states that the ACOE does not generally consider the following waters to be waters of the U.S. The ACOE does, however, reserve the right to regulate these waters on a case-by-case basis.

- Nontidal drainage and irrigation ditches excavated on dry land;
- Artificially irrigated areas that would revert to upland if the irrigation ceased;
- Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons; and
- Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for purposes of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the U.S.

Waters found to be isolated and not subject to CWA regulation are often still regulated by the Regional Water Quality Control Board (RWQCB) under the State Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

Wetlands

Wetland delineations for Section 404 purposes must be conducted according to the Regional Supplement to the *Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (Regional Supplement) (ACOE 2008) and the *Corps of Engineers 1987 Wetland Delineation Manual* (1987 Manual) (Environmental Laboratory 1987). Where there are differences between the two documents, the Regional Supplement takes precedence over the 1987 Manual. The ACOE and United States Environmental Protection Agency (EPA) define wetlands as follows:

Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances

do support, a prevalence of vegetation typically adapted to life in saturated soil conditions.”

In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. Several indicators may be analyzed to determine whether the criteria are satisfied.

Hydrophytic vegetation and hydric soils indicators provide evidence that episodes of inundation have lasted more than a few days or have occurred repeatedly over a period of years, but do not confirm that an episode has occurred recently. Conversely, wetland hydrology indicators provide evidence that an episode of inundation or soil saturation occurred recently, but do not provide evidence that episodes have lasted more than a few days or have occurred repeatedly over a period of years. Because of this, if an area lacks one of the three characteristics under normal circumstances, the area is considered nonwetland under most circumstances.

Determination of wetland limits may be obfuscated by a variety of natural environmental factors or human activities, collectively called difficult wetland situations, including cyclic periods of drought and flooding or highly ephemeral stream systems. During periods of drought, for example, bank return flows are reduced and water tables are lowered. This results in a corresponding lowering of ordinary high water and invasion of upland plant species into wetland areas. Conversely, extreme flooding may create physical evidence of high water well above what might be considered ordinary and may allow the temporary invasion of hydrophytic species into nonwetland areas. In highly ephemeral systems typical of southern California, these problems are encountered frequently. In these situations, professional judgment based on years of practical experience and extensive knowledge of local ecological conditions comes into play in delineating wetlands. The *Regional Supplement* provides additional guidance for difficult wetland situations.

Hydrophytic Vegetation. Hydrophytic vegetation is plant life that grows and is typically adapted for life in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, herb, and woody vine layers) are considered hydrophytic. Hydrophytic species are those included on the *National Wetland Plant List: 2014 Update of Wetland Ratings* (Lichvar et al. 2014), published by the ACOE. Each species on the list is rated according to a wetland indicator category, as shown in Table A. To be considered hydrophytic, the species must have wetland indicator status (i.e., be rated as OBL, FACW, or FAC).

Table A: Hydrophytic Vegetation

Category		Probability
Obligate Wetland	OBL	Almost always occur in wetlands (estimated probability > 99%)
Facultative Wetland	FACW	Usually occur in wetlands (estimated probability 67–99%)
Facultative	FAC	Equally likely to occur in wetlands and nonwetlands (estimated probability 34–66%)
Facultative Upland	FACU	Usually occur in nonwetlands (estimated probability 67–99%)
Obligate Upland	UPL	Almost always occur in nonwetlands (estimated probability > 99%)

The delineation of hydrophytic vegetation is typically based on the most dominant species from each vegetative stratum (strata are considered separately); when more than 50 percent of these dominant species are hydrophytic (i.e., FAC, FACW, or OBL), the vegetation is considered hydrophytic. In particular, the ACOE recommends the use of the “50/20” rule (also known as the dominance test) from the *Regional Supplement* for determining dominant species. Under this method, dominant species are the most abundant species that immediately exceed 50 percent of the total dominance measure for the stratum, plus any additional species comprising 20 percent or more of the total dominance measure for the stratum. In cases where indicators of hydric soil and wetland hydrology are present but the vegetation initially fails the dominance test, the prevalence index must be used. The prevalence index is a weighted average of all plant species within a sampling plot. The prevalence index is particularly useful when communities only have one or two dominants, where species are present at roughly equal coverage, or when strata differ greatly in total plant cover. In addition, ACOE guidance provides that morphological adaptations may be considered when determining hydrophytic vegetation when indicators of hydric soil and wetland hydrology are present (ACOE 2006). If the plant community passes either the dominance test or prevalence index after reconsidering the indicator status of any plant species that exhibit morphological adaptations for life in wetlands, then the vegetation is considered hydrophytic.

Hydric Soils.¹ Hydric soils are defined as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.² Soils are considered likely to meet the definition of a hydric soil when one or more of the following criteria are met:

¹ The hydric soil definition and criteria included in the 1987 Manual are obsolete. Users of the Manual are directed to the United States Department of Agriculture (USDA) Natural Resources Conservation Service Web site for the most current information on hydric soils.

² Current definition as of 1994 (FR July 13, 1994).

1. All Histels except Folistels and Histosols except Folists; or
2. Soils that are frequently ponded for long duration or very long duration³ during the growing season; or
3. Soils that are frequently flooded for long duration or very long duration during the growing season.

Hydric soils develop under conditions of saturation and inundation combined with microbial activity in the soil that causes a depletion of oxygen. While saturation may occur at any time of year, microbial activity is limited to the growing season, when soil temperature is above biologic zero (the soil temperature at a depth of 50 centimeters, below which the growth and function of locally adapted plants are negligible). Biogeochemical processes that occur under anaerobic conditions during the growing season result in the distinctive morphologic characteristics of hydric soils. Based on these criteria, a National List of Hydric Soils was created from the National Soil Information System (NASIS) database and is updated annually.

The *Regional Supplement* has a number of field indicators that may be used to identify hydric soils. Natural Resources Conservation Service (NRCS) (2003) has also developed a number of field indicators that may demonstrate the presence of hydric soils. These indicators include hydrogen sulfide generation, accumulation of organic matter, and the reduction, translocation and/or accumulation of iron and other reducible elements. These processes result in soil characteristics that persist during both wet and dry periods. Separate indicators have been developed for sandy soils and for loamy and clayey soils.

Wetland Hydrology. Under natural conditions, development of hydrophytic vegetation and hydric soils are dependent on a third characteristic: wetland hydrology. Areas with wetland hydrology are those where the presence of water has an overriding influence on vegetation and soil characteristics due to anaerobic and reducing conditions, respectively (Environmental Laboratory 1987). The wetland hydrology criterion is satisfied if the area is seasonally inundated or saturated to the surface for a minimum of 14 consecutive days during the growing season in most years (ACOE 2008). Hydrology is often the most difficult criterion to measure in the field due to seasonal and annual variations in water availability. Some of the indicators that are commonly used to identify wetland hydrology include visual observation of inundation or saturation, watermarks, recent sediment deposits, surface scour, and oxidized root channels (rhizospheres) resulting from prolonged anaerobic conditions.

California Department of Fish and Wildlife

The CDFW, through provisions of the California Fish and Game Code (Sec. 1600 et seq.), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks and at least an intermittent flow of water. The CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFW. Also, the CDFW typically does not regulate estuaries below the mouth of a tributary river or stream.

³ Long duration is defined as a single event ranging from 7 to 30 days; very long duration is defined as a single event that lasts longer than 30 days.

In obtaining CDFW agreements, the limits of wetlands are not typically determined. The reason for this is that the CDFW generally includes, within the jurisdictional limits of streams and lakes, any riparian habitat present. Riparian habitat includes willows (*Salix* spp.), mule fat (*Baccharis salicifolia*), and other vegetation typically associated with the banks of a stream or lake shorelines and may not be consistent with ACOE definitions. In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Thus, defining the limits of CDFW jurisdiction based on riparian habitat will automatically include any wetland areas and may include additional areas that do not meet ACOE criteria for soils and/or hydrology (e.g., where riparian woodland canopy extends beyond the banks of a stream away from frequently saturated soils).

Regional Water Quality Control Board

The RWQCB is responsible for the administration of Section 401 of the CWA and the California Water Code Porter-Cologne Water Quality Control Act (Water Code Section 13260). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters. The Porter-Cologne Act requires “any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State” to file a report of discharge. Typically, the areas regulated by the RWQCB coincide with those of the ACOE (i.e., waters of the U.S., including any wetlands).

EXISTING SETTING

The project site is situated at the northeast corner of Wilson Avenue and Sunset Avenue in the City of Banning. The site is undeveloped, but the eastern half of the project site had previously been graded for home sites as late as 2009. The entire project site has been vacant since that time. The site is bordered on the west and north by undeveloped open space, and to the east and south by single-family homes and rural residences.

The historical topography of the project site is relatively flat with slight, hilly undulations. The site slopes gently to the south. This topography still exists at the west end of the project site; however, the east end of the project site has been graded for home sites and the topography has been altered to have elevated plateaus for tiered lots. The general elevation of the site ranges from approximately 2,550 to 2,650 feet above mean sea level.

The project site is highly disturbed due to past and current land use practices. As a result of the disturbance caused by these land use practices, the vegetation on the project site is dominated by ruderal vegetation. The east side of the project site consists almost solely of Russian thistle (*Salsola tragus*) and the west side of the project site consists primarily of non-native grasslands where red brome (*Bromus madritensis*), riggut brome (*Bromus diandrus*), and wild oat (*Avena fatua*) are dominant. Small isolated polygons of California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*) are dispersed within the nonnative grasses on the western half of the project site. Figure 2 shows the three drainages identified on site (arbitrarily named Drainages D1, D2, and D3 for purposes of this report) and Figure 3 show site photos.

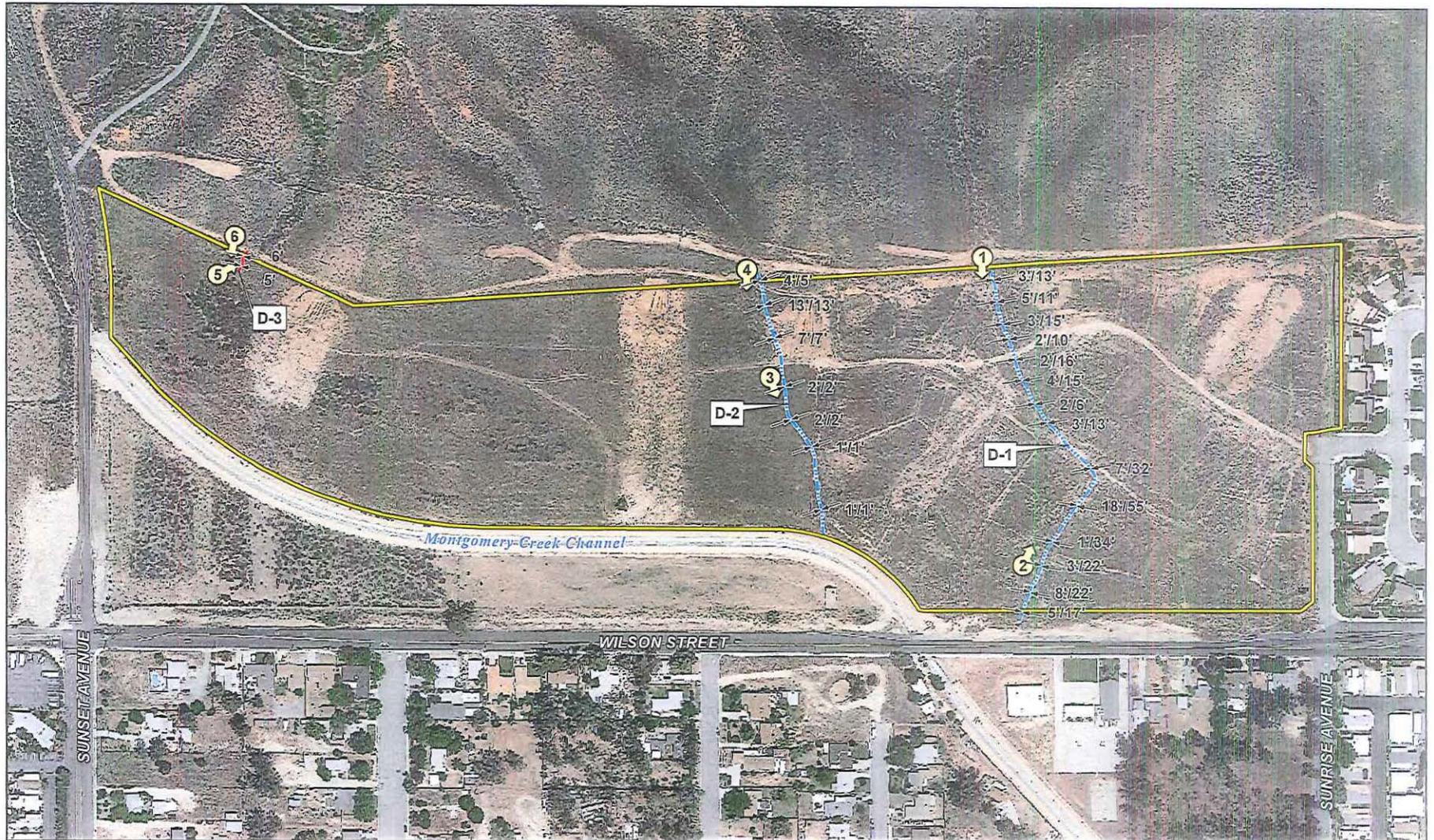
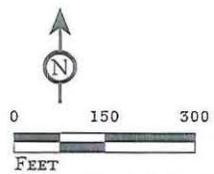


FIGURE 2

LSA



- Project Boundary
- Potential Waters of the U.S./CDFW Streambed
- Potential CDFW Streambed
- 1'11" Drainage Width (ACOE/CDFW)

SOURCE: Google Earth, 2014

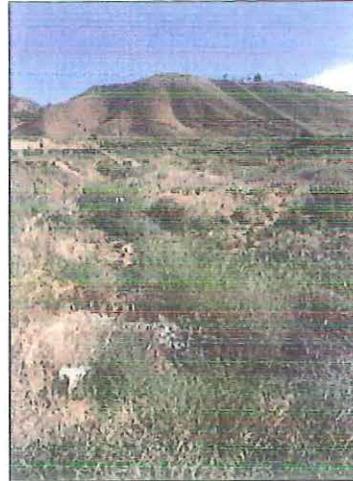
I:\DFD1502\Reports\JuriDel\fig2_JuriDel.mxd (7/24/2015)

Banning Tract 36939
Jurisdictional Delineation Report

Potential Waters of the U.S./CDFW Streambed



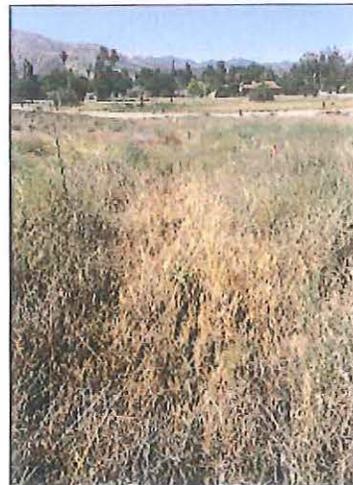
PHOTOGRAPH 1: *View of Drainage D-1 as seen facing south.*



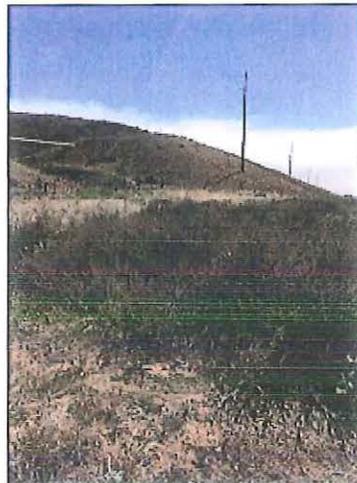
PHOTOGRAPH 2: *View of drainage D-1 as seen facing northeast.*



PHOTOGRAPH 3: *View of overgrown Drainage D-2 as seen facing south.*



PHOTOGRAPH 4: *View of drainage D-4 as seen facing south.*



PHOTOGRAPH 5: *View of Drainage D-3 as seen facing northeast.*



PHOTOGRAPH 6: *View of a large patch of buckwheat scrub at the terminus of drainage D-3.*

LSA

FIGURE 3

*Banning Tract 36939
Jurisdictional Delineation Report*

Site Photographs

METHODOLOGY

Prior to conducting the fieldwork associated with this jurisdictional delineation, LSA obtained the necessary aerial photographs and topographic maps needed for completing a jurisdictional delineation. The entire project site was surveyed on foot for potential wetlands and non-wetland jurisdictional waters as well as streambed and riparian resources. General site characteristics were also noted. Areas supporting species of plant life potentially indicative of wetlands, exhibiting a bed and bank, and/or an Ordinary High Water Mark (OHWM), were evaluated according to routine wetland delineation procedures described in the ACOE *Wetlands Delineation Manual* (Environmental Laboratory, 1987), and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (Environmental Laboratory, 2008) (Manual). Those areas identified as potential jurisdictional waters of the U.S./streambeds of the CDFW were examined in the field for evidence of jurisdiction (wetland parameters, OHWM, streambed and bank, and/or riparian habitat). The ACOE OHWM widths and CDFW streambed widths were measured in the field and mapped on an aerial photograph (scale 1 inch = 400 feet). Additionally, the project site was examined to determine the extent of CDFW jurisdiction.

RESULTS AND DISCUSSION

Wetland and Non-Wetland Waters of the U.S./Streambed Resources

Both Drainages D1 and D2 drain southeast through the project site. D1 and D2 convey flows through the site into Montgomery Creek Channel which borders the southern boundary of the project site. Drainage D3 appears to be an erosional feature associated with the water towers north of the project site, and not a relatively permanent water that the ACOE would typically regulate. Historic aerial photographs do not show any evidence of the drainage on site prior to the water tower installation just north of the project site. D3 does not appear to have any connectivity to any waterway including the Montgomery Creek Channel south of the project site. The Preliminary Jurisdictional Determination Form (Appendix A), lists D1 and D2 as potentially jurisdictional waterways.

The Montgomery Creek Channel conveys flows under Interstate 10 to Smith Creek. Smith Creek flows into the San Geronio River, to the Whitewater River, which is a direct tributary to the Salton Sea. The Salton Sea is considered to be a navigable water of the U.S. Table B, below, shows potential waters of the U.S. occurring on the project site.

Table A: Potential Jurisdictional Waters of the U.S.

Drainage ID	ACOE Non-Wetland Waters (Acres)
D1	0.106
D2	0.049
Total	0.155

Soils. The soils on the project site include the following:

- o Gorgonio gravelly loamy fine sand, 2 to 15 percent slopes;
- o Hanford coarse sandy loam, 8 to 15 percent slopes, eroded;
- o Hanford sandy loam, 2 to 15 percent slopes; and
- o Riverwash.

Hydrology/OHWM. Wetland hydrology indicators identified within the drainages included water marks and sediment deposits.

Significant Nexus. Drainages D1 and D2 flow into Montgomery Creek Channel and convey flows under Interstate 10 to Smith Creek. Smith Creek flows into the San Gorgonio River, which then flows into the Whitewater River, which is a direct tributary to the Salton Sea. D3 does not appear to connect with any waterway via tributary and/or by virtue of any chemical, biological, or physical integrity nexus.

California Department of Fish and Wildlife

Vegetation within drainages D1, D2, and D3 includes ruderal upland species such as Russian thistle, California buckwheat, and brome grasses which are not considered riparian species or those species associated with riparian habitat. CDFW typically asserts jurisdiction over habitats associated with streams. It is anticipated that the drainage ditches from bank to bank would be subject to CDFW regulatory jurisdiction. Table C, below, shows potential CDFW jurisdictional streambed occurring on the project site.

Table C: Potential CDFW Jurisdictional Streambed

Drainage ID	CDFW Streambed (Acres)
D1	0.445
D2	0.050
D3	0.004
Total	0.499

FUNCTIONS AND VALUES OF WETLANDS

All wetlands and other waters have some degree of functionality. The drainages on site were evaluated according to the functions discussed below. Functions have been evaluated at low, moderate, or high levels and are provided in the discussion below.

Wildlife Habitat

The “wildlife habitat” function is the ability of the wetland or other water to provide habitat for various types of animals typically associated with wetlands and riparian habitats. Both resident and migrating species are considered in this function.

Low-quality habitat value for wildlife is present within drainages D1, D2, and D3. These drainages are considered low quality habitat for wildlife because they are erosional in nature and are sparsely vegetated with ruderal upland species.

Endangered Species Habitat

The “endangered species habitat” function is the ability of a wetland or other waters to provide habitat for endangered species typically associated with wetlands, and other waters. Both resident and migrating species are considered in this function.

Habitat within is considered to be of low value to endangered species as a result of the lack of suitable habitat for endangered species with the potential to occur within the project site.

Fish Habitat

Because the drainage channels located on the project site are ephemeral, the project site contains no habitat for fish.

Nutrient Production

This function is the effectiveness of the wetland or other water to retain and/or transform inorganic phosphorus and/or nitrogen into their organic forms or transform (remove) nitrogen in its gaseous form.

Nutrient production for the drainages found within the project site provides low value to biological resources downstream due to sparseness and lack of riparian vegetation. The nutrient production for all drainages found within the project site is not expected to be substantial.

Nutrient Export

This function is the capability of a wetland or other water to flush relatively large amounts of organic plant material into downslope waters. There may be instances where export represents a nutrient loss to the system or where exported material causes water quality problems down slope.

All three drainages within the project area are considered of low value for nutrient export.

Flood Storage

This function is the effectiveness of the wetlands or their waters to reduce flood damage and attenuation of floodwater for prolonged periods following rain events.

The upland vegetation in drainages found within the project site may slow down flows slightly during periods of flooding, minimally absorb wave energy to reduce erosion, and assist in the process of sediment deposition. There are no wetlands outside the drainage channels that would provide

overbank flood storage. Flood storage is thus considered a low value in all of the drainages found within the project site.

Flood storage for all of the drainages within the project site is considered to be of low value because they lack dense riparian vegetation.

Water Purification

This function is the ability of a wetland or other water to filter and absorb soil particles and living organisms in water and soil. Upstream runoff from predominantly urban land uses in the proposed project area can contain toxins and other contaminants. These include residual pesticides, fertilizers, and petroleum products. Toxins and other pollutants may be present during periods of peak runoff. Water purification is considered to be low value within all three drainages as they do not carry large volumes of water during a storm event. These factors prevent the drainages from filtering and absorbing soil particles and living organisms in water and soil, therefore providing a low value for water purification.

Sediment Retention

This function is the ability of a wetland or other water to bind soil and dissipate erosive forces. The drainages within the project site provide low value of sediment retention due to the lack of riparian vegetation.

Sediment Detoxification

This function is the efficiency with which a wetland or other water physically or chemically traps and retains inorganic sediments and/or chemical substances generally toxic to wildlife. Sediment detoxification is considered a low value for drainages D1-D3 due to the lack of vegetation to physically trap and retain inorganic sediments.

Groundwater Discharge and Recharge

This function involves the potential for the wetland or other water to contribute to an aquifer or the potential to serve as an area where groundwater can be discharged to the surface.

Groundwater discharge and recharge are considered to have a low value within drainages D1 – D3. The drainages do not carry large volumes of water during storm events. Which prevents those drainages from providing groundwater discharge and recharge and therefore these drainages are considered to be of low value.

CONCLUSIONS

U.S. Army Corps of Engineers

A total of 0.155 acre of potential ACOE nonwetland waters of the U.S. were found to be present within the project site. No potential wetland waters of the U.S. were found.

The conclusions presented above are subject to verification by the ACOE.

California Department of Fish and Wildlife

A total of 0.499 acre of potential CDFW streambed were found to be present within the project site. No CDFW potential riparian habitat is present within the project area.

The conclusions above are subject to verification by the CDFW.

Additionally, drainages D1 and D2 may be regulated by the RWQCB under the Clean Water Act and D3 under Porter-Cologne Water Quality Control Act. Temporary impacts associated with ground disturbance within areas of CDFW jurisdiction can be avoided through implementation of appropriate avoidance measures. The results of this jurisdictional delineation are subject to CDFW concurrence.

REFERENCES

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APPENDIX A

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

District Office: <u>Los Angeles District</u>	File/ORM #: _____	PJD Date: <u>05/19/15</u>
State: <u>CA</u>	City/County: <u>Riverside County</u>	Name/Address of Person Requesting PJD: <u>Peter J. Pitassi, AIA, LBED AP</u> <u>Senior Vice President</u> <u>Community Design and Forward Planning</u> <u>Diversified Pacific</u> <u>10621 Civic Center Drive</u> <u>Rancho Cucamonga, CA 91730</u>
Nearest Waterbody: <u>Salton Sea</u>	Location: TPS, Lat/Long or UTM: <u>T03S, R01E, S5</u> <u>See page 2 for all drainage coordinates</u>	

Identify (Estimate) Amount of Waters in the Review Area: <u>Non-Wetland Waters:</u> [1461] linear ft [] width [0.155] acres [Ephemeral] Stream Flow: <u>Wetlands:</u> [] acre(s) Cowardin Class: <u>N/A</u>	Name of Any Water Bodies on the Site identified as: Section 10 Waters: Tidal: _____ Non-Tidal: _____ <input type="checkbox"/> Office (Desk) Determination <input type="checkbox"/> Field Determination: Date of Field Trip: _____
--	--

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See attached JD Report
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps
- Corps navigable waters' study: _____
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite quad name: Beuamont
- USDA Natural Resources Conservation Service Soil Survey. Citation: Natural Resources Conservation Service. 2008. Soil
- National wetlands inventory map(s). Cite name: _____
- State/Local wetland inventory map(s): _____
- FEMA/FIRM maps: _____
- 100-year Floodplain Elevation is: _____
- Photographs: Aerial (Name & Date): Google Earth 2014
 - Other (Name & Date): _____
- Previous determination(s). File no. and date of response letter: _____
- Other information (please specify): _____

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and Date of Regulatory Project Manager (REQUIRED) _____
 Signature and Date of Person Requesting Preliminary JD (REQUIRED, unless obtaining the signature is impracticable) _____

EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:
 1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.
 2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

Appendix A - Sites

District Office	Los Angeles District	File/ORM #		PJD Date:	06/19/15
State	CA	City/County	Riverside	Person Requesting PJD	Peter Pitassi

Site Number	Latitude	Longitude	Cowardin Class	Est. Amount of Aquatic Resource in Review Area	Class of Aquatic Resource
D1	11S 508759 m _g E	3754837 m N	Riverine	0.106	Non-Section 10 non-wetland
D2	11S 508601 m _g E	3754840 m N	Riverine	0.049	Non-Section 10 non-wetland
			n/a		Non-Section 10 non-wetland

Notes:

Appendix E



September 24, 2015

Mr. Reuben J. Arceo, City of Banning
99 East Ramsey Street
Banning, California 92220

Subject: Air Quality and Climate Change Study for Banning TTM 36939 (LSA Project No. DFD1505)

Mr. Arceo:

This focused air quality and climate change impact study has been prepared to assess the potential impacts associated with the development of the proposed Banning TTM 36939 Project to be located between Sunset Avenue and Sunrise Avenue, north of the Montgomery Creek Channel in the City of Banning, Riverside County. Figure 1 illustrates the regional and project location.

The project site is located in the City of Banning (City) in the non-desert portion of Riverside County, California, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). This evaluation was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook (SCAQMD 1993) and associated updates.

PROJECT DESCRIPTION

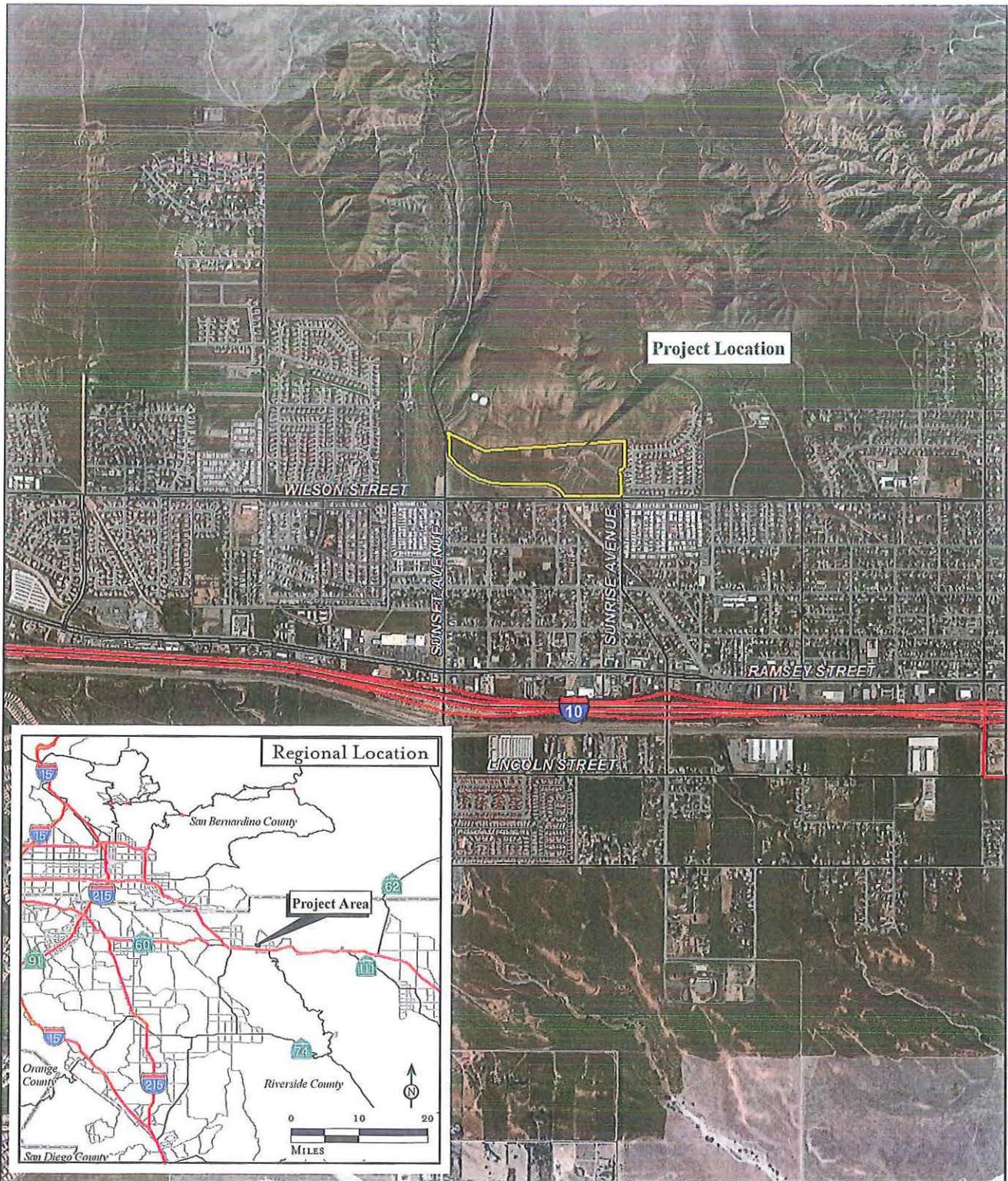
The proposed project consists of 98 single-family residential dwelling units on a 35-acre lot. The project site is located on the east side of Sunset Avenue, north of Wilson Street and the Montgomery Creek Channel, and west of Sunrise Avenue. Access to the project site is provided by three intersections, one on Sunset Avenue, one on Wilson Street, and one on Sunrise Avenue. The site is undeveloped, but the eastern half of the project site had previously been graded for home sites as late as 2009. The entire project site has been dormant since that time. It is bounded by open, undeveloped land to the north and west and residential development to the south and east. Figure 2 illustrates the site plan.

Sensitive Land Uses in the Project Vicinity

The site is bordered on the west and north by undeveloped open space, and to the east and south by single-family homes and rural residences.

THRESHOLDS AND METHODOLOGY

A number of modeling tools are available to assess air quality impacts of projects. In addition, certain air districts, such as the SCAQMD, have created guidelines and requirements to conduct air quality



Project Location

WILSON STREET

SUNSET AVENUE

SUNRISE AVENUE

RAMSEY STREET

10

LINCOLN STREET

Regional Location

Project Area

San Bernardino County

Orange County

Riverside County

San Diego County

0 10 20
MILES

LSA

FIGURE 1



0 1,000 2,000
FEET

Banning TTM 36939

SOURCE: Bing Aerials, 2010; County of Riverside, 2015.

Regional and Project Location

I:\DFD1502\Reports\Traffic\fig1_RegLoc.mxd (7/28/2015)



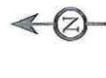
FIGURE 2

Project Boundary

Banning Tract 36939

Site Plan

LSA



0 150 500
FEET

SOURCE: Google Earth, 2014; Soil Data Mart, 2003.

I:\DFD1502\Reports\MSHCP\Fig2_SitePlan.mxd (7/24/2015)

analysis. SCAQMD's current guidelines, the *CEQA Air Quality Handbook* (SCAQMD 1993) with associated updates were adhered to in the assessment of air quality impacts for the proposed projects. The current air quality model, CalEEMod Version 2013.2.2, was used to estimate project-related construction emissions in this air quality analysis.

The net increase in pollutant emissions determines the significance and impact on regional air quality as a result of the construction of the proposed projects. The results also allow the local government to determine whether the proposed projects will deter the region from achieving the goal of reducing pollutants in accordance with the SCAQMD Air Quality Management Plan in order to comply with the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS).

Criteria pollutant emissions thresholds

In addition to the NAAQS and CAAQS, the SCAQMD has established daily emissions thresholds for construction and operation of a project in the Basin. It should be noted that the emissions thresholds were established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks. Table A shows the SCAQMD daily criteria pollutant emissions thresholds for construction and operation of a proposed project in the Basin.

Table A: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Thresholds (pounds per day)					
	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction	75	100	550	150	150	55
Operational	55	55	550	150	150	55

Source: South Coast Air Quality Management District, 1993

Projects with construction-related emissions that exceed any of these emission thresholds are considered to be significant under the SCAQMD guidelines.

Localized significance analysis thresholds

SCAQMD has developed LST methodology that can be used to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or State AAQS and are developed based on the ambient concentrations of that pollutant for each source receptor area.

The SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003, recommending that all air quality analyses include an assessment of construction impacts on the air quality of nearby sensitive receptors. LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of the NAAQS or CAAQS. LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA for the LST is the Banning Airport Source Receptor Area (SRA 29).

In the case of CO and NO₂, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM₁₀ and PM_{2.5}, both of which are nonattainment pollutants. For these two, the significance criteria are the pollutant concentration thresholds presented in SCAQMD Rules 403 and 1301. The Rule 403 threshold of 10.4 µg/m³ applies to construction emissions of PM₁₀ and PM_{2.5} (and may apply to operational emissions at aggregate handling facilities). The Rule 1301 threshold of 2.5 µg/m³ applies to nonaggregate handling operational activities.

To avoid the need for every air quality analysis to perform air dispersion modeling, the SCAQMD performed air dispersion modeling for a range of construction sites less than or equal to 5 acres (ac) in size and created look-up tables that correlate pollutant emissions rates with project size to screen out projects that are unlikely to generate enough emissions to result in a locally significant concentration of any criteria pollutant. These look-up tables can also be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required. Additionally, the SCAQMD has issued guidance on applying CalEEMod modeling results to localized impacts analysis.¹ This guidance provides calculations to determine what subset of the total site would be disturbed based on the equipment planned.

For operational emissions, the localized significance for a project greater than 5 ac can be determined by performing the screening-level analysis using the 5 ac LSTs before using the dispersion modeling because the screening-level analysis is more conservative, and if no exceedance of the screening-level thresholds is identified, then the chance of a local concentration exceeding the national or State AAQS is small. The total gross area for the project site is approximately 35 ac. Since the project is not an aggregate handling facility, operational LSTs are assessed with the SCAQMD screening thresholds.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. There are existing single-family homes south of Wilson Street, approximately 350 ft (105 m) from the project site. Additionally, there is a church south of Wilson Street, approximately 150 ft (45 m) from the project site.

Table B: Localized Significance Thresholds for Construction and Operational Emissions for the Banning Airport Source Receptor Area at 45 meter distance

Emissions Source	Pollutant Thresholds (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Construction Operations on a 5 Acre Site	259	3,423	58	13
Normal Operations on a 5 Acre Site	259	3,423	14	3.8

Source: South Coast Air Quality Management District, 2003, above values interpolated from LST tables.

¹ South Coast Air Quality Management District (SCAQMD). Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf>, accessed September, 2015.

Climate change and greenhouse gas emissions thresholds

Currently, there is no statewide greenhouse gas (GHG) emissions threshold that has been used to determine potential GHG emissions impacts of a project. Threshold methodology and thresholds are still being developed and revised by air districts in the State. Therefore this environmental issue remains unsettled and must be evaluated on a case-by-case basis until such time the SCAQMD adopts significance thresholds and GHG emissions impact methodology. In the absence of a climate action plan for Banning, SCAQMD thresholds, when adopted, would apply to future development in the City.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. The applicable tier for this project is either Tier 3 (3,500 metric tons per year of carbon dioxide equivalent [MT/yr CO₂e]). If GHG emissions are less than the appropriate Tier, project-level and cumulative GHG emissions would be less than significant.

IMPACTS AND MITIGATION

Air pollutant emissions associated with the project would occur over the short term from construction activities, such as fugitive dust from site preparation and grading, and emissions from equipment exhaust. There would be long-term regional emissions associated with project-related vehicular trips. Long-term local CO emissions at intersections in the project vicinity could be affected by project-related traffic. Long-term stationary source emissions would occur due to energy consumption such as electricity usage by the proposed land uses.

CONSTRUCTION IMPACTS

Construction activities produce combustion emissions from various sources such as heavy-duty construction equipment, utility engines, trucks hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions.

The earthwork and grading details are based on the proposed Tentative Tract Map 36939. The site improvements such as grading, streets, and utilities will be done in one phase but homes will be built in multiple phases based on market demand and absorption. Construction is expected to commence sometime in 2016 and would occur in several general phases. The Project Applicant expects the following time durations for the construction process, which would be somewhat sequential but overlap in some cases: site work including grading for approximately 3 months and model home construction for 10 – 12 weeks. Table C lists the tentative project construction schedule for the proposed project including all site preparation, grading and paving for the entire site and building construction thru the first phase of homes. This tentative schedule is based on a probable start date, a planned completion of the first phase later in 2016, and the assumption that the architectural coatings would be applied during the latter portion of the building construction phase. It is assumed that all

later home construction phases would have emissions equal to or less than those shown in Table C and would only include emissions from building construction and architectural coatings.

Table C: Tentative Project Construction Schedule

Phase Name	Phase Start Date	Phase End Date	Number of Days/Week	Number of Days
Site Preparation	2/1/2016	2/26/2016	5	20
Grading	2/27/2016	4/22/2016	5	40
1st Phase of Home Construction	4/23/2016	7/15/2016	5	60
Architectural Coating	5/25/2016	7/15/2016	5	38
Paving	7/16/2016	9/30/2016	5	55

Source: Approximate dates, assuming the first phase opens in 2016, and using CalEEMod defaults.

The construction emissions calculated using the CalEEMod model are shown in Table D. The emissions rates shown in the table are from the CalEEMod output tables listed as "Mitigated Construction," even though the only measures that have been applied to the analysis are the required construction emissions control measures, or standard conditions. They are also the combination of the on- and off-site emissions.

Table D: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)								
	VOC	NO _x	CO	SO _x	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}	CO _{2e}
Site Preparation	5.1	55	42	0.042	7.2	2.9	3.9	2.7	4,300
Grading	6.6	75	50	0.064	3.6	3.6	1.5	3.3	6,700
Building Construction	3.6	30	21	0.034	0.45	2	0.12	1.9	3,300
Architectural Coating	37	2.4	2.3	0.0039	0.078	0.2	0.021	0.2	360
Paving	2.1	22	16	0.024	0.17	1.3	0.045	1.2	2,500
Peak Daily	41	75	50	0.064	10		6.6		6,700
SCAQMD Thresholds	75	100	550	150		150		55	No
Significant Emissions?	No	No	No	No		No		No	Threshold

Source: Compiled by LSA Associates, Inc. (2015).

CO = carbon monoxide

CO_{2e} = carbon dioxide equivalent

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOC = volatile organic compounds

Fugitive Dust

Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, as well as cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. The proposed project will be required to comply with SCAQMD Rules 402 and 403 to control fugitive dust.

Table D lists total construction emissions (i.e., fugitive-dust emissions and construction-equipment exhausts) that have incorporated a number of feasible control measures that can be reasonably implemented to significantly reduce PM₁₀ emissions from construction.

Architectural Coatings

Architectural coatings contain VOCs and are part of the O₃ precursors. Based on the proposed project, it is estimated that application of the architectural coatings for the proposed peak construction day will result in a combined peak of 44 lbs/day of VOC. Therefore, this VOC emission will not exceed the SCAQMD VOC threshold of 75 lbs/day.

Localized Impacts Analysis

As described in the SCAQMD guidance on applying CalEEMod modeling results to localized impacts analysis, the equipment planned to be used on a peak day during site preparation and grading operations would disturb no more than 5 acres in a day.¹ Thus, the 5-acre LST thresholds are appropriate for this project. Table E shows that the emissions of pollutants on the peak day of construction would all be less than the SCAQMD LST thresholds, which means that the resulting concentrations at the church and nearest residences would be all below the NAAQS and CAAQS.

Table E: Construction Localized Impacts Analysis

Emissions Sources	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site Emissions	75	49	10	6.6
LST Thresholds	259	3,423	58	13
Significant Emissions?	No	No	No	No

Source: Compiled by LSA Associates, Inc. (2015).

Note: SRA – Banning Airport, 5 acres, 45-meter distance.

CO = carbon monoxide

PM_{2.5} = particulate matter less than 2.5 microns in size

lbs/day = pounds per day

PM₁₀ = particulate matter less than 10 microns in size

LST = local significance threshold

SRA = Source Receptor Area

NO_x = nitrogen oxides

Odors

Heavy-duty equipment in the project area during construction would emit odors, primarily from the equipment exhaust. SCAQMD Rule 402 regarding nuisances states: “A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.” The proposed uses are not anticipated to emit any objectionable odors. Therefore, objectionable odors posing a health risk to potential on-site and existing off-site uses would not occur as a result of the proposed project, and no mitigation measures are required.

¹ South Coast Air Quality Management District (SCAQMD). Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf>, accessed September, 2015.

Naturally Occurring Asbestos

The proposed project is located in Riverside County, which is not among the counties that are found to have serpentine and ultramafic rock in their soils. Therefore, the potential risk for NOA during project construction is small and less than significant.

Construction Emissions Conclusions

Tables D and E show that daily regional construction emissions would not exceed the daily thresholds of any criteria pollutant emission thresholds established by the SCAQMD, and during construction, there will be no locally significant impacts. Thus, no mitigation is required during project construction.

OPERATIONAL IMPACTS

Long-term air emission impacts are those associated with stationary sources and mobile sources involving any project-related change. The proposed project would result in both stationary and mobile source emissions. The stationary source emissions would come from natural gas consumption, landscape maintenance, and off-site electric power generation. Mobile sources from vehicular trips associated with the proposed uses emit pollutants.

The CalEEMod model was also used to calculate the operational emissions. Mobile sources emissions were calculated based on the trip generation factors described in the Focused Traffic Impact Study (LSA Associates, Inc., September 2015). Other emissions sources were calculated using the defaults in the CalEEMod model for the project land use.

Long-term operational emissions associated with the full proposed project of 98 homes are shown in Table J. Table J shows that the peak daily emissions of all criteria pollutants as a result of the proposed project would not exceed the corresponding SCAQMD daily emission thresholds. Therefore, project-related long-term air quality impacts would be less than significant.

Table J: Opening Year Regional Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Sources	4.3	0.096	8.2	0.00043	0.18	0.17
Energy Sources	0.098	0.84	0.36	0.0053	0.068	0.068
Mobile Sources	3.6	12	41	0.099	6.9	2.0
Total Project Emissions	8.0	13	50	0.10	7.1	2.2
SCAQMD Thresholds	55	55	550	150	150	55
Significant?	No	No	No	No	No	No

Source: Compiled by LSA Associates, Inc. (September 2015).

CO = carbon monoxide

CO₂ = carbon dioxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOC = volatile organic compounds

Localized Impacts Analysis

Table K shows the calculated emissions for the proposed operational activities compared with the appropriate SCAQMD localized impacts thresholds. The localized impacts analysis by design only includes on-site sources; however, the CalEEMod model outputs for operations do not separate on-site and off-site emissions. The emissions shown in Table J for area sources are assumed to all occur on site and for energy sources entirely off site. While some of the mobile-source emissions will occur from vehicles driving on site, most of the mobile-source emissions calculated by the CalEEMod model would occur while the vehicles are driving off site. It is unlikely that the average on-site distance driven by vehicles will be 2,000 ft, which is approximately 4 percent of the total miles traveled. For a worst-case scenario assessment, the emissions shown in Table K include all on-site project-related area sources and 5 percent of the project-related new mobile sources.

Table K: Long-Term Operational Localized Impact Analysis (lbs/day)

Emissions Sources	NO _x	CO	PM ₁₀	PM _{2.5}
On-site emissions	0.70	10	0.53	0.27
LST Thresholds	259	3,423	14	3.8
Significant Emissions?	No	No	No	No

Source: Compiled by LSA Associates, Inc. (September 2015).

Note: SRA – Banning Airport, 5 acres, 45-meter distance, on-site traffic 5 percent of total.

CO = carbon monoxide

PM_{2.5} = particulate matter less than 2.5 microns in size

lbs/day = pounds per day

PM₁₀ = particulate matter less than 10 microns in size

LST = Localized Significance Thresholds

SRA = Source Receptor Area

NO_x = nitrogen oxides

Table K shows that the emissions of pollutants during project operations would all be less than the SCAQMD LST thresholds, which means that the resulting concentrations at the church and nearest residences would be all below the NAAQS and CAAQS. Therefore, the proposed operational activity would not result in a locally significant air quality impact.

Greenhouse Gas Emissions

This section evaluates potential significant impacts related to global climate change that could result from implementation of the proposed project. Because it is not possible to tie specific GHG emissions to actual changes in climate, this evaluation focuses on the project's emission of GHGs. Mitigation measures are identified as appropriate.

GHG Emissions Background. GHG emissions estimates are provided herein for informational purposes only, as there is no established quantified GHG emissions threshold. Bearing in mind that CEQA does not require “perfection” but instead “adequacy, completeness, and a good faith effort at full disclosure,” the analysis below is based on methodologies and information available to the City and the applicant at the time this analysis was prepared. Estimation of GHG emissions in the future does not account for all changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that is worse than that which is likely to be encountered (after energy-efficient technologies have been implemented). While information is presented below to assist the public and decision-makers in understanding the project's potential contribution to global climate change impacts, the information available to the cities is not sufficiently detailed to allow a direct comparison between particular project characteristics and

particular climate change impacts, or between any particular proposed mitigation measure and any reduction in climate change impacts.

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment.
- **Gas, Electricity, and Water Use:** Natural gas use results in the emission of two GHGs: CH₄ (the major component of natural gas) and CO₂ (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy-intensive.
- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH₄ from the anaerobic decomposition of organic materials. CH₄ is 25 times more potent a GHG than CO₂. However, landfill CH₄ can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

Preliminary guidance from the OPR and recent letters from the Attorney General critical of CEQA documents that have taken different approaches indicate that lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, and construction activities.

Table L lists the annual GHG emissions for each of the planned construction phases and shows that the GHG emissions would be highest during the grading phase, at approximately 120 MT. Total construction GHG emissions thru phase 1 of the construction period are estimated to be 320 MT of CO₂e. Each additional phase would contribute additional GHG emissions, approximately the same as shown for Phase 1 in Table L, or the sum of 89 MT of CO₂e for construction of the homes (6.0 + 83) plus 5.6 MT of CO₂e for the architectural coating processes, or 95 MT of CO₂e.

Long-term operation of the proposed project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with on-site residences. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for heating, and other sources. Increases in stationary-source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

Table L: Greenhouse Gas Construction Emissions for Phase 1

Construction Phase	Total Regional Pollutant Emissions (MT/yr)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Site Preparation	39	0.011	0	39
Grading	120	0.035	0	120
Phase 1 of Home Construction	88	0.019	0	89
Architectural Coating	6.1	0.00063	0	6.1
Paving	62	0.018	0	62
Total	320	0.084	0	320

Source: Compiled by LSA Associates, Inc. (September 2015).

CH₄ = methane

MT/yr = metric tons per year

CO₂ = carbon dioxide

N₂O = nitrous oxide

CO₂e = carbon dioxide equivalent

The GHG emission estimates presented in Table M show the emissions associated with the level of development envisioned by the full proposed project of 98 homes at build out. It is not known how many homes would be built in each phase (depends on market demand at the time), thus it is not known how many phases there will be. Assuming a conservative 20 homes per phase would result in five phases. Thus, the amortized construction GHG emissions shown in Table M reflect this total. Appendix A includes the worksheets for the GHG emissions. As shown in Table M, the project will produce 2,000 MT/yr of CO₂e, which is 0.002 million metric tons per year (MMT/yr) of CO₂e. For comparison, the existing emissions from the entire SCAG region are estimated to be approximately 176.79 MMT/yr of CO₂e, and the existing emissions for the entire State are estimated at approximately 496.95 MMT/yr of CO₂e.

Table M: Long-Term Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT/yr)					
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction Emissions amortized over 30 Years	0	53	53	0.014	0	53
Operational Emissions						
Area Sources	0	25	25	0.0021	0.00043	25
Energy Sources	0	390	390	0.013	0.0053	390
Mobile Sources	0	1,400	1,400	0.047	0	1,400
Waste Sources	23	0	23	1.4	0	52
Water Usage	2.0	37	39	0.21	0.0053	45
Total Project Emissions	25	1,900	1,900	1.7	0.011	2,000

Source: Compiled by LSA Associates, Inc. (September 2015).

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.

Bio-CO₂ = biologically generated CO₂

MT = metric tons

CH₄ = methane

N₂O = nitrous oxide

CO₂ = carbon dioxide

NBio-CO₂ = Non-biologically generated CO₂

CO₂e = carbon dioxide equivalent

At present, there is a federal ban on chlorofluorocarbons (CFCs); therefore, it is assumed the project would not generate emissions of CFCs. The project may emit a small amount of HFCs from leakage and service of refrigeration and air-conditioning equipment and from disposal at the end of the life of the equipment. However, the details regarding refrigerants to be used at the project site are unknown at this time. PFCs and SF₆ are typically used in industrial applications, none of which would be used on the project site. Therefore, it is not anticipated that the project would contribute significant emissions of these additional GHGs.

Because climate change impacts are cumulative in nature, no typical single project can result in emissions of such a magnitude that it, in and of itself, would be significant on a project basis. The project's operational emissions of 2,000 MT/yr of CO₂e are less than the SCAQMD-recommended interim threshold of 3,500 MT/yr of CO₂e for residential uses. Therefore, the proposed project would not result in a significant impact on GHG emissions.

LONG-TERM MICROSCALE (CO HOT SPOT) ANALYSIS

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (residents, schoolchildren, the elderly, and hospital patients, etc.).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended, to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored in the Palm Spring station (the closest to the project site) showed a highest recorded 1-hour concentration of 3.2 ppm (State standard is 20 ppm) and a highest 8-hour concentration of 1.5 ppm (State standard is 9 ppm) during the past 3 years (ARB, 2015). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

Given the relatively low level of CO concentrations in the project area, project-related vehicles are not expected to result in the CO concentrations exceeding the State or federal CO standards. Because no CO hot spot would occur, there would be no project-related impacts on CO concentrations.

SUMMARY

The project's long-term operational emissions would not exceed the SCAQMD's criteria pollutant thresholds. As climate change impacts are global in nature, no typical single project can result in emissions of such a magnitude that it, in and of itself, would be significant on project basis. Because

the proposed project will not exceed the SCAQMD-recommended interim thresholds for residential uses, the proposed project would not result in a significant long-term impact.

STANDARD CONDITIONS

Construction Operations

The project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM₁₀ component). Compliance with these rules would reduce impacts on nearby sensitive receptors (see SCAQMD Rule 403).¹ As shown in Table D, implementation of Rule 403 measures results in dust emissions below SCAQMD thresholds.

The applicable Rule 403 measures are as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 m (2 ft) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
- Pave construction access roads at least 30 m (100 ft) onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.

The applicable CalRecycle Sustainable (Green) Building Program Measures are:

- Recycle/reuse at least 50 percent of the construction material (including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard).
- Use "green building materials" such as those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project, as defined on the California Department of Resources Recycling and Recovery (CalRecycle) website.²

¹ South Coast Air Quality Management District (SCAQMD). Rule 403. <http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-iv>, accessed August 2015.

² California Department of Resources Recycling and Recovery (CalRecycle). Website: <http://www.calrecycle.ca.gov>.

These measures will result in reduced emissions during the construction and operation phases of the proposed project.

Construction Emissions Conclusions

Tables D and E show that with implementation of these SCAQMD Standard Measures daily regional construction emissions would not exceed the daily thresholds of any criteria pollutant emission thresholds established by the SCAQMD, and during construction, there will be no locally significant impacts.

Since no exceedances of any criteria pollutants are expected, no significant impacts would occur for project construction. Details of the emission factors and other assumptions are included in the attached CalEEMod modeling output.

REFERENCES

- California Air Resources Board (ARB). 2009. 2012–2014 Air Quality Data. Website: <http://www.arb.ca.gov>, accessed September, 2015.
- California Department of Conservation, http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/Pages/index.aspx.
- California Department of Resources Recycling and Recovery (CalRecycle). Website: <http://www.calrecycle.ca.gov>.
- South Coast Air Quality Management District (SCAQMD). April 1993. *CEQA Air Quality Handbook*.
- . June 2003. Final Localized Significance Threshold Methodology.
- . October 2006. Final – Methodology to Calculate Particulate Matter (PM)_{2.5} and PM_{2.5} Significance Thresholds.
- . Rule 403. Website: <http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-iv>, accessed August 2015.
- . Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf>. accessed September 2015.

Please review the air quality and greenhouse gas emissions analyses outlined in this letter. Should the City have any comments or require additional information, please do not hesitate to contact me at (949) 553-0666 or via email Ronald.Brugger@lsa-assoc.com.

LSA ASSOCIATES, INC.

Sincerely,

LSA ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Ronald Brugger". The signature is written in black ink and is positioned above the printed name and title.

Ronald Brugger
Senior Air Quality Specialist

ATTACHMENT: CalEEMod output

TTM 36939
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	98.00	Dwelling Unit	34.60	176,400.00	280

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	630.89	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site acreage from project plans.

Construction Phase - Schedule based on starting construction in 2016, assume that architectural coatings applied during building construction phase.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Using trip rate from project traffic study - used peak daily rate for all days.

Woodstoves - Assume no woodburning allowed and that all homes have a natural gas fireplace.

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Sequestration - Estimate the number of new trees from the site plan.

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	55.00	38.00
tblConstructionPhase	NumDays	740.00	60.00
tblConstructionPhase	NumDays	75.00	40.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	PhaseEndDate	9/7/2016	7/15/2016
tblConstructionPhase	PhaseStartDate	7/16/2016	5/25/2016
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	83.30	98.00
tblFireplaces	NumberNoFireplace	9.80	0.00
tblFireplaces	NumberWood	4.90	0.00
tblLandUse	LotAcreage	31.82	34.60
tblProjectCharacteristics	OperationalYear	2014	2016
tblSequestration	NumberOfNewTrees	0.00	50.00
tblVehicleTrips	ST_TR	10.08	9.52
tblVehicleTrips	SU_TR	8.77	9.52
tblVehicleTrips	WD_TR	9.57	9.52
tblWoodstoves	NumberCatalytic	4.90	0.00
tblWoodstoves	NumberNoncatalytic	4.90	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

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					
2016	40.3219	74.9042	50.2716	0.0644	18.2675	3.5856	21.2074	9.9840	3.2988	12.6888	0.0000	6,636.8970	6,636.8970	1.9446	0.0000	6,677.7328
Total	40.3219	74.9042	50.2716	0.0644	18.2675	3.5856	21.2074	9.9840	3.2988	12.6888	0.0000	6,636.8970	6,636.8970	1.9446	0.0000	6,677.7328

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					
2016	40.3219	74.9042	50.2716	0.0644	7.2470	3.5856	10.1870	3.9263	3.2988	6.6311	0.0000	6,636.8970	6,636.8970	1.9446	0.0000	6,677.7327
Total	40.3219	74.9042	50.2716	0.0644	7.2470	3.5856	10.1870	3.9263	3.2988	6.6311	0.0000	6,636.8970	6,636.8970	1.9446	0.0000	6,677.7327

	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
Percent Reduction	0.00	0.00	0.00	0.00	60.33	0.00	51.96	60.67	0.00	47.74	0.00	0.00	0.00	0.00	0.00	0.00

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	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8522	0.0545	0.0381	2,102.7937
Energy	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Mobile	3.6140	11.4005	40.6820	0.0993	6.7544	0.1657	6.9201	1.8025	0.1523	1.9549		8,699.7263	8,699.7263	0.2826		8,705.6605
Total	8.0309	12.3319	49.2457	0.1051	6.7544	0.4089	7.1633	1.8025	0.3942	2.1967	0.0000	11,856.1887	11,856.1887	0.3575	0.0576	11,881.5557

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	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8522	0.0546	0.0381	2,102.7937
Energy	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Mobile	3.6140	11.4005	40.6820	0.0993	6.7544	0.1657	6.9201	1.8025	0.1523	1.9549		8,699.7263	8,699.7263	0.2826		8,705.6605
Total	8.0309	12.3319	49.2457	0.1051	6.7544	0.4089	7.1633	1.8025	0.3942	2.1967	0.0000	11,856.1887	11,856.1887	0.3576	0.0576	11,881.5557

	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
Percent Reduction	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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2016	2/26/2016	5	20	
2	Grading	Grading	2/27/2016	4/22/2016	5	40	
3	1st Phase of Home Construction	Building Construction	4/23/2016	7/15/2016	5	60	
4	Architectural Coating	Architectural Coating	5/25/2016	7/15/2016	5	38	
5	Paving	Paving	7/16/2016	9/30/2016	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 100

Acres of Paving: 0

Residential Indoor: 357,210; Residential Outdoor: 119,070; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
1st Phase of Home Construction	Cranes	1	7.00	226	0.29
1st Phase of Home Construction	Forklifts	3	8.00	89	0.20
1st Phase of Home Construction	Generator Sets	1	8.00	64	0.74
1st Phase of Home Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
1st Phase of Home Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
1st Phase of Home Construction	9	35.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2016

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	5.0771	54.6323	41.1053	0.0391	18.0663	2.9387	21.0049	9.9307	2.7036	12.6343		4,065.0053	4,065.0053	1.2262		4,090.7544

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0690	0.0814	1.0208	2.4100e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		199.7247	199.7247	8.6100e-003			199.9056
Total	0.0690	0.0814	1.0208	2.4100e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		199.7247	199.7247	8.6100e-003			199.9056

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000	
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036	0.0000	4,065.0053	4,065.0053	1.2262			4,090.7544
Total	5.0771	54.6323	41.1053	0.0391	7.0458	2.9387	9.9845	3.8730	2.7036	6.5766	0.0000	4,065.0053	4,065.0053	1.2262			4,090.7544

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0690	0.0814	1.0208	2.4100e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		199.7247	199.7247	8.6100e-003		199.9056
Total	0.0690	0.0814	1.0208	2.4100e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		199.7247	199.7247	8.6100e-003		199.9056

3.3 Grading - 2016

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000				0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350			6,455.6154
Total	6.4795	74.8137	49.1374	0.0617	8.6733	3.5842	12.2576	3.5965	3.2975	6.8940		6,414.9807	6,414.9807	1.9350			6,455.6154

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0766	0.0905	1.1342	2.6800e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		221.9163	221.9163	9.5700e-003		222.1173
Total	0.0766	0.0905	1.1342	2.6800e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		221.9163	221.9163	9.5700e-003		222.1173

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					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000				0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414,980 7	6,414.9807	1.9350			6,455.6154
Total	6.4795	74.8137	49.1374	0.0617	3.3826	3.5842	6.9668	1.4026	3.2975	4.7001	0.0000	6,414,980 7	6,414.9807	1.9350			6,455.6154

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	3.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	3.0000			0.0000
Worker	0.0766	0.0905	1.1342	2.6800e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		221.9163	221.9163	9.5700e-003			222.1173
Total	0.0766	0.0905	1.1342	2.6800e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		221.9163	221.9163	9.5700e-003			222.1173

3.4 1st Phase of Home Construction - 2016

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					
	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
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6520		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6520		2,683.1890

Unmitigated Construction Off-Site

Category	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
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0776	0.8392	0.8787	2.1000e-003	0.0629	0.0163	0.0792	0.0180	0.0150	0.0330		211.2802	211.2802	1.3700e-003		211.3091
Worker	0.341	0.1584	1.9849	4.6900e-003	0.3912	2.4500e-003	0.3937	0.1038	2.2500e-003	0.1060		388.3536	388.3536	0.0168		388.7053
Total	0.2119	0.9975	2.8636	6.7900e-003	0.4541	0.0187	0.4729	0.1217	0.0172	0.1390		599.6338	599.6338	0.0181		600.1144

Mitigated Construction On-Site

Category	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
	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6520		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6520		2,683.1890

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0778	0.8392	0.8787	2.1000e-003	0.0629	0.0163	0.0792	0.0180	0.0150	0.0330		211.2802	211.2802	1.3700e-003		211.3091
Worker	0.1341	0.1584	1.9849	4.6900e-003	0.3912	2.4500e-003	0.3937	0.1038	2.2500e-003	0.1060		388.3536	388.3536	0.0168		388.7053
Total	0.2119	0.9975	2.8636	6.7900e-003	0.4541	0.0187	0.4729	0.1217	0.0172	0.1390		599.6338	599.6338	0.0181		600.0444

3.5 Architectural Coating - 2016

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	36.3085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	36.6770	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0268	0.0317	0.3970	9.4000e-004	0.0782	4.9000e-004	0.0787	0.0208	4.5000e-004	0.0212		77.6707	77.6707	3.3500e-003		77.7411
Total	0.0268	0.0317	0.3970	9.4000e-004	0.0782	4.9000e-004	0.0787	0.0208	4.5000e-004	0.0212		77.6707	77.6707	3.3500e-003		77.7411

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	36.3085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.7449
Total	36.6770	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.7449

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0268	0.0317	0.3970	9.4000e-004	0.0782	4.9000e-004	0.0787	0.0208	4.5000e-004	0.0212	77.6707	77.6707	3.3500e-003	77.7411		
Total	0.0268	0.0317	0.3970	9.4000e-004	0.0782	4.9000e-004	0.0787	0.0208	4.5000e-004	0.0212	77.6707	77.6707	3.3500e-003	77.7411		

3.6 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6907		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0575	0.0679	0.8507	2.0100e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		166.4372	166.4372	7.1800e-003		166.5880
Total	0.0575	0.0679	0.8507	2.0100e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		166.4372	166.4372	7.1800e-003		166.5880

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0575	0.0679	0.8507	2.0100e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		166.4372	166.4372	7.1800e-003		166.5880
Total	0.0575	0.0679	0.8507	2.0100e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		166.4372	166.4372	7.1800e-003		166.5880

4.0 Operational Detail - Mobile

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	3.6140	11.4005	40.6820	0.0993	6.7544	0.1657	6.9201	1.8025	0.1523	1.9549		8,699.7263	8,699.7263	0.2826		8,705.6605
Unmitigated	3.6140	11.4005	40.6820	0.0993	6.7544	0.1657	6.9201	1.8025	0.1523	1.9549		8,699.7263	8,699.7263	0.2826		8,705.6605

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	932.96	932.96	932.96	3,188,066	3,188,066
Total	932.96	932.96	932.96	3,188,066	3,188,066

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.462438	0.069856	0.176572	0.170752	0.045136	0.007399	0.012745	0.042494	0.000970	0.001060	0.006446	0.000893	0.003237

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

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					
Natural Gas Mitigated	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Natural Gas Unmitigated	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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/yr	lb/day										lb/day					
Single Family Housing	9066.19	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Total		0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014

Mitigated

	Natural Gas 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/yr	lb/day										lb/day					
Single Family Housing	9,066.19	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Total		0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014

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	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8522	0.0546	0.0381	2,102.7937
Unmitigated	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8522	0.0546	0.0381	2,102.7937

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					
Consumer Products	3.4927					0.0000	0.0000		0.0000	0.0000			0.0000			3.0000
Hearth	0.1902	1.0000e-005	0.0104	0.0000		0.1314	0.1314		0.1301	0.1301	0.0000	2,075.2941	2,075.2941	0.0393	0.0381	2,087.9240
Landscaping	0.2582	0.0959	8.1978	4.3000e-004		0.0442	0.0442		0.0442	0.0442		14.5581	14.5581	0.0143		14.8637
Architectural Coating	0.3780					0.0000	0.0000		0.0000	0.0000			0.0000			0.3300
Total	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8523	0.0543	0.0381	2,102.7937

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBic- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	3.4927					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1302	1.0000e-005	0.0104	0.0000		0.1314	0.1314		0.1301	0.1301	0.0000	2,075.2941	2,075.2941	0.0398	0.0381	2,087.9240
Landscaping	0.2582	0.0959	8.1978	4.3000e-004		0.0442	0.0442		0.0442	0.0442		14.5581	14.5581	0.0148		14.8697
Architectural Coating	0.3780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8523	2,039.8523	0.0546	0.0381	2,102.7937

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

TTM 36939
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	98.00	Dwelling Unit	34.60	176,400.00	280

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWahr)	630.89	CH4 Intensity (lb/MWahr)	0.029	N2O Intensity (lb/MWahr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site acreage from project plans.

Construction Phase - Schedule based on starting construction in 2016, assume that architectural coatings applied during building construction phase.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Using trip rate from project traffic study - used peak daily rate for all days.

Woodstoves - Assume no woodburning allowed and that all homes have a natural gas fireplace.

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Sequestration - Estimate the number of new trees from the site plan.

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	55.00	38.00
tblConstructionPhase	NumDays	740.00	60.00
tblConstructionPhase	NumDays	75.00	40.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	PhaseEndDate	9/7/2016	7/15/2016
tblConstructionPhase	PhaseStartDate	7/16/2016	5/25/2016
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	83.30	98.00
tblFireplaces	NumberNoFireplace	9.80	0.00
tblFireplaces	NumberWood	4.90	0.30
tblLandUse	LotAcreage	31.82	34.60
tblProjectCharacteristics	OperationalYear	2014	2016
tblSequestration	NumberOfNewTrees	0.00	50.00
tblVehicleTrips	ST_TR	10.08	9.52
tblVehicleTrips	SU_TR	8.77	9.52
tblVehicleTrips	WD_TR	9.57	9.52
tblWoodstoves	NumberCatalytic	4.90	0.00
tblWoodstoves	NumberNoncatalytic	4.90	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

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					
2016	40.3196	74.9101	50.1147	0.0642	18.2675	3.5856	21.2074	9.9840	3.2988	12.6888	0.0000	6,617.7781	6,617.7781	1.9446	0.0000	6,658.6138
Total	40.3196	74.9101	50.1147	0.0642	18.2675	3.5856	21.2074	9.9840	3.2988	12.6888	0.0000	6,617.7781	6,617.7781	1.9446	0.0000	6,658.6138

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					
2016	40.3196	74.9101	50.1147	0.0642	7.2470	3.5856	10.1870	3.9263	3.2988	6.6311	0.0000	6,617.7781	6,617.7781	1.9446	0.0000	6,658.6138
Total	40.3196	74.9101	50.1147	0.0642	7.2470	3.5856	10.1870	3.9263	3.2988	6.6311	0.0000	6,617.7781	6,617.7781	1.9446	0.0000	6,658.6138

	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
Percent Reduction	0.00	0.00	0.00	0.00	60.33	0.00	51.96	60.67	0.00	47.74	0.00	0.00	0.00	0.00	0.00	0.00

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	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8522	0.0546	0.0381	2,102.7937
Energy	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Mobile	3.5295	11.8883	37.8277	0.0927	6.7544	0.1663	6.9207	1.8025	0.1529	1.9555		8,139.7394	8,139.7394	0.2829		8,145.6802
Total	7.9464	12.8197	46.3914	0.0984	6.7544	0.4095	7.1639	1.8025	0.3948	2.1973	0.0000	11,296.2018	11,296.2018	0.3580	0.0576	11,321.5753

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	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8522	0.0546	0.0381	2,102.7937
Energy	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Mobile	3.5295	11.8883	37.8277	0.0927	6.7544	0.1663	6.9207	1.8025	0.1529	1.9555		8,139.7394	8,139.7394	0.2829		8,145.6802
Total	7.9464	12.8197	46.3914	0.0984	6.7544	0.4095	7.1639	1.8025	0.3948	2.1973	0.0000	11,296.2018	11,296.2018	0.3580	0.0576	11,321.5753

	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
Percent Reduction	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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2016	2/26/2016	5	20	
2	Grading	Grading	2/27/2016	4/22/2016	5	40	
3	1st Phase of Home Construction	Building Construction	4/23/2016	7/15/2016	5	60	
4	Architectural Coating	Architectural Coating	5/25/2016	7/15/2016	5	38	
5	Paving	Paving	7/16/2016	9/30/2016	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 100

Acres of Paving: 0

Residential Indoor: 357,210; Residential Outdoor: 119,070; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating --

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
1st Phase of Home Construction	Cranes	1	7.00	226	0.29
1st Phase of Home Construction	Forklifts	3	8.00	89	0.20
1st Phase of Home Construction	Generator Sets	1	8.00	84	0.74
1st Phase of Home Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
1st Phase of Home Construction	Welders	1	8.00	46	0.43
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.33
Paving	Rollers	2	8.00	80	0.35

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
1st Phase of Home Construction	9	35.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2016

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	5.0771	54.6323	41.1053	0.0391	18.0663	2.9387	21.0049	9.9307	2.7036	12.6343		4,065.0053	4,065.0053	1.2262		4,090.7544

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0658	0.0868	0.8796	2.2000e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		182.5176	182.5176	8.5100e-003		182.6966
Total	0.0658	0.0868	0.8796	2.2000e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		182.5176	182.5176	8.5100e-003		182.6966

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	5.0771	54.6323	41.1053	0.0391	7.0458	2.9387	9.9845	3.8730	2.7036	6.5766	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0658	0.0868	0.8796	2.2000e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545	182.5176	182.5176	182.5176	8.5100e-003		182.6986
Total	0.0658	0.0868	0.8796	2.2000e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545	182.5176	182.5176	182.5176	8.5100e-003		182.6986

3.3 Grading - 2016
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617	3.5842	3.5842	3.5842	3.2975	3.2975	3.2975	6,414.9807	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	6.4795	74.8137	49.1374	0.0617	8.6733	3.5842	12.2576	3.5965	3.2975	6.8940	6,414.9807	6,414.9807	6,414.9807	1.9350		6,455.6154

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0731	0.0964	0.9773	2.4500e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606	202.7974	202.7974	202.7974	9.5700e-003		202.9984
Total	0.0731	0.0964	0.9773	2.4500e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606	202.7974	202.7974	202.7974	9.5700e-003		202.9984

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					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000				0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350			6,435.6154
Total	6.4795	74.8137	49.1374	0.0617	3.3826	3.5842	6.9668	1.4026	3.2975	4.7001	0.0000	6,414.9807	6,414.9807	1.9350			6,455.6154

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0731	0.0964	0.9773	2.4500e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		202.7974	202.7974	9.5700e-003			202.9984
Total	0.0731	0.0964	0.9773	2.4500e-003	0.2236	1.4000e-003	0.2250	0.0593	1.2800e-003	0.0606		202.7974	202.7974	9.5700e-003			202.9984

3.4 1st Phase of Home Construction - 2016

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	CH-4	N2O	CO2e
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Category	lb/day										lb/day					
	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
Off-Road	3.4062	28.5063	18.5066	0.0263		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,583.1890
Total	3.4062	28.5063	18.5066	0.0263		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,583.1890

Unmitigated Construction Off-Site

Category	lb/day										lb/day					
	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
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0829	0.8602	0.9991	2.0900e-003	0.0629	0.0164	0.0794	0.0180	0.0151	0.0331		209.4517	209.4517	1.4200e-003		209.4815
Worker	0.1279	0.1687	1.7103	4.2900e-003	0.3912	2.4500e-003	0.3937	0.1038	2.2500e-003	0.1060		354.8954	354.8954	0.0168		355.2472
Total	0.2108	1.0289	2.7094	6.3800e-003	0.4541	0.0189	0.4730	0.1217	0.0174	0.1391		564.3471	564.3471	0.0182		564.7287

Mitigated Construction On-Site

Category	lb/day										lb/day					
	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
Off-Road	3.4062	28.5063	18.5066	0.0263		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,583.1890
Total	3.4062	28.5063	18.5066	0.0263		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,583.1890

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0829	0.8602	0.9991	2.0900e-003	0.0629	0.0164	0.0794	0.0180	0.0151	0.0331		209.4517	209.4517	1.4203e-003		209.4815
Worker	0.1279	0.1687	1.7103	4.2900e-003	0.3912	2.4500e-003	0.3937	0.1038	2.2500e-003	0.1060		354.8954	354.8954	0.0168		355.2472
Total	0.2108	1.0289	2.7094	6.3800e-003	0.4541	0.0189	0.4730	0.1217	0.0174	0.1391		564.3471	564.3471	0.0182		564.7237

3.5 Architectural Coating - 2016

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	36.3085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	36.6770	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0256	0.0337	0.3421	8.6000e-004	0.0782	4.9000e-004	0.0787	0.0208	4.5000e-004	0.0212		70.9791	70.9791	3.3500e-003		71.0484
Total	0.0256	0.0337	0.3421	8.6000e-004	0.0782	4.9000e-004	0.0787	0.0208	4.5000e-004	0.0212		70.9791	70.9791	3.3500e-003		71.0484

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	36.3085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	36.6770	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449

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	CH-4	N2O	CO2e
Category	lb/day										lb/day					

Category	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
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0256	0.0337	0.3421	8.6000e-004	0.0782	4.9000e-004	0.0787	0.0208	4.5000e-004	0.0212	70.9791	70.9791	70.9791	3.3500e-003		71.0494
Total	0.0256	0.0337	0.3421	8.6000e-004	0.0782	4.9000e-004	0.0787	0.0208	4.5000e-004	0.0212	70.9791	70.9791	70.9791	3.3500e-003		71.0494

3.6 Paving - 2016

Unmitigated Construction On-Site

Category	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
Off-Road	2.0898	22.3859	14.8176	0.0223	1.2610	1.2610	1.2610	1.1601	1.1601	1.1601	2,316.3767	7	2,316.3767	0.6987		2,331.0495
Paving	0.0000				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total	2.0898	22.3859	14.8176	0.0223	1.2610	1.2610	1.2610	1.1601	1.1601	1.1601	2,316.3767	7	2,316.3767	0.6987		2,331.0495

Unmitigated Construction Off-Site

Category	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
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0723	0.7330	1.8400e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454	152.0980	152.0980	152.0980	7.1800e-003		152.2488
Total	0.0548	0.0723	0.7330	1.8400e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454	152.0980	152.0980	152.0980	7.1800e-003		152.2488

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0723	0.7330	1.8400e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		152.0980	152.0980	7.1800e-003		152.2488
Total	0.0548	0.0723	0.7330	1.8400e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		152.0980	152.0980	7.1800e-003		152.2488

4.0 Operational Detail - Mobile

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	3.5295	11.8883	37.8277	0.0927	6.7544	0.1663	6.9207	1.8025	0.1529	1.9555		8,139.7394	8,139.7394	0.2829		8,145.6802
Unmitigated	3.5295	11.8883	37.8277	0.0927	6.7544	0.1663	6.9207	1.8025	0.1529	1.9555		8,139.7394	8,139.7394	0.2829		8,145.6802

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	932.96	932.96	932.96	3,188,066	3,188,066
Total	932.96	932.96	932.96	3,188,066	3,188,066

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.462438	0.069856	0.176572	0.170752	0.045136	0.007399	0.012745	0.042494	0.000970	0.001060	0.006446	0.000893	0.003237

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

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					
Natural Gas Mitigated	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Natural Gas Unmitigated	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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/yr	lb/day										lb/day					
Single Family Housing	9066.19	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Total		0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014

Mitigated

	Natural Gas 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/yr	lb/day										lb/day					
Single Family Housing	9,066.19	0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014
Total		0.0978	0.8355	0.3555	5.3300e-003		0.0676	0.0676		0.0676	0.0676		1,066.6102	1,066.6102	0.0204	0.0196	1,073.1014

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	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8522	0.0546	0.0381	2,102.7937
Unmitigated	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8522	0.0546	0.0381	2,102.7937

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	0.3780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4927					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1902	1.0000e-005	0.0104	0.0000		0.1314	0.1314		0.1301	0.1301	0.0000	2,075.2941	2,075.2941	0.0593	0.0381	2,087.9240
Landscaping	0.2582	0.0959	8.1978	4.3000e-004		0.0442	0.0442		0.0442	0.0442		14.5581	14.5581	0.0743		14.8687
Total	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8522	2,089.8523	0.0545	0.0381	2,102.7937

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	CF-4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	3.4927					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1902	1.0000e-005	0.0104	0.0000		0.1314	0.1314		0.1301	0.1301	0.0000	2,075.2941	2,075.2941	0.0393	0.0381	2,087.9240
Landscaping	0.2582	0.0959	8.1978	4.3000e-004		0.0442	0.0442		0.0442	0.0442		14.5581	14.5581	0.0143		14.8637
Architectural Coating	0.3780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	4.3191	0.0959	8.2082	4.3000e-004		0.1757	0.1757		0.1743	0.1743	0.0000	2,089.8523	2,089.8523	0.0543	0.0381	2,102.7937

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

TTM 36939
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	98.00	Dwelling Unit	34.60	176,400.00	280

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	630.89	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site acreage from project plans.

Construction Phase - Schedule based on starting construction in 2016, assume that architectural coatings applied during building construction phase.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Using trip rate from project traffic study - used peak daily rate for all days.

Woodstoves - Assume no woodburning allowed and that all homes have a natural gas fireplace.

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Sequestration - Estimate the number of new trees from the site plan.

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	55.00	38.00
tblConstructionPhase	NumDays	740.00	60.00
tblConstructionPhase	NumDays	75.00	40.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	PhaseEndDate	9/7/2016	7/15/2016
tblConstructionPhase	PhaseStartDate	7/16/2016	5/25/2016
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	83.30	98.00
tblFireplaces	NumberNoFireplace	9.80	0.00
tblFireplaces	NumberWood	4.90	0.00
tblLandUse	LotAcreage	31.82	34.60
tblProjectCharacteristics	OperationalYear	2014	2016
tblSequestration	NumberOfNewTrees	0.00	50.00
tblVehicleTrips	ST_TR	10.08	9.52
tblVehicleTrips	SU_TR	8.77	9.52
tblVehicleTrips	WD_TR	9.57	9.52
tblWoodstoves	NumberCatalytic	4.90	0.00
tblWoodstoves	NumberNoncatalytic	4.90	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

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					
2016	1.0468	3.5957	2.5333	3.4300e-003	0.3799	0.1992	0.5791	0.1781	0.1847	0.3628	0.0000	314.5677	314.5677	0.0332	0.0000	316.3156
Total	1.0468	3.5957	2.5333	3.4300e-003	0.3799	0.1992	0.5791	0.1781	0.1847	0.3628	0.0000	314.5677	314.5677	0.0332	0.0000	316.3156

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					
2016	1.0468	3.5957	2.5333	3.4300e-003	0.1639	0.1992	0.3630	0.0737	0.1847	0.2583	0.0000	314.5674	314.5674	0.0332	0.0000	316.3153
Total	1.0468	3.5957	2.5333	3.4300e-003	0.1639	0.1992	0.3630	0.0737	0.1847	0.2583	0.0000	314.5674	314.5674	0.0332	0.0000	316.3153

	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
Percent Reduction	0.00	0.00	0.00	0.00	56.86	0.00	37.31	58.65	0.00	28.79	0.00	0.00	0.00	0.00	0.00	0.00

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	0.7411	0.0120	1.0249	5.0000e-005		7.1700e-003	7.1700e-003		7.1500e-003	7.1500e-003	0.0000	25.1843	25.1843	2.1300e-003	4.3000e-004	25.3529
Energy	0.0178	0.1525	0.0649	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	391.9598	391.9598	0.0133	5.2900e-003	393.8774
Mobile	0.6144	2.2109	7.1067	0.0170	1.2091	0.0302	1.2393	0.3231	0.0277	0.3508	0.0000	1,356.3769	1,356.3769	0.0466	0.0000	1,357.3560
Waste						0.0000	0.0000		0.0000	0.0000	23.3034	0.0000	23.3034	1.3772	0.0000	52.2243
Water						0.0000	0.0000		0.0000	0.0000	2.0257	36.5900	38.6157	0.2037	5.2600e-003	41.6510
Total	1.3733	2.3754	8.1965	0.0181	1.2091	0.0497	1.2588	0.3231	0.0472	0.3703	25.3291	1,810.1110	1,835.4401	1.6499	0.0110	1,873.4719

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	0.7411	0.0120	1.0249	5.0000e-005		7.1700e-003	7.1700e-003		7.1500e-003	7.1500e-003	0.0000	25.1843	25.1843	2.1300e-003	4.3000e-004	25.3629
Energy	0.0178	0.1525	0.0649	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	391.9598	391.9598	0.0133	5.2900e-003	393.8774
Mobile	0.6144	2.2109	7.1067	0.0170	1.2091	0.0302	1.2393	0.3231	0.0277	0.3508	0.0000	1,356.3769	1,356.3769	0.0466	0.0000	1,357.3560
Waste						0.0000	0.0000		0.0000	0.0000	23.3034	0.0000	23.3034	1.3772	0.0000	52.2243
Water						0.0000	0.0000		0.0000	0.0000	2.0257	36.5900	38.6157	0.2037	5.2500e-003	44.6478
Total	1.3733	2.3754	8.1965	0.0181	1.2091	0.0497	1.2588	0.3231	0.0472	0.3703	25.3291	1,810.1110	1,835.4401	1.5489	0.0110	1,873.4684

	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
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Percent Reduction	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	0.09	0.00
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2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	35.4000
Total	35.4000

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2016	2/26/2016	5	20	
2	Grading	Grading	2/27/2016	4/22/2016	5	40	
3	1st Phase of Home Construction	Building Construction	4/23/2016	7/15/2016	5	60	
4	Architectural Coating	Architectural Coating	5/25/2016	7/15/2016	5	38	
5	Paving	Paving	7/16/2016	9/30/2016	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 100

Acres of Paving: 0

Residential Indoor: 357,210; Residential Outdoor: 119,070; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
1st Phase of Home Construction	Cranes	1	7.00	226	0.29
1st Phase of Home Construction	Forklifts	3	8.00	89	0.20
1st Phase of Home Construction	Generator Sets	1	8.00	84	0.74
1st Phase of Home Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
1st Phase of Home Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
1st Phase of Home Construction	9	35.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2016

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					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0508	0.5463	0.4111	3.9000e-004		0.0294	0.0294		0.0270	0.0270	0.0000	36.8771	36.8771	0.0111	0.0000	37.1107
Total	0.0508	0.5463	0.4111	3.9000e-004	0.1807	0.0294	0.2101	0.0993	0.0270	0.1264	0.0000	36.8771	36.8771	0.0111	0.0000	37.1107

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	9.0000e-004	9.1200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6784	1.6784	8.0000e-005	0.0000	1.6800
Total	6.2000e-004	9.0000e-004	9.1200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6784	1.6784	8.0000e-005	0.0000	1.6800

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					0.0705	0.0000	0.0705	0.0387	0.0000	0.0387	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0508	0.5463	0.4111	3.9000e-004		0.0294	0.0294		0.0270	0.0270	0.0000	36.8771	36.8771	0.0111	0.0000	37.1107
Total	0.0508	0.5463	0.4111	3.9000e-004	0.0705	0.0294	0.0999	0.0387	0.0270	0.0658	0.0000	36.8771	36.8771	0.0111	0.0000	37.1107

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	9.0000e-004	9.1200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6784	1.6784	8.0000e-005	0.0000	1.6800
Total	6.2000e-004	9.0000e-004	9.1200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6784	1.6784	8.0000e-005	0.0000	1.6800

3.3 Grading - 2016

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					0.1735	0.0000	0.1735	0.0719	0.0000	0.0719	0.0000	0.0000	0.0000	0.0300	0.0000	0.0300
Off-Road	0.1296	1.4963	0.9828	1.2300e-003		0.0717	0.0717		0.0660	0.0660	0.0000	116.3915	116.3915	0.0351	0.0000	117.1287
Total	0.1296	1.4963	0.9828	1.2300e-003	0.1735	0.0717	0.2452	0.0719	0.0660	0.1379	0.0000	116.3915	116.3915	0.0351	0.0300	117.1287

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3700e-003	2.0100e-003	0.0203	5.0000e-005	4.4000e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.7297	3.7297	1.7000e-004	0.0000	3.7333
Total	1.3700e-003	2.0100e-003	0.0203	5.0000e-005	4.4000e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.7297	3.7297	1.7000e-004	0.0000	3.7333

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					0.0677	0.0000	0.0677	0.0281	0.0000	0.0281	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1296	1.4963	0.9828	1.2300e-003		0.0717	0.0717		0.0660	0.0660	0.0000	116.3913	116.3913	0.0351	0.0000	117.1286
Total	0.1296	1.4963	0.9828	1.2300e-003	0.0677	0.0717	0.1393	0.0281	0.0660	0.0940	0.0000	116.3913	116.3913	0.0351	0.0000	117.1286

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3700e-033	2.0100e-003	0.0203	5.0000e-005	4.4000e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.7297	3.7297	1.7000e-004	0.0000	3.7333
Total	1.3700e-003	2.0100e-003	0.0203	5.0000e-005	4.4000e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.7297	3.7297	1.7000e-004	0.0000	3.7333

3.4 1st Phase of Home Construction - 2016

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	0.1022	0.8552	0.5552	8.0000e-004		0.0590	0.0590		0.0555	0.0555	0.0000	72.6461	72.6461	0.0180	0.0000	73.0244
Total	0.1022	0.8552	0.5552	8.0000e-004		0.0590	0.0590		0.0555	0.0555	0.0000	72.6461	72.6461	0.0180	0.0000	73.0244

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
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4600e-003	0.0263	0.0308	6.0000e-005	1.8600e-003	4.9000e-004	2.3500e-003	5.3000e-004	4.5000e-004	9.8000e-004	0.0000	5.7292	5.7292	4.0000e-005	0.0000	5.7300
Worker	3.6100e-003	5.2800e-003	0.0532	1.3000e-004	0.0115	7.0000e-005	0.0116	3.0600e-003	7.0000e-005	3.1300e-003	0.0000	9.7904	9.7904	4.6000e-004	0.0000	9.7999
Total	6.0700e-003	0.0316	0.0840	1.9000e-004	0.0134	5.6000e-004	0.0140	3.5900e-003	5.2000e-004	4.1100e-003	0.0000	15.5196	15.5196	5.0000e-004	0.0000	15.5299

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	MT/yr					
	Off-Road	0.1022	0.8552	0.5552	8.0000e-004		0.0590	0.0590		0.0555	0.0555	0.0000	72.6460	72.6460	0.0180	0.0000
Total	0.1022	0.8552	0.5552	8.0000e-004		0.0590	0.0590		0.0555	0.0555	0.0000	72.6460	72.6460	0.0180	0.0000	73.0244

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4600e-003	0.0263	0.0308	6.0000e-005	1.8600e-003	4.9000e-004	2.3500e-003	5.3000e-004	4.5000e-004	9.8000e-004	0.0000	5.7292	5.7292	4.0000e-005	0.0000	5.7300
Worker	3.6100e-003	5.2800e-003	0.0532	1.3000e-004	0.0115	7.0000e-005	0.0116	3.0600e-003	7.0000e-005	3.1300e-003	0.0000	9.7904	9.7904	4.6000e-004	0.0000	9.7999

Total	6.0700e-003	0.0316	0.0840	1.9000e-004	0.0134	5.6000e-004	0.0140	3.5900e-003	5.2000e-004	4.1100e-003	0.0000	15.5196	15.5196	5.0000e-004	0.0000	15.5299
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3.5 Architectural Coating - 2016
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	0.6899					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0000e-003	0.0451	0.0358	6.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	4.8512	4.8512	5.7000e-004	0.0000	4.8632
Total	0.6969	0.0451	0.0358	6.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	4.8512	4.8512	5.7000e-004	0.0000	4.8632

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	6.7000e-004	6.7400e-003	2.0000e-005	1.4600e-003	1.0000e-005	1.4700e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2401	1.2401	6.0000e-005	0.0000	1.2413
Total	4.6000e-004	6.7000e-004	6.7400e-003	2.0000e-005	1.4600e-003	1.0000e-005	1.4700e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2401	1.2401	6.0000e-005	0.0000	1.2413

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	0.6399					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0000e-003	0.0451	0.0358	6.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	4.8512	4.8512	5.7000e-004	0.0000	4.8632
Total	0.6399	0.0451	0.0358	6.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	4.8512	4.8512	5.7000e-004	0.0000	4.8632

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	6.7000e-004	6.7400e-003	2.0000e-005	1.4600e-003	1.0000e-005	1.4700e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2401	1.2401	6.0000e-005	0.0000	1.2413
Total	4.6000e-004	6.7000e-004	6.7400e-003	2.0000e-005	1.4600e-003	1.0000e-005	1.4700e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2401	1.2401	6.0000e-005	0.0000	1.2413

3.6 Paving - 2016

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	0.0575	0.6156	0.4075	6.1000e-004		0.0347	0.0347		0.0319	0.0319	0.0000	57.7880	57.7880	0.0174	0.0000	58.1540
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0575	0.6156	0.4075	6.1000e-004		0.0347	0.0347		0.0319	0.0319	0.0000	57.7880	57.7880	0.0174	0.0000	58.1540

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	2.0700e-003	0.0209	5.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.8462	3.8462	1.8000e-004	0.0000	3.8500
Total	1.4200e-003	2.0700e-003	0.0209	5.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.8462	3.8462	1.8000e-004	0.0000	3.8500

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	0.0575	0.6156	0.4075	6.1000e-004		0.0347	0.0347		0.0319	0.0319	0.0000	57.7879	57.7879	0.0174	0.0000	58.1540
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0575	0.6156	0.4075	6.1000e-004		0.0347	0.0347		0.0319	0.0319	0.0000	57.7879	57.7879	0.0174	0.0000	58.1540

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	2.0700e-003	0.0209	5.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.8462	3.8462	1.8000e-004	0.0000	3.8500
Total	1.4200e-003	2.0700e-003	0.0209	5.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.8462	3.8462	1.8000e-004	0.0000	3.8500

4.0 Operational Detail - Mobile

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	0.6144	2.2109	7.1067	0.0170	1.2091	0.0302	1.2393	0.3231	0.0277	0.3508	0.0000	1,356.3769	1,356.3769	0.0466	0.0000	1,357.3560
Unmitigated	0.6144	2.2109	7.1067	0.0170	1.2091	0.0302	1.2393	0.3231	0.0277	0.3508	0.0000	1,356.3769	1,356.3769	0.0466	0.0000	1,357.3560

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		

Single Family Housing	932.96	932.96	932.96	3,188,066	3,188,066
Total	932.96	932.96	932.96	3,188,066	3,188,066

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.462438	0.069856	0.176572	0.170752	0.045136	0.007399	0.012745	0.042494	0.000970	0.001060	0.006446	0.000893	0.003237

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	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
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	215.3706	215.3706	9.9000e-003	2.0500e-003	216.2134
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	215.3706	215.3706	9.9000e-003	2.0500e-003	216.2134
Natural Gas Mitigated	0.0178	0.1525	0.0649	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	176.5893	176.5893	3.3800e-003	3.2400e-003	177.3640
Natural Gas Unmitigated	0.0178	0.1525	0.0649	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	176.5893	176.5893	3.3800e-003	3.2400e-003	177.3640

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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/yr	tons/yr										MT/yr					
Single Family Housing	3.30916e+006	0.0178	0.1525	0.0649	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	176.5893	176.5893	3.3800e-003	3.2400e-003	177.6640
Total		0.0178	0.1525	0.0649	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	176.5893	176.5893	3.3800e-003	3.2400e-003	177.6640

Mitigated

	Natural Gas 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/yr	tons/yr										MT/yr					
Single Family Housing	3.30916e+006	0.0178	0.1525	0.0649	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	176.5893	176.5893	3.3800e-003	3.2400e-003	177.6640
Total		0.0178	0.1525	0.0649	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	176.5893	176.5893	3.3800e-003	3.2400e-003	177.6640

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	752605	215.3706	9.9000e-003	2.0500e-003	216.2134

Total		215.3706	9.9000e-003	2.0500e-003	216.2134
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Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	752605	215.3706	9.9000e-003	2.0500e-003	216.2134
Total		215.3706	9.9000e-003	2.0500e-003	216.2134

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	CF-4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7411	0.0120	1.0249	5.0000e-005		7.1700e-003	7.1700e-003		7.1500e-003	7.1500e-003	0.0000	25.1843	25.1843	2.1300e-003	4.3000e-004	25.3629
Unmitigated	0.7411	0.0120	1.0249	5.0000e-005		7.1700e-003	7.1700e-003		7.1500e-003	7.1500e-003	0.0000	25.1843	25.1843	2.1300e-003	4.3000e-004	25.3629

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	0.0690					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6374					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3600e-003	0.0000	1.3000e-004	0.0000		1.6400e-003	1.6400e-003		1.6300e-003	1.6300e-003	0.0000	23.5334	23.5334	4.5000e-004	4.3000e-004	23.6767
Landscaping	0.0323	0.0120	1.0247	5.0000e-005		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003	0.0000	1.6509	1.6509	1.6800e-003	0.0000	1.6862
Total	0.7411	0.0120	1.0249	5.0000e-005		7.1700e-003	7.1700e-003		7.1600e-003	7.1600e-003	0.0000	25.1843	25.1843	2.1300e-003	4.3000e-004	25.3629

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					
Consumer Products	0.6374					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3800e-003	0.0000	1.3000e-004	0.0000		1.6400e-003	1.6400e-003		1.6300e-003	1.6300e-003	0.0000	23.5334	23.5334	4.5000e-004	4.3000e-004	23.6767
Landscaping	0.0323	0.0120	1.0247	5.0000e-005		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003	0.0000	1.6509	1.6509	1.6800e-003	0.0000	1.6862
Architectural Coating	0.0690					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.7411	0.0120	1.0249	5.0000e-005		7.1700e-003	7.1700e-003		7.1600e-003	7.1600e-003	0.0000	25.1843	25.1843	2.1300e-003	4.3000e-004	25.3629

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	38.6157	0.2097	5.2500e-003	44.6478
Unmitigated	38.6157	0.2097	5.2600e-003	44.6510

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	6.38509 / 4.02539	38.6157	0.2097	5.2600e-003	44.6510
Total		38.6157	0.2097	5.2600e-003	44.6510

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	6.38509 / 4.02539	38.6157	0.2097	5.2500e-003	44.6478

Total		38.6157	0.2097	5.2500e-003	44.6478
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8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.3034	1.3772	0.0000	52.2243
Unmitigated	23.3034	1.3772	0.0000	52.2243

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	114.8	23.3034	1.3772	0.0000	52.2243
Total		23.3034	1.3772	0.0000	52.2243

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	114.8	23.3034	1.3772	0.0000	52.2243
Total		23.3034	1.3772	0.0000	52.2243

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	35.4000	0.0000	0.0000	35.4000

10.2 Net New Trees

Species Class

Appendix F

Project Specific Water Quality Management Plan

For: Tract 36939

N/W Corner of Sunrise Avenue and Wilson Street

DEVELOPMENT NO.
DESIGN REVIEW NO.

Prepared for:

Banning Wilson 97, LLC
10621 Civic Center Drive
Rancho Cucamonga, CA 91730
Telephone: 909-481-1150

Prepared by:

Robert Otte, PE, QSD
Otte-Berkeley Groupe, Inc.
575 E. Carreon Drive
Colton, CA 92324
Telephone: 909-370-0911

Original Date Prepared: April, 2015

Revision Date(s): Date

OWNER'S CERTIFICATION

This project-specific Water Quality Management Plan (WQMP) has been prepared for:

Banning Wilson 97, LLC
by ~~Otte-Berkeley~~ Groupe, Inc.
for the project known as Tract 36939 at Sunrise Avenue and Wilson Street.

This WQMP is intended to comply with the requirements of ~~Banning for Error!~~ Reference source not found., which includes the requirement for the preparation and implementation of a project-specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity.

The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under City of Banning Water Quality Ordinance (Municipal Code Section 1415 § 6).

If the undersigned transfers its interest in the subject property/project, the undersigned shall notify the successor in interest of its responsibility to implement this WQMP.

"I, the undersigned, certify under penalty of law that I am the owner of the property that is the subject of this WQMP, and that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature

Owner's Printed Name

Owner's Title/Position

Date

10621 Civic Center Drive
Rancho Cucamonga, CA 91730
Telephone: 909-481-1150

ATTEST

Notary Signature

Printed Name

Title/Position

Date

THIS FORM SHALL BE NOTARIZED BEFORE ACCEPTANCE OF THE
FINAL PROJECT SPECIFIC WQMP

Date

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APPENDICES

A. CONDITIONS OF APPROVAL	
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H. PHASE 1 ENVIRONMENTAL SITE ASSESSMENT – SUMMARY OF SITE REMEDIATION CONDUCTED AND USE RESTRICTIONS	
I. PROJECT-SPECIFIC WQMP SUMMARY DATA FORM	

I. Project Description

Project Owner: Banning Wilson 97, LLC
10621 Civic Center Drive
Rancho Cucamonga, CA 91730
909-481-1150

WQMP Preparer: Otte-Berkeley Groupe, Inc
575 E. Carreon Drive
Colton, CA 92324
909-370-0911

Project Site Address: N/W Corner of Sunrise Avenue & Wilson Street
Banning, CA

**Planning Area/
Community Name/
Development Name:** N/A

APN Number(s): 535-430-001 thru 535-430-021
535-431-001 thru 535-431-015
535-432-001 thru 535-432-017
535-070-004 & 535-007-006

Latitude & Longitude: 33.933742° / 116.906562°

Receiving Water: Montgomery Creek

Project Site Size: 34.4 Acres

Standard Industrial Classification (SIC) Code: N/A – Single Family Residential

**Formation of Home Owners' Association (HOA)
or Property Owners Association (POA):** Y N

2014 Whitewater River Region WQMP
Tentative Tract 36939

Additional Permits/Approvals required for the Project:

AGENCY	Permit required
State Department of Fish and Wildlife, Fish and Game Code §1602 Streambed Alteration Agreement	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Certification	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
US Army Corps of Engineers, CWA Section 404 permit	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
US Fish and Wildlife, Endangered Species Act Section 7 biological opinion	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
Statewide Construction General Permit Coverage	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Statewide Industrial General Permit Coverage	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
Other <i>(please list in the space below as required)</i>	

The project consists of two previously entitled tracts. Tract 30642, recorded in 2007, occupies the Eastern $\frac{1}{3}$ of the site and Tentative Tract 32429, approved by the City in 2005, composes the Western $\frac{2}{3}$. These tracts combined to total 97 lots.

Subsequent to the entitlement of these tracts, a fault was discovered running east-west near the northern boundary of both properties. Geologic investigation has established a recommended fault-setback line consistent with the requirements of the Alquist-Priolo Act. The effect of this setback is to render approximately 25 lots unbuildable in the current configuration.

The project proposes to remap both tracts into a new single map totaling 98 lots. Existing dedications made on recorded Tract 30642 would be vacated and replaced with new dedications on the new map. A substantial portion of Tract 30642 will be identical to the new map.

The western portion of the site, Tentative Tract 32429, will be reconfigured. The project proposes to remove the RL-10,000 zoning overlay that currently exists and revert to the underlying Low Density Residential zone thus allowing lot sizes of 7,000 square-feet consistent with the eastern portion of the site. This will allow the creation of one cohesive community with the same standards rather than two distinct developments.

A lettered lot "A" is proposed to be dedicated to the City. Much of lot "A" is within the seismic setback zone and is unusable for development. The area immediately north of lot "A" is zoned as Open Space. The project proposes to incorporate lot "A" into this adjacent open space. Although no grading is depicted on the accompanying site plan, grading – in form of slopes – will occur within lot "A".

Two Water Quality Basins are proposed. These will serve to retain developed condition runoff and mitigate developed condition flows as required by City Ordinance.

Appendix A of this project-specific WQMP includes a complete copy of the final Conditions of Approval. Appendix B of this project-specific WQMP includes:

- a. A Vicinity Map identifying the project site and surrounding planning areas in sufficient detail; and
- b. A Site Plan for the project. The Site Plan included as part of Appendix B depicts the following project features:
 - Location and identification of all structural BMPs, including Source Control, LID/Site Design and Treatment Control BMPs.
 - Landscaped areas.
 - Paved areas and intended uses (i.e., parking, outdoor work area, outdoor material storage area, sidewalks, patios, tennis courts, etc.).
 - Number and type of structures and intended uses (i.e., buildings, tenant spaces, dwelling units, community facilities such as pools, recreation facilities, tot lots, etc.).

- Infrastructure (i.e., streets, storm drains, etc.) that will revert to public agency ownership and operation.
- Location of existing and proposed public and private storm drainage facilities (i.e., storm drains, channels, basins, etc.), including catch basins and other inlets/outlet structures. Existing and proposed drainage facilities should be clearly differentiated.
- Location(s) of Receiving Waters to which the project directly or indirectly discharges.
- Location of points where onsite (or tributary offsite) flows exit the property/project site.
- Delineation of proposed drainage area boundaries, including tributary offsite areas, for each location where flows exit the project site and existing site (where existing site flows are required to be addressed). Each tributary area should be clearly denoted.
- Pre- and post-project topography.

Appendix I is a one page form that summarizes pertinent information relative to this project-specific WQMP.

II. Site Characterization

Land Use Designation or Zoning: **Low Density Residential (East Half)**
 Low Density Residential w/ RL-10,000 overlay (West Half)

Current Property Use: **East half previously rough graded. West half vacant
and undeveloped.**

Proposed Property Use: **Single Family Residential Subdivision**

Availability of Soils Report: Y N *Note: A soils report is required if infiltration
BMPs are utilized. Attach report in Appendix E.*

Phase 1 Site Assessment: Y N *Note: If prepared, attached remediation
summary and use restrictions in Appendix H.*

Receiving Waters for Urban Runoff from Site

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use Designated Receiving Waters
Montgomery Creek	None	None	N/A
San Geronio River	None	AGR, GWR, REC I, REC II, COLD, WILD	N/A
Whitewater River	None	MUN, AGR, GWR, REC I, REC II, COLD, WILD, POW	N/A

III. Pollutants of Concern

Table 1. Pollutant of Concern Summary

Pollutant Category	Potential for Project and/or Existing Site	Causing Receiving Water Impairment
Bacteria/Virus	P	No
Heavy Metals	N	No
Nutrients	P	No
Toxic Organic Compounds	N	No
Sediment/Turbidity	P	No
Trash & Debris	P	No
Oil & Grease	P	No
Other (specify pollutant):		
Other (specify pollutant):		

IV. Hydrologic Conditions of Concern

Local Jurisdiction Requires On-Site Retention of Urban Runoff:

- Yes The project will be required to retain urban runoff onsite in conformance with local ordinance (See Table 6 of the WQMP Guidance document, "Local Land use Authorities Requiring Onsite Retention of Stormwater"). This section does not need to be completed; however, retention facility design details and sizing calculations must be included in Appendix F.
- No This section must be completed.

This Project meets the following condition:

- Condition A:** 1) Runoff from the Project is discharged directly to a publicly-owned, operated and maintained MS4 or engineered and maintained channel, 2) the discharge is in full compliance with local land use authority requirements for connections and discharges to the MS4 (including both quality and quantity requirements), 3) the discharge would not significantly impact stream habitat in proximate Receiving Waters, and 4) the discharge is authorized by the local land use authority.
- Condition B:** The project disturbs less than 1 acre and is not part of a larger common plan of development that exceeds 1 acre of disturbance. The disturbed area calculation must include all disturbances associated with larger plans of development.
- Condition C:** The project's runoff flow rate, volume, velocity and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour and 10-year 24-hour rainfall events. This condition can be achieved by, where applicable, complying with the local land use authority's on-site retention ordinance, or minimizing impervious area on a site and incorporating other Site-Design BMP concepts and LID/Site Design BMPs that assure non-exceedance of pre-development conditions. This condition must be substantiated by hydrologic modeling methods acceptable to the local land use authority.
- None:** Refer to Section 3.4 of the Whitewater River Region WQMP Guidance document for additional requirements.

Supporting engineering studies, calculations, and reports are included in Appendix C.

	2 year – 24 hour		10 year – 24 hour	
	Precondition	Post-condition	Precondition	Post-condition
Discharge (cfs)				
Velocity (fps)				
Volume (cubic feet)				
Duration (minutes)				

V. Best Management Practices

This project implements Best Management Practices (BMPs) to address the Pollutants of Concern that may potentially be generated from the use of the Project Site. These BMPs have been selected and implemented to comply with Section 3.5 of the WQMP Guidance document, and consist of Site Design BMP concepts, Source Control, LID/Site Design and, if/where necessary, Treatment Control BMPs as described herein.

V.1 SITE DESIGN BMP CONCEPTS, LID/SITE DESIGN AND TREATMENT CONTROL BMPs

Local Jurisdiction Requires On-Site Retention of Urban Runoff:

Yes The project will be required to retain Urban Runoff onsite in conformance with local ordinance (See Table 6 of the WQMP Guidance document, "Local Land use Authorities Requiring Onsite Retention of Stormwater). **The LID/Site Design measurable goal has thus been met (100%), and Sections V.1.A and V.1.B do not need to be completed;** however, retention facility design details and sizing calculations must be included in Appendix F, and '100%' should be entered into Column 3 of Table 6 below.

No Section V.1 must be completed.

This section of the Project-Specific WQMP documents the LID/Site Design BMPs and, if/where necessary, the Treatment Control BMPs that will be implemented on the project to meet the requirements detailed within Section 3.5.1 of the WQMP Guidance document. Section 3.5.1 includes requirements to implement Site Design Concepts and BMPs, and includes requirements to address Pollutants of Concern with BMPs. Further, sub-section 3.5.1.1 specifically requires that Pollutants of Concern be addressed with LID/Site Design BMPs to the extent feasible.

LID/Site Design BMPs are those BMPs listed within Table 2 below which promote retention and/or feature a natural treatment mechanism; off-site and regionally-based BMPs are also LID/Site Design BMPs, and therefore count towards the measurable goal, if they fit these criteria. This project incorporates LID/Site Design BMPs to fully address the Treatment Control BMP requirement where and to the extent feasible. If and where it has been acceptably demonstrated to the local land use authority that it is infeasible to fully meet this requirement with LID/Site Design BMPs, Section V.1.B (below) includes a description of the conventional Treatment Control BMPs that will be substituted to meet the same requirements.

In addressing Pollutants of Concern, BMPs are selected using Table 2 below.

Table 2. BMP Selection Matrix Based Upon Pollutant of Concern Removal Efficiency ⁽¹⁾

(Sources: Riverside County Flood Control & Water Conservation District Design Handbook for Low Impact Development Best Management Practices, dated September 2011, the Orange County Technical Guidance Document for Water Quality Management Plans, dated May 19, 2011, and the Caltrans Treatment BMP Technology Report, dated April 2010 and April 2003)

Pollutant of Concern	Landscape Swale ^{2,3}	Landscape Strip ^{2,3}	Biofiltration (with underdrain) ^{2,3}	Extended Detention Basin ²	Sand Filter Basin ²	Infiltration Basin ²	Infiltration Trench ²	Permeable Pavement ²	Bioretention (w/o underdrain) ^{2,3}	Other BMPs including Proprietary BMPs ^{4,5}
Sediment & Turbidity	M	M	H	M	H	H	H	H	H	Varies by Product ⁶
Nutrients	L/M	L/M	M	L/M	L/M	H	H	H	H	
Toxic Organic Compounds	M/H	M/H	M/H	L	L/M	H	H	H	H	
Trash & Debris	L	L	H	H	H	H	H	L	H	
Bacteria & Viruses (also: Pathogens)	L	M	H	L	M	H	H	H	H	
Oil & Grease	M	M	H	M	H	H	H	H	H	
Heavy Metals	M	M/H	M/H	L/M	M	H	H	H	H	
<p>Abbreviations: L: Low removal efficiency M: Medium removal efficiency H: High removal efficiency</p> <p>Notes:</p> <p>(1) Periodic performance assessment and updating of the guidance provided by this table may be necessary.</p> <p>(2) Expected performance when designed in accordance with the most current edition of the document, "Riverside County, Whitewater River Region Stormwater Quality Best Management Practice Design Handbook".</p> <p>(3) Performance dependent upon design which includes implementation of thick vegetative cover. Local water conservation and/or landscaping requirements should be considered; approval is based on the discretion of the local land use authority.</p> <p>(4) Includes proprietary stormwater treatment devices as listed in the CASQA Stormwater Best Management Practices Handbooks, other stormwater treatment BMPs not specifically listed in this WQMP (including proprietary filters, hydrodynamic separators, inserts, etc.), or newly developed/emerging stormwater treatment technologies.</p> <p>(5) Expected performance should be based on evaluation of unit processes provided by BMP and available testing data. Approval is based on the discretion of the local land use authority.</p> <p>(6) When used for primary treatment as opposed to pre-treatment, requires site-specific approval by the local land use authority.</p>										

V.1.A SITE DESIGN BMP CONCEPTS AND LID/SITE DESIGN BMPs

This section documents the Site Design BMP concepts and LID/Site Design BMPs that will be implemented on this project to comply with the requirements detailed in Section 3.5.1 of the WQMP Guidance document.

- Table 3 herein documents the implementation of the Site Design BMP Concepts described in sub-sections 3.5.1.3 and 3.5.1.4.
 - Table 4 herein documents the extent to which this project has implemented the LID/Site Design goals described in sub-section 3.5.1.1.
-

Table 3. Implementation of Site Design BMP Concepts

Design Concept	Technique	Specific BMP	Included			Brief Reason for BMPs Indicated as No or N/A
			Yes	No	N/A	
<i>Site Design BMP Concept 1</i>	Minimize Urban Runoff, Minimize Impervious Footprint, and Conserve Natural Areas (See WQMP Section 3.5.1.3)	Conserve natural areas by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Conserve natural areas by incorporating the goals of the Multi-Species Habitat Conservation Plan or other natural resource plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Preserve natural drainage features and natural depressional storage areas on the site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Use natural drainage systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Where applicable, incorporate Self-Treating Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Where applicable, incorporate Self-Retaining Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Increase the building floor to area ratio (i.e., number of stories above or below ground).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Construct streets, sidewalks and parking lot aisles to minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Reduce widths of streets where off-street parking is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other comparable and equally effective Site Design BMP concept(s) as approved by the local land use authority (Note: Additional narrative required to describe BMP and how it addresses site design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Table 3. Site Design BMP Concepts (continued)

Design Concept	Technique	Specific BMP	Included			Brief Reason for Each BMP Indicated as No or N/A	
			Yes	No	N/A		
Site Design BMP Concept 2	Minimize Directly Connected Impervious Area (See WQMP Section 3.5.1.4)	Design residential and commercial sites to contain and infiltrate roof runoff, or direct roof runoff to landscaped swales or buffer areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Incorporate landscaped buffer areas between sidewalks and streets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Use natural or landscaped drainage swales in lieu of underground piping or imperviously lined swales.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Where soil conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Maximize the permeable area by constructing walkways, trails, patios, overflow parking, alleys, driveways, low-traffic streets, and other low-traffic areas with open-jointed paving materials or permeable surfaces such as pervious concrete, porous asphalt, unit pavers, and granular materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Use one or more of the following:					
		Rural swale system: street sheet flows to landscaped swale or gravel shoulder, curbs used at street corners, and culverts used under driveways and street crossings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Urban curb/swale system: street slopes to curb; periodic swale inlets drain to landscaped swale or biofilter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Dual drainage system: first flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder; high flows connect directly to MS4s.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Other comparable and equally effective Site Design BMP concept(s) as approved by the local land use authority (Note: Additional narrative required to describe BMP and how it addresses site design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Use one or more of the following for design of driveways and private residential parking areas:					
		Design driveways with shared access, flared (single lane at street), or wheel strips (paving only under the tires).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Uncovered temporary or guest parking on residential lots paved with a permeable surface, or designed to drain into landscaping.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

DATE

Table 3. Site Design BMP Concepts (continued)

Design Concept	Technique	Specific BMP	Included			Brief Reason for Each BMP Indicated as No or N/A	
			Yes	No	N/A		
Site Design BMP Concept 2 (cont'd)	Minimize Directly Connected Impervious Area (See WQMP Section 3.5.1.4)	Other comparable and equally effective Site Design BMP concept(s) as approved by the local land use authority (Note: Additional narrative required to describe BMP and how it addresses site design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Use one or more of the following for design of parking areas:					
		Where landscaping is proposed in parking areas, incorporate parking area landscaping into the drainage design.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Overflow parking (parking stalls provided in excess of the Permittee's minimum parking requirements) may be constructed with permeable pavement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Other comparable and equally effective Site Design BMP (or BMPs) as approved by the local land use authority (Note: Additional narrative required describing BMP and how it addresses site design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Project Site Design BMP Concepts:

Insert text here briefly describing how each included Site Design BMP concept will be implemented.

Alternative Project Site Design BMP Concepts:

Insert text here describing any other comparable and equally effective Site Design BMP concept(s) as approved by the local land use authority, or indicate N/A.

Justification of infeasibility for sub-areas not addressed with LID/Site Design BMPs

V.1.B TREATMENT CONTROL BMPs

Conventional Treatment Control BMPs shall be implemented to address the project's Pollutants of Concern as required in WQMP Section 3.5.1 where, and to the extent that, Section V.1.A has demonstrated that it is infeasible to meet these requirements through implementation of LID/Site Design BMPs.

- The LID/Site Design BMPs described in Section V.1.A of this project-specific WQMP completely address the 'Treatment Control BMP requirement' for the entire project site (and where applicable, entire existing site) as required in Section 3.5.1.1 of the WQMP Guidance document. Supporting documentation for the sizing of these LID/Site Design BMPs is included in Appendix F. ***Section V.1.B does not need to be completed.**

 - The LID/Site Design BMPs described in Section V.1.A of this project-specific WQMP do NOT completely address the 'Treatment Control BMP requirement' for the entire project site (or where applicable, entire existing site) as required in Section 3.5.1.1 of the WQMP. ***Section V.1.B must be completed.**
-

The Treatment Control BMPs identified in this section are selected, sized and implemented to treat the design criteria of V_{BMP} and/or Q_{BMP} for all project (and if required, existing site) drainage sub-areas which were not fully addressed using LID/Site Design BMPs. Supporting documentation for the sizing of these Treatment Control BMPs is included in Appendix F.

V.1.C MEASURABLE GOAL SUMMARY

This section documents the extent to which this project has met the measurable goal described in WQMP Section 3.5.1.1 of addressing 100% of the project's 'Treatment Control BMP requirement' with LID/Site Design BMPs. Projects required to retain Urban Runoff onsite in conformance with local ordinance are considered to have met the measurable goal; for these instances, '100%' is entered into Column 3 of the Table.

Table 6: Measurable Goal Summary

<p>(1) Total Area Treated with <u>LID/Site Design</u> BMPs (Last row of Table 4)</p>	<p>(2) Total Area Treated with <u>Treatment Control</u> BMPs (Last row of Table 5)</p>	<p>(3) % of Treatment Control BMP Requirement addressed with LID/Site Design BMPs</p>
		<p>100%</p>

V.2 SOURCE CONTROL BMPs

This section identifies and describes the Source Control BMPs applicable and implemented on this project.

Table 7. Source Control BMPs

BMP Name	Check One		If not applicable, state brief reason
	Included	Not Applicable	
Non-Structural Source Control BMPs			
Education for Property Owners, Operators, Tenants, Occupants, or Employees	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Activity Restrictions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Irrigation System and Landscape Maintenance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Common Area Litter Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Street Sweeping Private Streets and Parking Lots	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No private streets/pkg
Drainage Facility Inspection and Maintenance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Structural Source Control BMPs			
Storm Drain Inlet Stenciling and Signage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Landscape and Irrigation System Design	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Protect Slopes and Channels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Provide Community Car Wash Racks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed
Properly Design*:			
Fueling Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed - SFR
Air/Water Supply Area Drainage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed - SFR
Trash Storage Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed
Loading Docks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed - SFR
Maintenance Bays	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed - SFR
Vehicle and Equipment Wash Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed - SFR
Outdoor Material Storage Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed - SFR
Outdoor Work Areas or Processing Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed - SFR
Provide Wash Water Controls for Food Preparation Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None proposed - SFR

*Details demonstrating proper design must be included in Appendix F.

Appendix D includes copies of the educational materials (described in Section 3.5.2.1 of the WQMP Guidance document) that will be used in implementing this project-specific WQMP.

V.3 EQUIVALENT TREATMENT CONTROL BMP ALTERNATIVES

Not Applicable

V.4 REGIONALLY-BASED BMPS

Not Applicable

VI. Operation and Maintenance Responsibility for BMPs

Appendix G of this project-specific WQMP includes copies of CC&Rs, Covenant and Agreements, BMP Maintenance Agreement and/or other mechanisms used to ensure the ongoing operation, maintenance, funding, transfer and implementation of the project-specific WQMP requirements.

VII. Funding

Funding sources are yet to be determined. Possibilities include the formation of a Home Owner's Association, or annexation into a Landscape Maintenance District.

Appendix A

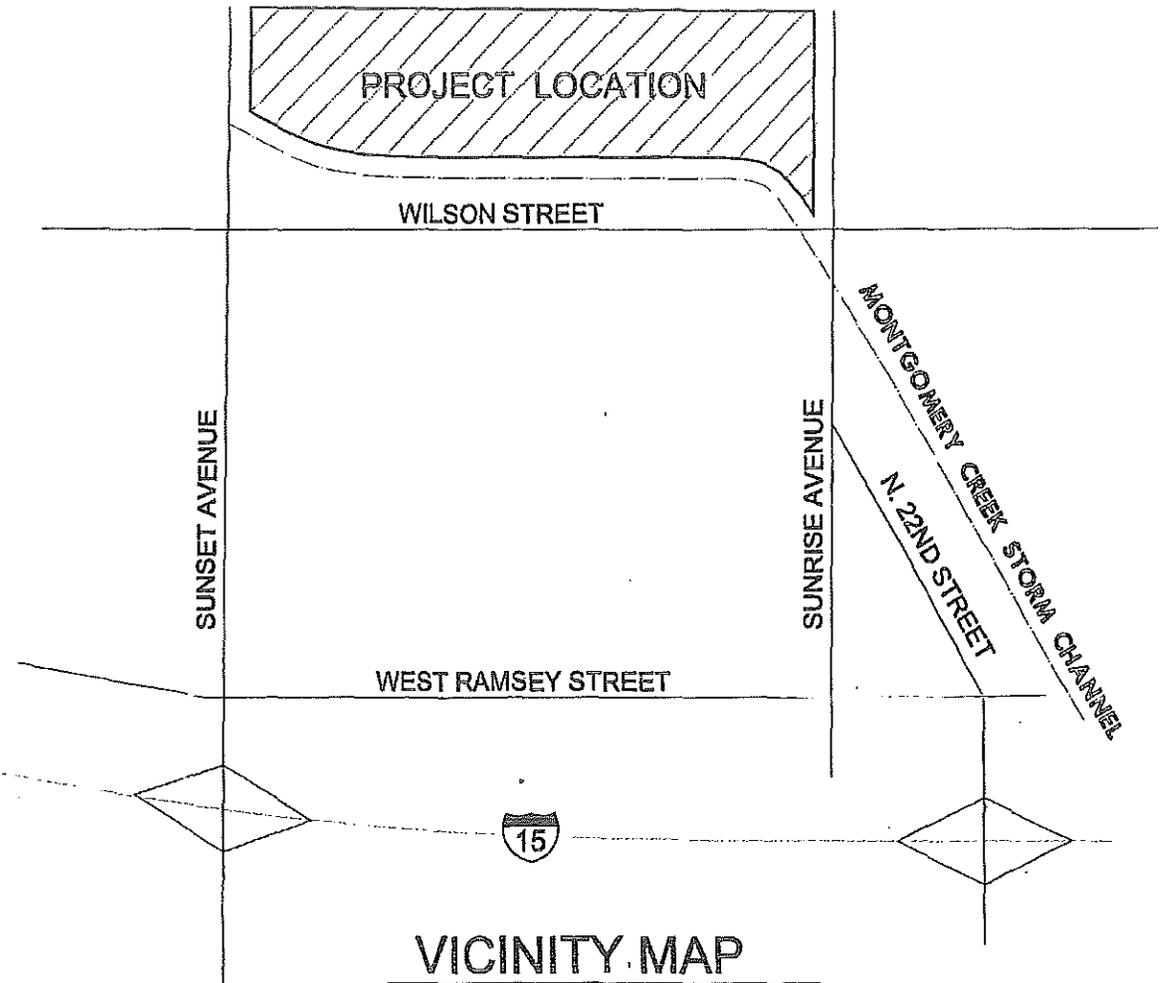
Conditions of Approval

Planning Commission Resolution _____

Dated _____

Appendix B

Vicinity Map, WQMP Site Plan, and Receiving Waters Map



VICINITY MAP
NOT TO SCALE

Appendix C

Supporting Detail Related to Hydrologic Conditions of Concern

Preliminary Drainage Report

Tentative Tract Map No. 36939

City of Banning

Job No.: 15002

Submitted April 2015

Prepared by:



OTTE-BERKELEY GROUPE, INC.

575 E. Carreon Drive
Colton, California 92324-3000
(909) 370-0911

Robert Otte, RCE 44120

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- I. Introduction
- II. Summary of Results
- III. Hydrology

Insert - Hydrology Node Maps

APPENDICES

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| Appendix A | Vicinity Map |
| Appendix B | Soils and Rainfall Data Sheets |
| Appendix C | Unity Hydrograph Studies |

I. Introduction

Tract Map No. 36939 is a proposed 34.40 acre residential subdivision consisting of 98 single family detached homes on minimum 7,000 SF lots. The development is located in the City of Banning, north of Wilson Street, between Sunset Avenue on the west and Sunrise Avenue on the east. Montgomery Creek Channel forms the southern boundary of the project.

City of Banning Ordinance #1415&6 requires that "all development will make provisions to store runoff from rainfall events up to and including the one-hundred-year, three-hour duration event onsite via storage or infiltration basins for new development and redevelopment. Post-development peak urban runoff discharge rates shall not exceed pre-development peak urban runoff discharge rates."

The purpose of this study is to establish the storage and discharge parameters referenced in the City ordinance.

Hydrologic calculations have been performed based on criteria provided in the County of Riverside Hydrology Manual.

II. Summary of Results

The calculations contains in this report indicate that the following parameters should be used in the design of Tract 36939:

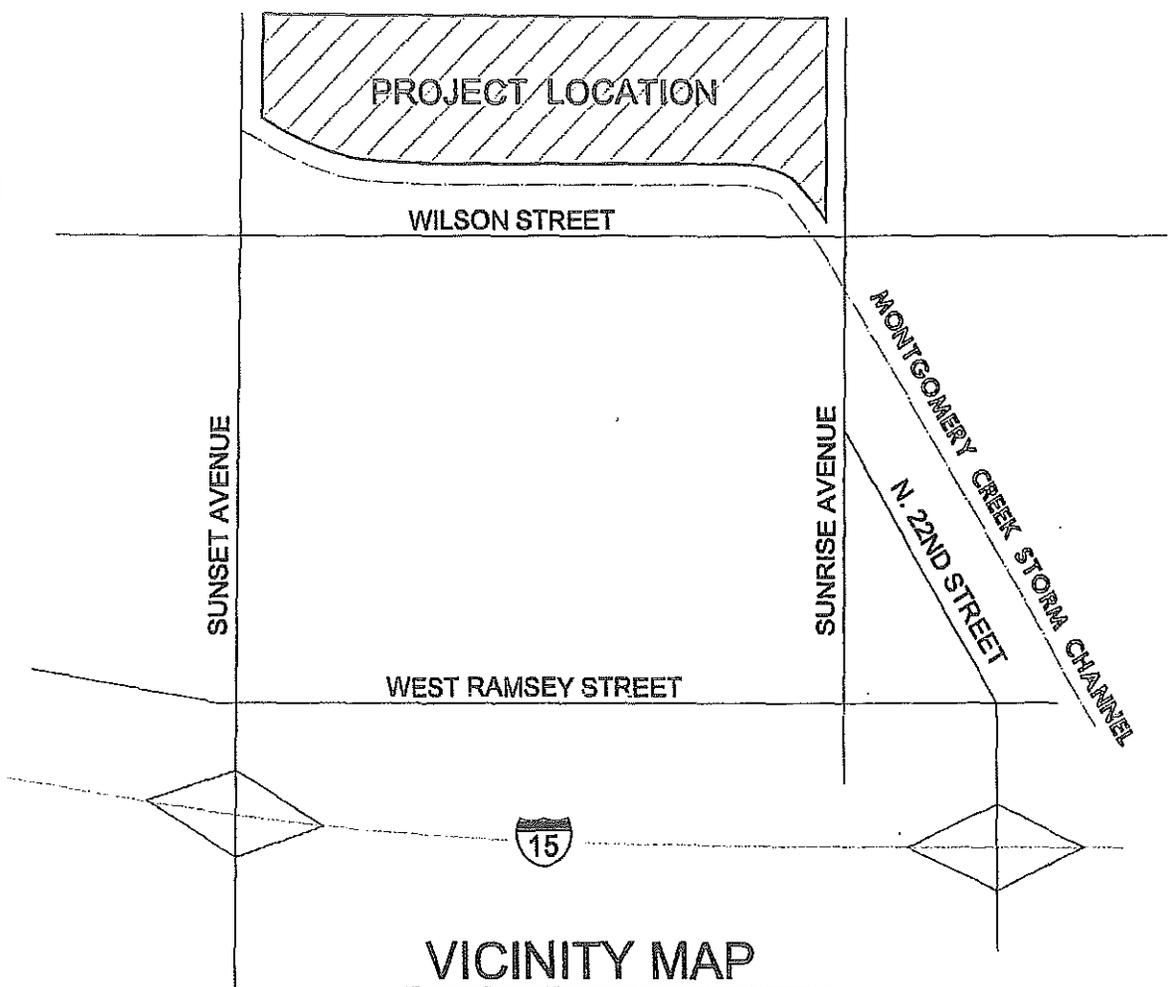
- I. Required Storage (developed condition, Q_{100} 3 hour-volume): 4.6 Ac-Ft
- II. Max Allowable Discharge (existing condition, Q_{100} , 3-hour peak flow): 58.45 CFS

III. Hydrology

A hydrologic analysis was performed using CivilD Unit Hydrograph software (Ver. 9.0) by CIVILCAD/CIVILDESIGN [*Appendix A*]. Per the USDA resource maps, the on-site Soil Type is A: Per NOAA atlas 14, volume 6, the 100-year, 1-hour peak rainfall is 1.78 inches.

APPENDIX A

Vicinity Map

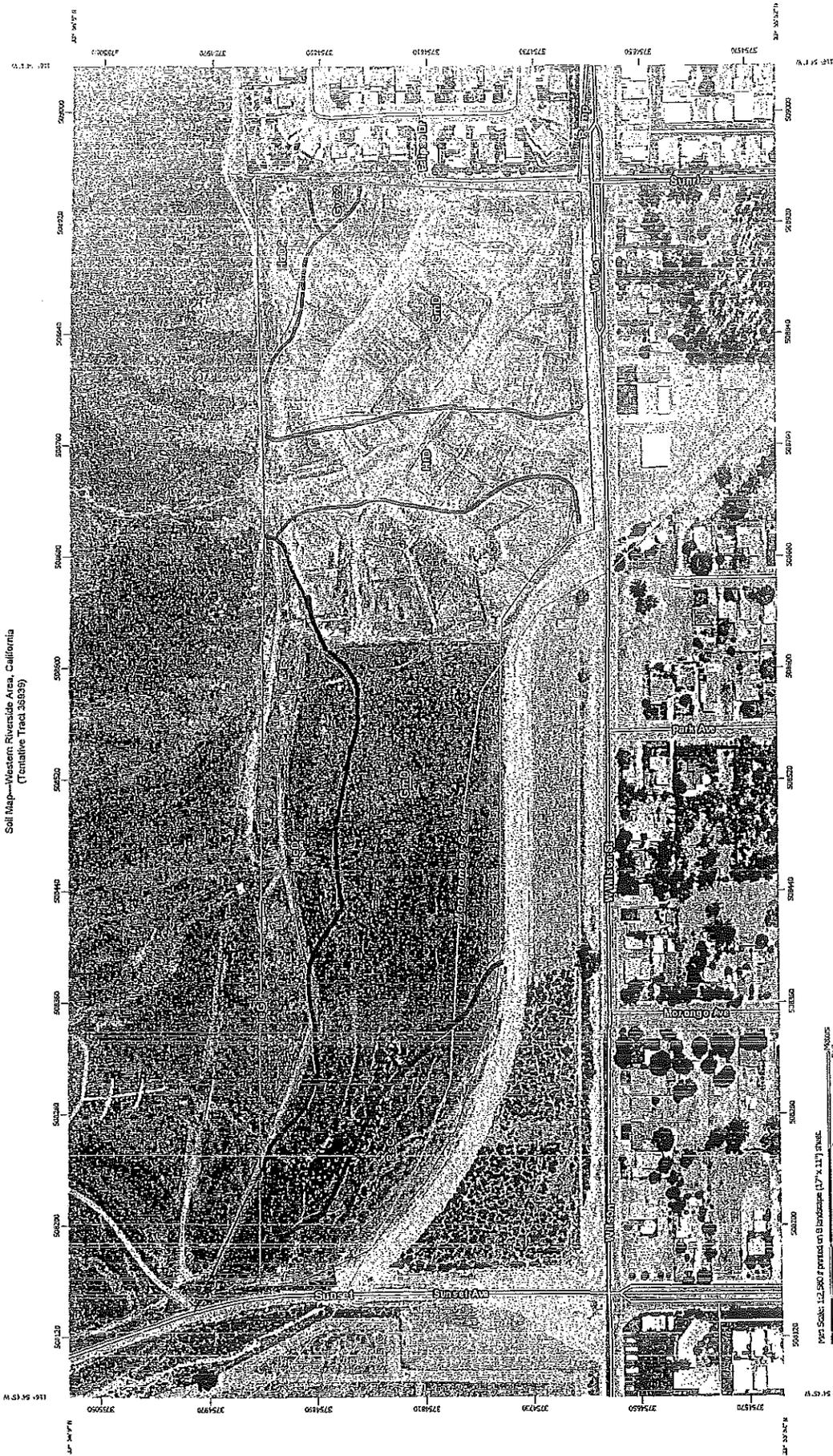


VICINITY MAP
NOT TO SCALE

APPENDIX B

Soils and Rainfall Data Sheets

Soil Map—Western Riverside Area, California
(Tentative Tract 36933)



Map Scale: 1:2,500, printed on B landscape (17" x 11") sheet.
 0 35 70 140 210 280
 Feet
 0 100 200 300 400 500
 Feet
 File program: Map Viewer. Color coordinate: WGS84. 8990 East LFN Zone 11N WGS84

Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

Soil Map—Western Riverside Area, California
(Tentative Tract 36939)

MAP LEGEND

Area of Interest (AOI)		 Spoil Area
 Area of Interest (AOI)		 Stony Spot
Soils		 Very Stony Spot
 Soil Map Unit Polygons		 Wet Spot
 Soil Map Unit Lines		 Other
 Soil Map Unit Points		 Special Line Features
Special Point Features		Water Features
 Blowout		 Streams and Canals
 Borrow Pit		Transportation
 Clay Spot		 Rails
 Closed Depression		 Interstate Highways
 Gravel Pit		 US Routes
 Gravelly Spot		 Major Roads
 Landfill		 Local Roads
 Lava Flow		Background
 Marsh or swamp		 Aerial Photography
 Mine or Quarry		
 Miscellaneous Water		
 Perennial Water		
 Rock Outcrop		
 Saline Spot		
 Sandy Spot		
 Severely Eroded Spot		
 Sinkhole		
 Slide or Slip		
 Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 7, Sep 17, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 25 2010—Jun 3, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Western Riverside Area, California (CA679)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GmD	Gorgonio gravelly loamy fine sand, 2 to 15 percent slopes	23.8	64.7%
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	0.3	0.7%
HcD2	Hanford coarse sandy loam, 8 to 15 percent slopes, eroded	6.1	16.5%
HfD	Hanford sandy loam, 2 to 15 percent slopes	3.8	10.3%
RsC	Riverwash	2.9	7.8%
TeG	Terrace escarpments	0.0	0.0%
Totals for Area of Interest		36.8	100.0%

Western Riverside Area, California

GmD—Gorgonio gravelly loamy fine sand, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: hcvg
Elevation: 20 to 3,000 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 250 to 310 days
Farmland classification: Not prime farmland

Map Unit Composition

Gorgonio and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gorgonio

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 15 inches: gravelly loamy fine sand
H2 - 15 to 60 inches: stratified gravelly loamy sand to gravelly loamy fine sand

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: A
Ecological site: Sandy (1975) (R019XD035CA)

Minor Components

Hanford

Percent of map unit: 5 percent

Soboba

Percent of map unit: 5 percent

Tujunga

Percent of map unit: 4 percent

Unnamed

Percent of map unit: 1 percent

Data Source Information

Soil Survey Area: Western Riverside Area, California

Survey Area Data: Version 7, Sep 17, 2014

Western Riverside Area, California

HcD2—Hanford coarse sandy loam, 8 to 15 percent slopes, eroded

Map Unit Setting

National map unit symbol: hcw3
Elevation: 150 to 900 feet
Mean annual precipitation: 9 to 20 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 250 to 280 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hanford and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hanford

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 8 inches: coarse sandy loam
H2 - 8 to 40 inches: fine sandy loam
H3 - 40 to 60 inches: stratified loamy sand to coarse sandy loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: Sandy (R020XD012CA)

Minor Components

Tujunga

Percent of map unit: 5 percent

Greenfield

Percent of map unit: 5 percent

Ramona

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 7, Sep 17, 2014

Western Riverside Area, California

HfD—Hanford sandy loam, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: hcw6
Elevation: 150 to 900 feet
Mean annual precipitation: 9 to 20 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 250 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Hanford and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hanford

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 8 inches: sandy loam
H2 - 8 to 40 inches: fine sandy loam
H3 - 40 to 60 inches: stratified loamy sand to coarse sandy loam

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A
Ecological site: Sandy alluvial (1975) (R019XD069CA)

Minor Components

Tujunga

Percent of map unit: 5 percent

Greenfield

Percent of map unit: 5 percent

Ramona

Percent of map unit: 4 percent

Riverwash

Percent of map unit: 1 percent

Landform: Channels

Data Source Information

Soil Survey Area: Western Riverside Area, California

Survey Area Data: Version 7, Sep 17, 2014



NOAA Atlas 14, Volume 6, Version 2
 Location name: Banning, California, US*
 Latitude: 33.9337°, Longitude: -116.9066°
 Elevation: 2589ft*
 * source: Google Maps



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aeriats](#)

PF tabular

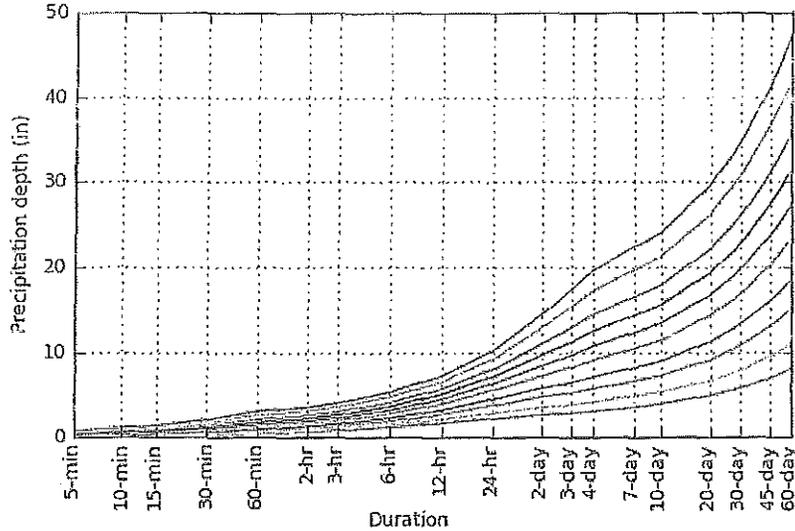
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval(years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.123 (0.102-0.149)	0.157 (0.130-0.190)	0.207 (0.172-0.252)	0.254 (0.209-0.311)	0.326 (0.259-0.414)	0.391 (0.304-0.507)	0.464 (0.352-0.618)	0.551 (0.406-0.754)	0.686 (0.485-0.980)	0.807 (0.551-1.20)
10-min	0.176 (0.147-0.214)	0.224 (0.187-0.272)	0.297 (0.246-0.361)	0.363 (0.299-0.446)	0.468 (0.372-0.594)	0.560 (0.436-0.727)	0.666 (0.505-0.886)	0.789 (0.582-1.08)	0.983 (0.695-1.41)	1.16 (0.789-1.71)
15-min	0.213 (0.178-0.258)	0.271 (0.226-0.329)	0.359 (0.298-0.437)	0.439 (0.362-0.539)	0.565 (0.450-0.718)	0.677 (0.527-0.879)	0.805 (0.611-1.07)	0.954 (0.704-1.31)	1.19 (0.840-1.70)	1.40 (0.955-2.07)
30-min	0.315 (0.263-0.382)	0.402 (0.334-0.487)	0.531 (0.441-0.646)	0.650 (0.535-0.798)	0.837 (0.665-1.06)	1.00 (0.779-1.30)	1.19 (0.904-1.59)	1.41 (1.04-1.93)	1.76 (1.24-2.51)	2.07 (1.41-3.07)
60-min	0.471 (0.392-0.571)	0.599 (0.499-0.728)	0.793 (0.658-0.965)	0.971 (0.789-1.19)	1.25 (0.993-1.59)	1.50 (1.16-1.94)	1.78 (1.35-2.37)	2.11 (1.55-2.89)	2.63 (1.86-3.75)	3.09 (2.11-4.58)
2-hr	0.675 (0.562-0.818)	0.849 (0.706-1.03)	1.10 (0.912-1.34)	1.32 (1.09-1.62)	1.65 (1.31-2.10)	1.93 (1.50-2.51)	2.24 (1.70-2.99)	2.59 (1.91-3.55)	3.11 (2.20-4.45)	3.56 (2.43-5.28)
3-hr	0.831 (0.693-1.01)	1.04 (0.867-1.26)	1.34 (1.11-1.63)	1.60 (1.31-1.96)	1.97 (1.57-2.51)	2.29 (1.78-2.97)	2.63 (2.00-3.50)	3.01 (2.22-4.12)	3.56 (2.52-5.09)	4.02 (2.75-5.96)
6-hr	1.20 (1.00-1.46)	1.51 (1.25-1.83)	1.92 (1.59-2.34)	2.28 (1.87-2.79)	2.78 (2.21-3.53)	3.19 (2.48-4.14)	3.62 (2.75-4.82)	4.09 (3.02-5.61)	4.76 (3.36-6.80)	5.30 (3.62-7.85)
12-hr	1.66 (1.38-2.01)	2.11 (1.75-2.56)	2.71 (2.25-3.30)	3.22 (2.65-3.95)	3.92 (3.12-4.98)	4.48 (3.49-5.81)	5.06 (3.84-6.73)	5.67 (4.18-7.77)	6.52 (4.61-9.32)	7.20 (4.91-10.7)
24-hr	2.18 (1.93-2.52)	2.85 (2.52-3.29)	3.73 (3.29-4.32)	4.46 (3.90-5.20)	5.48 (4.64-6.60)	6.27 (5.20-7.71)	7.09 (5.75-8.93)	7.95 (6.27-10.3)	9.14 (6.93-12.3)	10.1 (7.39-14.1)
2-day	2.64 (2.34-3.04)	3.53 (3.12-4.07)	4.74 (4.18-5.48)	5.77 (5.05-6.73)	7.23 (6.13-8.71)	8.41 (6.98-10.3)	9.66 (7.83-12.2)	11.0 (8.67-14.2)	12.9 (9.76-17.4)	14.4 (10.6-20.1)
3-day	2.84 (2.51-3.27)	3.83 (3.39-4.42)	5.23 (4.61-6.05)	6.44 (5.64-7.51)	8.20 (6.94-9.88)	9.64 (8.00-11.9)	11.2 (9.08-14.1)	12.9 (10.2-16.7)	15.4 (11.6-20.7)	17.4 (12.7-24.3)
4-day	3.07 (2.71-3.53)	4.16 (3.68-4.81)	5.72 (5.04-6.61)	7.07 (6.18-8.24)	9.04 (7.66-10.9)	10.7 (8.86-13.1)	12.4 (10.1-15.7)	14.4 (11.3-18.6)	17.2 (13.0-23.2)	19.6 (14.3-27.3)
7-day	3.56 (3.15-4.11)	4.83 (4.27-5.57)	6.61 (5.83-7.65)	8.16 (7.14-9.52)	10.4 (8.82-12.6)	12.3 (10.2-15.1)	14.3 (11.6-18.0)	16.5 (13.0-21.3)	19.6 (14.9-26.5)	22.3 (16.3-31.1)
10-day	3.90 (3.45-4.50)	5.28 (4.67-6.10)	7.22 (6.37-8.36)	8.90 (7.78-10.4)	11.3 (9.60-13.7)	13.3 (11.1-16.4)	15.5 (12.6-19.6)	17.8 (14.0-23.0)	21.2 (16.0-28.5)	24.0 (17.6-33.4)
20-day	4.88 (4.32-5.63)	6.64 (5.87-7.67)	9.09 (8.02-10.5)	11.2 (9.80-13.1)	14.2 (12.1-17.1)	16.7 (13.9-20.5)	19.3 (15.7-24.4)	22.2 (17.5-28.7)	26.3 (19.9-35.4)	29.7 (21.7-41.3)
30-day	5.79 (5.12-6.67)	7.89 (6.98-9.11)	10.8 (9.53-12.5)	13.3 (11.6-15.5)	16.9 (14.3-20.3)	19.8 (16.4-24.3)	22.9 (18.5-28.8)	26.2 (20.7-33.9)	30.9 (23.4-41.7)	34.8 (25.5-48.5)
45-day	6.95 (6.15-8.01)	9.50 (8.40-11.0)	13.0 (11.5-15.0)	16.0 (14.0-18.6)	20.2 (17.1-24.4)	23.7 (19.6-29.1)	27.3 (22.1-34.4)	31.2 (24.6-40.3)	36.7 (27.8-49.4)	41.2 (30.2-57.4)
60-day	8.09 (7.16-9.33)	11.0 (9.76-12.7)	15.1 (13.3-17.5)	18.5 (16.2-21.6)	23.4 (19.8-28.1)	27.3 (22.6-33.5)	31.4 (25.4-39.5)	35.8 (28.2-46.3)	42.0 (31.8-56.6)	47.1 (34.5-65.6)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

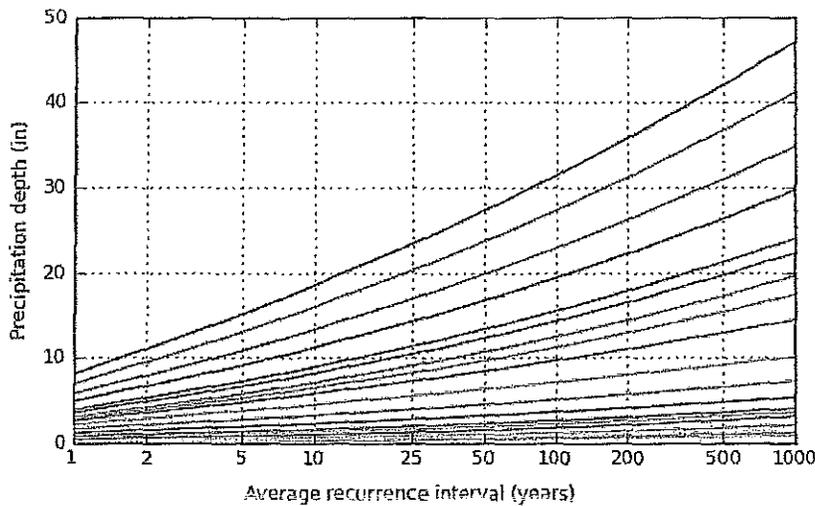
[Back to Top](#)

PF graphical

PDS-based depth-duration-frequency (DDF) curves
 Latitude: 33.9337°, Longitude: -116.9066°



Average recurrence interval (years)
1
2
5
10
25
50
100
200
500
1000



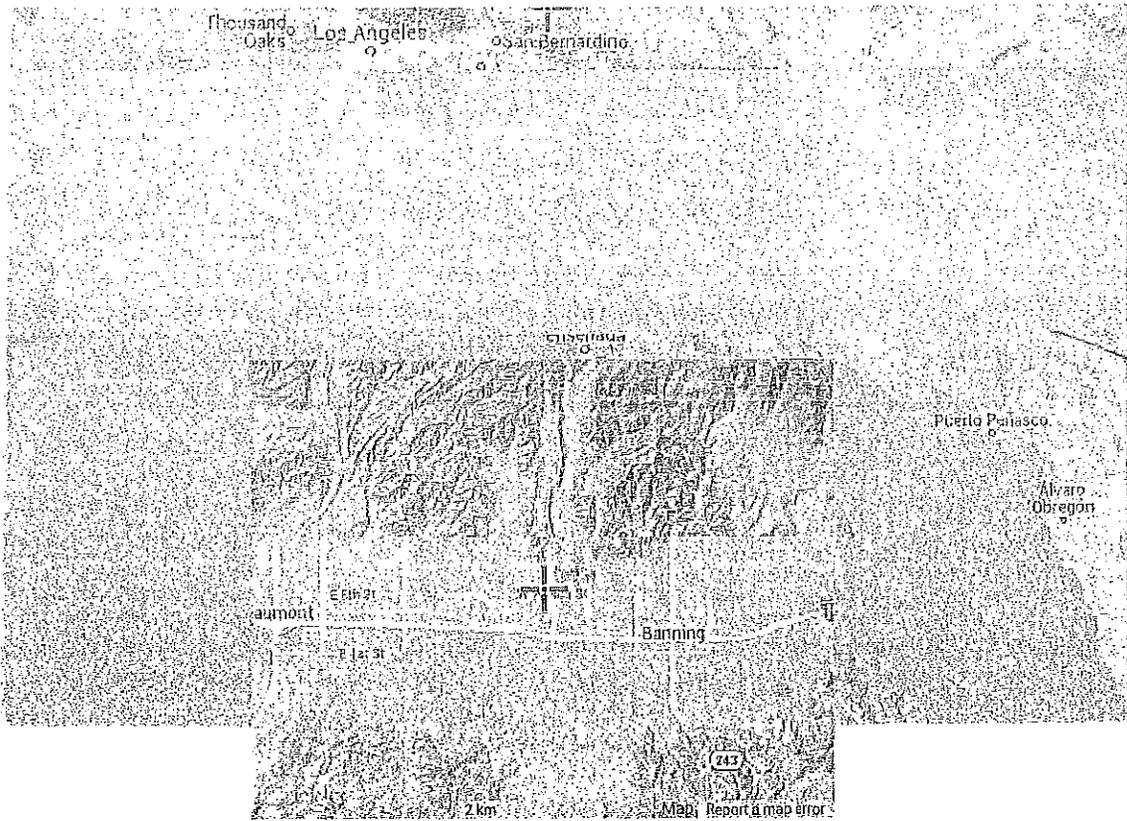
Duration
5-min
10-min
15-min
30-min
60-min
2-hr
3-hr
6-hr
12-hr
24-hr
2-day
3-day
4-day
7-day
10-da
20-da
30-da
45-da
60-da

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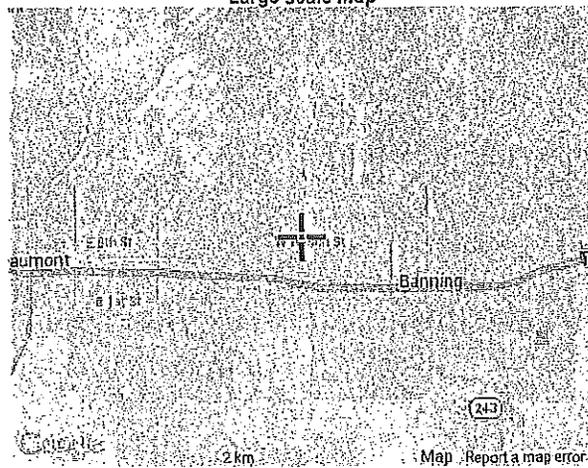
Maps & aerials

Small scale terrain

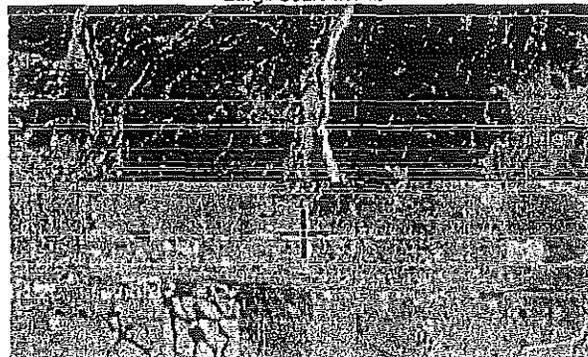




Large scale map



Large scale aerial



ATTACHMENT 7
Mitigation, Monitoring, and Reporting Program

Mitigation Measure	Timing	Verification		
		Department	Signature	Date
Biological Resources				
<p>BIO-1: Pre-Construction Burrowing Owl Survey. Per the Multiple Species Habitat Conservation Plan, and additional pre-construction Burrowing Owl survey will be required within 30 days prior to beginning of site grading.</p> <p>a. In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow California Department of Fish and Wildlife relocation protocol. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow California Department of Fish and Wildlife relocation protocol. The biologist shall confirm in writing to the Planning Department that the species has fledged or been relocated prior to the issuance of a grading permit.</p>	Prior to building permit issuance	Community Development Department		
<p>BIO-2. Native Plan Recovery: Developer shall recover native and drought tolerant plant materials, and incorporate them into project landscaping, to provide or enhance habitat for</p>	Prior to building permit issuance	Community Development Department		

Mitigation Measure	Timing	Verification		
		Department	Signature	Date
local species to the extent possible.				
Cultural Resources				
<p>CR-1: Archaeological Monitoring. Prior to the issuance of a grading permit, the Project Proponent shall implement the following program:</p> <p>a) A qualified archaeological monitor shall be retained by the Project Proponent to conduct monitoring of all grading and trenching activities and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.</p> <p>b) During grading operations, a professional archaeological monitor shall observe the grading operation until such time as monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological</p>	Prior to grading permit issuance	Community Development Department & Public Works Department		

Mitigation Measure	Timing	Verification		
		Department	Signature	Date
monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure CR-2 shall apply.				
<u>CR-2: Treatment Plan.</u> If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Proponent, and the City of Banning Community Development Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is two (2) to five (5) percent of the volume of the cultural deposit). The treatment plan shall require monitoring by the appropriate Native American Tribe(s) during data recovery excavations of archaeological resource(s) of prehistoric origin, and shall require that all recovered artifacts undergo laboratory analysis. At the completion of the laboratory analysis, any recovered archaeological resources shall be processed and curated	During any earth movement activity	Community Development Department		

Mitigation Measure	Timing	Verification		
		Department	Signature	Date
<p>according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American Tribe(s) if that is recommended by the City of Banning. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City of Banning Community Development Department.</p>				
<p><u>CR-3: Paleontological Monitoring.</u> Prior to the issuance of grading permits, the Project Proponent shall implement the following program:</p> <ul style="list-style-type: none"> a) A qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols. b) The qualified paleontologist shall be empowered to temporarily halt or redirect grading activities paleontological resources are discovered. c) In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area. d) The qualified paleontologist shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly removed and the area cleared. 	<p>Prior to grading permit issuance</p>	<p>Community Development Department</p>		

Mitigation Measure	Timing	Verification		
		Department	Signature	Date
<p>e) If the discovery is significant the qualified paleontologist shall notify the Project proponent and the City immediately.</p> <p>f) In consultation with the Project proponent and the City, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.</p>				
<u>Geology and Soils</u>				
<u>GEO-1 Fault Setback Zone.</u> Fault Setback Zone. No human structures for human habitation can be built within this zone; however other land uses are permitted.	During Plan Check process	Community Development Department		
<u>GEO-2 Recommended Fault Setback Zone Boundaries.</u> The Project shall adhere to the recommendations and requirements cited in the RMA Group Report dated April 8, 2014 with regard to Fault Setback Zone Boundaries.	During Plan Check process and during construction activity	Community Development Department and Public Works Department		
<u>GEO-3. Debris and Catch basins.</u> The Project shall adhere to the recommendations and requirements cited in the RMA Group Report dated April 8, 2014 with regard to the design of catch and debris basins for Lot "B" and "C" and design requirements of the City of Banning Engineering and Public Works Department and WQMP report.	During Plan Check process and during construction activity	Community Development Department and Public Works Department		
<u>GEO-4. Fill in Graded Eastern Portion of Site.</u> The existing undocumented fill is not adequate for purposes intended	During permitted grading activity	Public Works Department		

Mitigation Measure	Timing	Verification		
		Department	Signature	Date
and will need to be removed and recompactd.				
<u>GEO-5 General Earthwork and Grading</u> . All Earthwork and grading to be performed in accordance with the 2013 California Building Code and all applicable governmental agency requirements.	During permitted grading activity	Public Works Department and Community Development Department		
<u>Hazards and Hazardous Materials</u>				
<u>HAZ -1 Fuel Modification Zone</u> : Parcels adjacent to Lot "A" shall maintain a Fuel Modification Zone of 70 feet.	Prior to Final Map recordation	Fire Department		
<u>HAZ -2 Hazard Plan</u> : The Applicant shall submit a Hazard Analysis Prior to issuance of Building Permits	Prior to issuance of building permits.	Community Development Department		

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ATTACHMENT 8
Geologic Fault Investigation - Report
Addendum to Geologic Fault Investigation - Letter



GEOTECHNICAL CONSULTANTS

January 14, 2016

RMA Job No.: 13-773-01

Diversified Pacific
10621 Civic Center Drive
Rancho Cucamonga, CA

Attention: Mr. Peter J. Pitassi
Senior Vice President

Subject: Addendum to Geologic Fault Investigation
Additional Information regarding Regional Fault Mapping on Caltech Website
Tentative Tract 36939
Banning, CA

Reference: RMA Group, 2014, Geologic Fault Investigation of Alquist-Priolo Zone, Proposed Residential Development, Tracts 30642 and 32429, North of West Wilson Street between Sunrise and Sunset Avenues, Banning, CA, dated April 8, 2014, Job No. 13-773-01.

Dear Mr. Pitassi:

At a Banning Planning Commission meeting held on January 6, 2016, a question was raised about whether a fault shown passing through site on a regional fault map that is currently available on the California Institute of Technology (Caltech) website has an impact on our 2014 fault investigation.

According to the website (<http://scedc.caltech.edu/significant/index.html>) the online map was derived from the 1994 Fault Activity Map of California prepared by the California Division of Mines and Geology. The newer 2010 version of this map, which supersedes the older map, and the plotted fault location were considered during the performance of our 2014 fault investigation. The fault location as shown on the Fault Activity Map was crossed by Trench T-2 at Station 30 where unfaulted younger and older alluvium was found. It should also be noted that both the 1994 and 2010 Fault Activity Maps contain the following disclaimer:

“This fault map and accompanying text are for use as a guide only and should not be used to replace site-specific evaluations.”

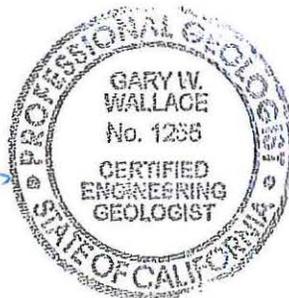
Since the Fault Activity Map of California is to be used only as a guide and the information depicted on the map was already considered during the performance of our site-specific fault investigation, we conclude that the map posted on the Caltech website has no impact on the findings, conclusion and recommendations presented in our 2014 fault investigation report.

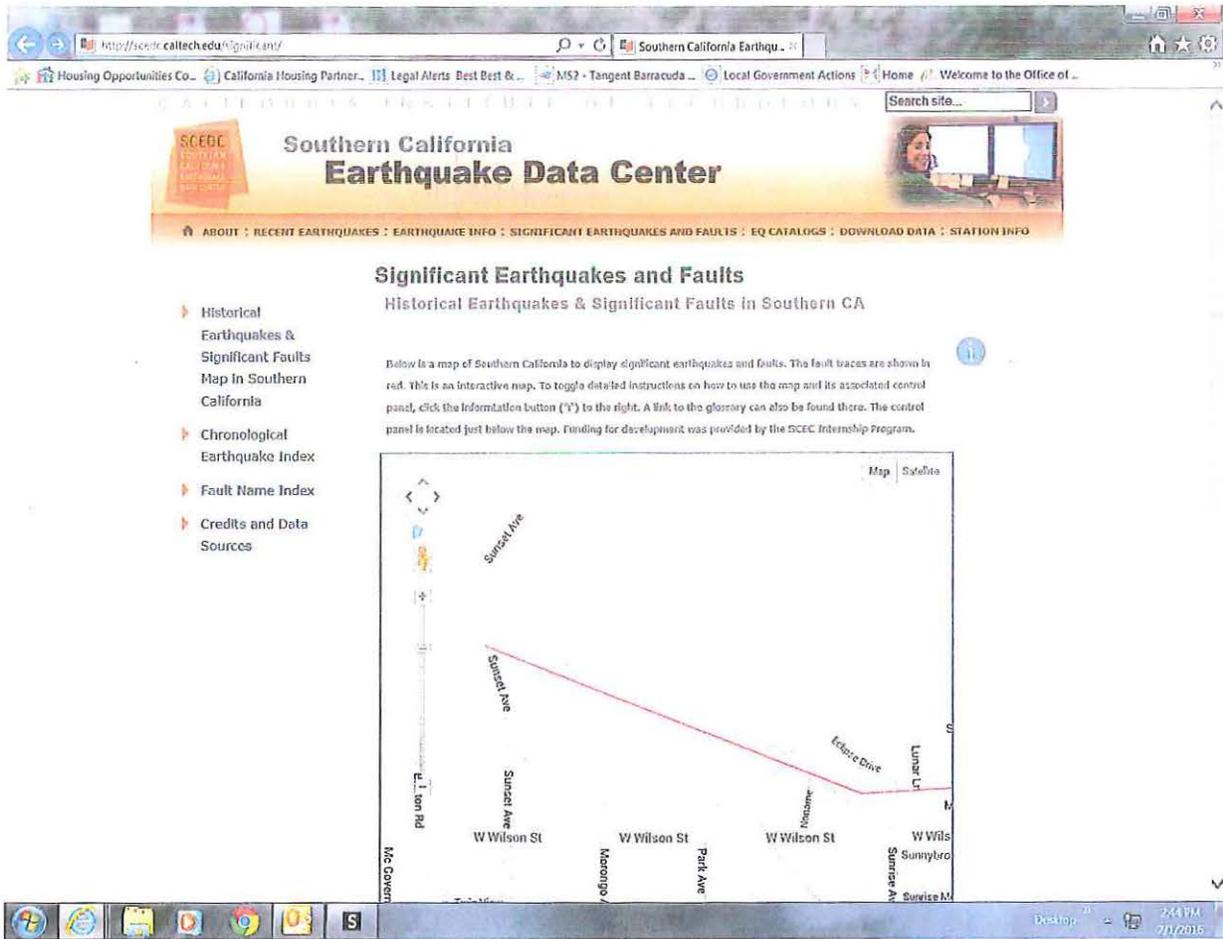
We trust this letter will serve your needs. Please do not hesitate to contact me if any further clarification is needed.

Respectfully,

RMA Group


Gary Wallace, PG | CEG
Vice President
CEG 1255





Screenshot from Caltech webpage [http://scedc/caltech.edu/significant/](http://scedc.caltech.edu/significant/)

Please Note:

An email was sent to Caltech regarding this map and the response is included with this information for clarity.

Brian Guillot

From: ellenyu01@gmail.com on behalf of Ellen Yu <eyu@gps.caltech.edu>
Sent: Monday, February 01, 2016 3:31 PM
To: Brian Guillot
Cc: Margaret Vinci
Subject: Re: City of Banning; Proposed Tentative Tract Map 36939

Mr. Guillot,

Please do not use the SCEDC map for decisions in construction or public policy. The map is there to help our users get a general understanding of the faults in Southern California but for building activities one should use maps from the California Geological Survey.

I am referring you to Margaret Vinci, who works in public outreach who can give you links to these resources.

Regards,

Ellen Yu
SCEDC Manager

On Mon, Feb 1, 2016 at 2:55 PM, <bguillot@ci.banning.ca.us> wrote:

Ms. Yu,

Attached to this email is a screen print from the Caltech website of the mapping of an earthquake fault in the City of Banning that a subdivision of homes is proposed to be constructed. One of our Planning Commissioners who reviewed the project wants an assurance that the fault shown on your web page is the same fault that the Geotechnical Engineer reviewed in their report. I have attached the report for your consideration. Can you confirm that this is the fault addressed in the report? Any information would be appreciated.

Regards,

Brian Guillot

Acting Community Development Director



GEOTECHNICAL CONSULTANTS

GEOLOGIC FAULT INVESTIGATION OF
ALQUIST-PRIOLO ZONE
PROPOSED RESIDENTIAL DEVELOPMENT
TRACTS 30642 AND 32429
NORTH OF WEST WILSON STREET
BETWEEN SUNRISE AND SUNSET AVENUES
BANNING, CA

for

Diversified Pacific
10621 Civic Center Drive
Rancho Cucamonga, CA 91730, CA

April 8, 2014

13-773-01



GEOTECHNICAL CONSULTANTS

April 8, 2014

Diversified Pacific
10621 Civic Center Drive
Rancho Cucamonga, CA 91730

Attention: Mr. Phil Burum
Executive Vice President

Subject: Geologic Fault Investigation of Alquist-Priolo Zone
Proposed Residential Development
Tracts 30642 and 32429
North of West Wilson Street between Sunrise and Sunset Avenues
Banning, CA

Dear Burum:

In accordance with your request, we have performed a geologic investigation of surface fault rupture potential for the portions of Tracts 30642 and 32429 in Banning that are located within a California Alquist-Priolo Earthquake Fault Zone. The results of our investigation are presented in the accompanying report.

We appreciate this opportunity to be of continued service to you. If you have any questions regarding this report, please do not hesitate to contact us at your convenience.

Respectfully submitted,

RMA Group

Gary Wallace, PG | CEG
Vice President - Geology
CEG 1255

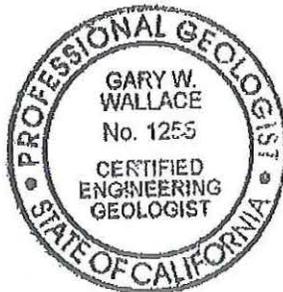


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1.00 INTRODUCTION

1.01 Purpose

The purpose of our investigation was to assess the potential for future surface fault rupture within a State of California Alquist-Priolo Earthquake Fault Zone that crosses through the site. The location of the site, the suspected fault location and boundaries of the Alquist-Priolo Zone are shown on Figure 1.

1.02 Study Area

The study area consisted of an elongate parcel of land in the City of Banning that is bounded by Sunset Avenue on the west, West Wilson Street and Montgomery Creek Channel on the south, and Sunrise Avenue on the east. The north boundary of the study area extends approximately 670 to 920 feet north of West Wilson Street.

The property has been assigned two tract numbers. The eastern portion of the site was previously graded for a residential subdivision and is identified as Tract No. 30642. This tract occupies approximately the eastern third of the study area. The western portion of the site is undeveloped and is identified as Tract No. 32429. It occupies approximately the western two-thirds of the site.

1.03 Scope of the Investigation

Our scope of work consisted of the following elements:

- Review of published maps and reports addressing regional geology, faulting and seismicity.
- Review of a prior geotechnical investigation report for Tract 30642.
- Consultation with a geologist retained by the City of Banning to peer review our study.
- Examination of aerial photographs for the purpose of identifying lineaments that could be attributed to faulting.
- Geologic mapping of the site and nearby area.
- Logging of 5 exploratory trenches excavated with a track mounted excavator.
- Logging of 8 exploratory borings drilled to supplement subsurface data generated from the exploratory trenches.
- Geologic evaluation of the compiled data.
- Preparation of this report presenting our findings, conclusions and recommendations.

Our scope of work did not include a geotechnical investigation of the site, a Phase I environmental site assessment, or compaction testing of backfill placed in the exploratory trenches.

1.04 Planned Usage

It is our understanding that it is proposed to develop the site with two residential subdivisions.

1.05 Summary of Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was signed into law December 22, 1972, and went into effect March 7, 1973. The purpose of the Act is to prohibit the location of most structures for human occupancy across the traces of active faults, thereby mitigating the potential for future surface fault rupture beneath such structures.

The Act defines an active fault as a fault that has had surface displacement within Holocene time, about the last 11,000 years. This definition does not mean that faults lacking evidence for surface displacement within Holocene time are necessarily inactive. A fault may be presumed to be inactive if there is satisfactory geologic evidence that surface displacement has not occurred along the fault during all of Holocene time. However, the evidence necessary to prove inactivity may be difficult to obtain and may not exist at some locations. In addition, the area within 50 feet of active faults is presumed to be underlain by active branches of the faults unless proven otherwise by an appropriate geologic investigation and report.

Initially, faults that showed evidence of surface displacement during Quaternary time (last 1.6 million years) were defined as potential active. An exception was made for Pleistocene faults that were presumed to be inactive based on direct geologic evidence of inactivity during all of Holocene time or longer. Beginning in 1977, evidence of Quaternary surface displacement was no longer used as a criterion for Alquist-Priolo zoning and the term "potentially active fault" was no longer used on Earthquake Fault Zone maps after 1988.

2.00 REGIONAL SETTING AND SITE CONDITIONS

2.01 Geologic Setting

The site is located on the northern fringe of San Gorgonio Pass just south of the San Bernardino Mountains and an abrupt topographic rise known as the Banning Bench.

The San Gorgonio Pass is an elongate east-west trending valley situated between the San Bernardino Mountains and San Jacinto Mountains. This valley is part of the major drainage divide between the Pacific Ocean and Salton Trough. It is filled with multiple generations of alluvial deposits that are mainly derived from the San Bernardino Mountains. The high part of the valley is to the west of the site. From there the valley slopes downward to the east until it merges with the alluvial filled Coachella Valley. To the west the valley merges with older alluvial soils of the Beaumont Plain. San Gorgonio Pass alluvial deposits have been mapped within the site and were encountered in our subsurface investigation.

The San Bernardino Mountains are basically a block that has been uplifted along bounding faults. There are also faults within the mountain range. The majority of the mountain range is underlain by Cretaceous age granitic bedrock. Other rock types within the mountains include metamorphic schists and gneisses, and marine sedimentary deposits. The bedrock units are in places overlain by Quaternary age surficial deposits composed of lake bed, stream channel and alluvial fan deposits.

The Banning Bench is composed primarily of Pleistocene age older alluvial deposits and Plio-Pleistocene age sedimentary units that have been uplifted by faults of the San Gorgonio Pass fault zone. Banning Bench older alluvial deposits were encountered in the trenches excavated in the northern part of the site and in two borings drilled in that portion of the site. These deposits are exposed by a cut slope along the northern property line and by offsite cut slopes to the north of the site. A U. S. Geological Survey report (2006) indicates that the Banning Bench has been uplifted by northwest-southeast compression and that there is east-west trending thrust fault along the southern boundary of the Bench. This is the fault that has been mapped along the northern boundary of the site on regional geologic maps and the State Alquist-Priolo Earthquake Fault Zone Map. The Geological Survey report indicates that uplift of the Banning

Bench occurred during middle to late Pleistocene time perhaps starting 250,000 years ago. Since the Bench has been eroded over the last few thousand years, it appears that uplift may not have continued into Holocene time.

Sedimentary deposits along the north side of the San Gorgonio Pass are folded and cut by north dipping low-angle thrust and wrench faults of the San Gorgonio Pass fault pass fault zone. North of the San Gorgonio Pass is the Banning fault and further to the north is San Bernardino Strand of the San Andreas fault.

Regional geologic conditions near the site are illustrated on Figure 2.

2.02 Tectonic Setting

The dominate tectonic feature in the vicinity of the site is San Gorgonio Pass fault zone, a portion of which traverses along the northern part of the property. As described by the U.S. Geological Survey (2006), the San Gorgonio Pass fault zone has a distinctive zig-zag pattern caused by the repetition of L-shaped wrench and reverse or thrust faults. The San Gorgonio Pass fault zone extends from the Whitewater area, where the Coachella segment of the Banning fault splays into multiple north-dipping thrust sheets, to the Calimesa area where it disappears beneath thick deposits of older alluvium.

Boyd (1971) mapped a northeast-southwest trending hypothetical, concealed fault separating two groundwater storage units, the Banning and Beaumont storage units. Geoscience Support Services Inc. (2011) referred to this hypothetical fault as the Banning Barrier fault. The trace of this postulated feature trends through the southeast portion of the site; however, it has no surface expression and its location and existence is uncertain. The feature is not recognized as a potential surface rupture hazard by land hazard mapping. Boyd (1971) also mapped a northwest-southeast trending hypothetical, concealed fault to separate the Beaumont and Banning Bench groundwater storage units. He shows the southern end of this postulated feature trending through the western portion of the site and terminating against the postulated Banning Barrier fault. Again, this feature has no surface expression, its location and existence is uncertain, and it is not recognized as a potential surface rupture hazard by land hazard mapping. Both of these features were postulated to develop boundaries of groundwater storage units, not potential fault rupture hazards.

Within the San Bernardino Mountains, approximately 6 miles to the northeast of the site, is the San Bernardino strand of the San Andreas fault. Major fault zones in the region are illustrated in Figure 3. The approximate distances to other active faults in the region are listed in Table 1.

2.03 Site Description

The site is located on the north site of San Gorgonio Pass just south of the Banning Bench.

Approximately the eastern third of the site (Tract 30642) was previously grading in preparation for construction of a residential subdivision. Lots were never finish graded, structures will not built, and streets were not paved. At the time of our study the lots were covered by vegetation and were partially eroded. A natural gas transmission pipeline bisects Tract 30642, crossing the tract in a northwest to the southeast direction. The pipeline continues in a northwest to southeast direction north of the Tract 32429.

Approximately the western two-thirds of the site (Tract 32429) was essentially in its native state at the time of our study.

3.00 METHODS OF INVESTIGATION

3.01 Investigation Methods and Limitations

Our investigation consisted of office research, field exploration, review of compiled data, and preparation of this report. It has been performed in a manner consistent with generally accepted geologic principles and practices. The report format generally follows the California State Mine and Geology Board (1996) and California Geological Survey (Bryant and Hart, 2007) suggested outline for geologic fault investigation reports.

Our field investigation was performed in the following sequence:

1. Our initial work consisted of reconnaissance geologic mapping and logging of 4 exploratory trenches. One trench was extended from the northern property line to near the southern boundary of the Alquist-Priolo Zone. Three trenches were excavated in the northern part of the site near the location of the fault shown on the Alquist-Priolo map.
2. A fifth trench (T-5) was added in the northern part of the site to provide additional geologic data and to reduce spacing between trenches.
3. Three trenches (T-2, T-3 and T-4) exposed Banning Bench older alluvium at their north ends. The older alluvium was not faulted in the trenches and appeared to continue as uniform dipping planes deeper into San Geronio Pass. To confirm this observation and to check for deeper faulting, all but the northern ends of these trenches were backfilled and a total of 8 borings were drilled through the backfill along the lines of the trenches. A rapid lateral change between Banning Bench older alluvium and Valley older alluvial deposits and the presence of Valley older alluvium under Banning Bench older alluvium in two borings was interpreted to indicate the presence of a fault.
4. Three trenches (T-2, T-3 and T-4) were then deepened in an attempt to expose the fault. The deeper trenching provided additional structural data that allowed a refined interpretation of subsurface conditions, but the fault encountered in the borings was below the reach of the excavator used to deepen the trenches.
5. Additional geologic field mapping was performed after the completion of the trench and boring logging.

The following physical constrains hindered our field investigation:

1. The eastern portion of the site was previously graded, making it impractical the trench areas where thick fills were placed. The grading also removed surficial soils that might have been useful for age dating alluvial deposits in areas of cut. The cuts were beneficial in that they created artificial exposures of natural soils and aided in deeper exploration of soils.
2. A natural gas transmission pipeline crosses Tract 30642 thereby precluding subsurface exploration in some areas and hindered the selection of trench locations.
3. A concrete lined flood control channel along the southern boundary of Tract 32429 interfered with excavation of a continuous trench across the entire width of the Alquist-Priolo Zone within the site.
4. Several canyons drain off the Banning Bench into the site. Thick, recent alluvial deposits have accumulated at the mouths of these canyons. These deposits hindered the selection of trench locations where pre-Holocene age deposits could be reached with conventional trenching equipment.

3.02 Review of Published Literature

A fault was mapped at the base of the Banning Bench as early as the 1950s by Allen (1957). The fault has been depicted on numerous other regional geologic maps since then including Bloyd (1971), Matti, Morton and Cox (1992), Treiman (1994), Dibblee (2003), Rewis (2006), Yule (2009), Jennings (2010), Geoscience (2011) and Ramzan (2012)

Matti, Morton and Cox (1992) provide the following description of the San Gorgonio Pass fault zone:

“Faults of the San Gorgonio Pass zone are all late Quaternary in age. Some faults in the complex may have been active only in late Pleistocene time; others have been active throughout the late Pleistocene and Holocene and have generated ground ruptures as recently as a few thousand years ago (J.C. Tinsley and J.C. Matti, unpubl. trench data, 1986). Faults with confirmed Holocene displacements have been identified only in the eastern part of the San Gorgonio Pass zone between Beaumont and Whitewater; faults in the western part of the zone between Beaumont and Calimesa appear to have been active only in late Pleistocene time (J.C. Matti and D.M. Morton, unpubl. data). However, future ground ruptures throughout the entire extent of the San Gorgonio Pass fault zone cannot be ruled out.”

Treiman (1994) provides the following description of the San Gorgonio Pass fault zone at the Banning Bench:

“The uplift of the Banning Bench provides dramatic evidence of faulting along the San Gorgonio Pass Fault ZoneOlder alluvial fans on the Banning Bench and in the town of Banning...would appear to be about 50,000 to 80,000 years old...would appear to be offset vertically on the order of 70-80m, based on map interpretation. However, if there has been any recent displacement, at least along the western part of this scarp, it has been obscured by subsequent alleviation and no fresh features are visible in the photos or the field...Uplift of late-Pleistocene deposits (Qof) suggest a vertical slip-rate of 0.9-1.6mm/yr.”

Ramzan (2012) performed extensive radiocarbon dating of soils collected from trenches that crossed the San Gorgonio Pass fault zone about 9 miles east of the site and concluded that the most recent movement along the fault occurred 581 to 791 years ago. He also summarized the results of a prior study by Yule on an adjoining property that indicated that most recent movement along the fault occurred 500 to 710 years ago. He also reported that the most recent movement along the fault in Millard Canyon, about 6 miles east of the site, was less than 1,200 years ago. The locations of the Ramzan and Yule studies are illustrated in Figure 3.

Earthquake Fault Zone Mapping

The Alquist-Priolo Earthquake Fault Zone that passes through the site was established by the California Division of Mines and Geology in 1995. Nearly all of Tract 32429 and all but the southern portion of Tract 30642 are located within the Alquist-Priolo Zone. The boundaries of the Alquist-Priolo Zone are shown in Figure 1.

Historic Seismicity

Five historic strong earthquakes have been epicentered within about 20 miles of the site. The most recent events were the magnitude 5.6 North Palm Springs earthquake in 1986, the magnitude 7.3 Landers earthquake in 1992 and the magnitude 6.5 Big Bear earthquake in 1992. Large earthquakes also occurred in the San Jacinto region in 1899 and near Hemet in 1918. It is estimated that the San Jacinto earthquake had a magnitude of 6.7 and that the Hemet earthquake had a magnitude of 6.8. However, since the San Jacinto and Hemet earthquakes occurred prior to the development of seismic monitoring networks, their locations and magnitudes are only approximate. None of these earthquakes were epicentered along the San Gorgonio Pass fault zone. These and other strong earthquakes that have occurred within the region in historic time and their approximate epicentral distances are summarized in Table 2.

A map of seismicity in the San Gorgonio Pass area from 1984 to 1992 presented in Fault Evaluation Report FER-235

(Treiman, 1994) indicates that there was little seismic activity in the Banning Bench area during that time period (Figure 4).

3.03 Review of Consultant Fault Investigation Reports

City of Banning

The City of Banning Planning, Public Works and Engineering Departments were contacted by telephone to determine if the City had any geologic fault investigation reports on file for the site or the adjoining housing development to the east. We were informed that there were no such reports on file.

Planning documents prepared for the proposed residential development at the site were provided by the City. The documents, which were prepared in 2003 and 2005, did not identify the presence of the Alquist-Priolo Zone within the site and did not include geologic analysis of the potential for future surface fault rupture within the site. Aerial photographs indicate that the eastern part of the site, Tract 30642, was being graded in 2006 and that rough grading of the tract had been completed sometime before 2009. The aerial photographs show that the western part of the site, Tract 32429, was not graded.

Aerial photographs also show that the tract to the east of the site had been graded and partially built in January of 1995. This grading and construction occurred prior to the effective date of June 1, 1995 for the Alquist-Priolo Map of the Beaumont Quadrangle, the quadrangle in which the tract is located.

County of Riverside

An online search was made for geologic fault investigation reports for the site and adjoining tract on the Riverside County Land Information System database. No reports were identified for the site and adjoining area.

California Geological Survey

The California Geological Survey was contacted by telephone to determine if there were any geologic fault investigation reports on file with the State for either the site or the adjoining tract to the east. We were told that there were no such reports in their files.

California Geological Survey CD 2003-02 was reviewed for prior fault investigation reports within or near the site. The CD contains no reports for the site or adjoining properties. However, the CD does contain copies of four consultant reports that were prepared for proposed developments along the San Geronio Pass fault zone approximately 5 miles east of the site. The reports were prepared by Leighton and Associates, Clopine Geological Services and Gary S. Rasmussen and Associates.

Leighton and Associates prepared a geotechnical report for environment impact report purposes in 1988. The report identified the presence of the San Geronio Pass fault zone within their study area and recommended that a geologic investigation of the fault zone be performed. A subsurface geologic investigation was performed later that year by Clopine Geological Services. The investigation encountered an active thrust fault that dipped 20 to 27 degrees to the north and cut through Holocene age alluvial deposits. The Clopine report recommended a 60-foot wide fault setback zone. Gary S. Rasmussen performed a fault investigation the adjoining parcel to the west in 1994. The investigation encountered a northwest striking thrust fault with an apparent vertical offset of 3 feet through Holocene age alluvial soils. The report recommended a 50-foot wide fault setback zone.

A proposed water tank site was investigated by Clopine Geological Services in 1989. The investigation encountered an active thrust fault that dipped 18 to 25 degrees to the north and cut through Holocene age alluvial deposits. The Clopine report recommended a fault setback zone ranging from 150 to 200 feet in width.

The approximate locations of the consultant reports discussed above are presented on Figure 3.

Client Provided Geotechnical Report

At the start of our fault investigation of the site, we were provided with a copy of a prior geotechnical report for the eastern third of the site (Tract 30642) by our client, Diversified Pacific. The report was prepared by Lakeshore Engineering in 1988. This report predated the establishment of the Alquist-Priolo Zone which crosses the site. The report contains the logs of 13 trenches that were excavated for geotechnical analysis of the site. The trenches ranged from 3 ½ to 14 feet deep and 20 to 35 feet long. The report and logs indicate that the trenches encountered alluvial silty sand with some gravel. The report indicates that at the time it was prepared, the nearest Alquist-Priolo Zone was located about 3 to 4 miles northeast of the site along the Banning fault. The report stated that a segment of the San Geronio Pass fault zone is located just north of the tract, but indicated that "evidence of young movement has yet to be recognized on this segment of the fault". The report did not identify any faults within the site and subsurface investigation for potential faulting was not undertaken.

3.04 Interpretation of Aerial Photography

Aerial photographs from multiple sources were examined for lineaments that could be attributed to faulting or other geologic processes, and to determine historic land uses. The aerial photographs included digital images, hard copies, stereoscopic black-and-white and color prints, and non-stereoscopic black-and-white and color images.

Aerial photographs show that in 1948 a citrus orchard may have been planted in the western part of the site north of Montgomery Creek Channel. Abandoned concrete irrigation pipes encountered during our field investigation of this portion of the site may be a further indication of such an orchard. However, the suspected orchard was no longer present in later aerial photographs reviewed for this study. It appears that the area north of Montgomery Creek Channel was farmed with grass or grain crops up to approximately 1974. It also appears that Montgomery Creek Channel was concrete lined sometime in the 1980s. The subdivision to the east of the site had been graded and partially built in 1995. The eastern side of the site (Tract 30642) was being graded in 2006. Water tanks to the north of the site were built in the 1990s. The natural gas pipeline that passes through the site apparently dates back to the 1950s.

Northwest-southeast trending vegetation lineaments were observed on several aerial photographs. The lineaments appeared to be related to former drainage paths of Montgomery Creek prior to its current channelization. This interpretation was confirmed in Trenches T-2 and T-3 which encountered Montgomery Creek alluvium at the south end of each trench.

Faint scalloped topographic patterns were noted north of Montgomery Creek. They appeared to be related to deposition of alluvial outwash from Banning Bench drainage courses. In the field the lineaments were observed to be the flanks and distal portions of small alluvial fans.

The lineaments discussed above are illustrated on the accompanying Aerial Photograph Lineament Map (Figure 5).

3.05 Geologic Mapping

Prior grading of Tract 30642 created a cut slopes along the northern property line and along the eastern property line in the northeast corner of the site. The majority of the cut slopes exposed younger alluvium that originated as outwash off the Banning Bench. These deposits were found to consist of massive silty sand with gravel and cobbles. The western end of the cut slope along the northern property line also exposed Banning Bench older alluvium composed of silty sand with decomposed cobbles and boulders. A paleosol was found to cap a portion of the older alluvium at the west end of the cut slope. The cut slope along the northern property line also exposed two areas of fill. Other cut slopes within the previously graded tract in the eastern portion of the site exposed massive younger alluvium that was largely covered with slough and vegetation. Slopes in the middle to southern portion of the previously graded tract appeared to consist of fill derived from younger alluvial soils and in many cases were indistinguishable from massive alluvium.

Younger alluvial soils were exposed in the central and western portions of the site. The older Banning Bench alluvium was not exposed within this portion of the site, but was exposed by cut slopes offsite to the north. Soils exposed in the offsite cut slopes were massive.

Offset soil layers, soil fractures or other indications of faulting were not exposed in the onsite or offsite cut slopes, or in natural exposures.

Results of field geologic mapping are presented on Figures 6 and 7.

3.06 Subsurface Investigation

Our subsurface investigation consisted of the excavation and logging of 5 exploratory trenches and the drilling, sampling and logging of 8 exploratory borings.

The trenches were excavated by Penhall Company, a subcontractor to Clark Grading Inc. (Contractor License No. 426257) who was retained by Diversified Pacific. Prior to excavation, the trench locations were marked and Clark Grading notified Underground Service Alert and Cal/OSHA. Excavation was performed under a Cal/OSHA Annual Excavation permit issued to Clark Grading. Side walls of the trenches were benched in approximate 4-foot by 4-foot steps with a bottom bench width of approximately 8 feet. Upon completion of logging all but the north ends of Trenches T-2, T-3 and T-4 were backfilled by Clark Grading, Inc. The backfill placed in the trenches was not compacted. Trench walls were cleaned, logged and photographed by the undersigned geologist. Trenches were also examined by RMA Group geologist Ken Dowell, RMA Geoscience geologist Mark Swiatek and Mark Doerschlag, a geologist retained by the City of Banning. All of these geologists are California Certified Engineering Geologists. Graphical logs were prepared at a scale of one inch equals five feet. The trenches were photographed using a 6 megapixel digital camera. Individual photographs of trench segments were stitched together. Keystoning of the photographs occurred during the stitching process. This was not corrected because individual photographs could be examined and areas of interest were photographed in greater detail. Logs of trenches are presented in Appendix A and photographs of the trenches are presented in Appendix C.

Borings were drilled and backfilled by 2R Drilling (C57 Contract License No. 709029). Prior to drilling, boring locations were marked and RMA Group notified Underground Service Alert. Borings were logged by the undersigned geologist. Logs of borings are presented in Appendix B.

Geologic Units

Our mapping, trenches and borings encountered 5 basic geologic units. From youngest to oldest these units consist of the following

- Artificial fill (af)

Artificial fill was placed in the eastern part of the site during prior grading of Tract 30642. Details of the placement and compaction of the fill were not available. Consequently the extent and thickness of the fills are unknown. Based on field observations, it appears that the fill is composed of soils derived from excavations made into Banning Bench Outwash younger alluvial deposits and that fill was primarily placed in the central and southern sections of the tract.

Artificial fill was also mapped in two locations along the slopes that border the northern side of Tract 30642 and offsite to the north.

- Montgomery Creek Younger Alluvium (Qal_{YC})

Montgomery Creek is a fairly long and broad canyon on the west side of the Banning Bench. Runoff from the canyon empties into San Geronio Pass northwest of the site creating an alluvial fan. A portion of this fan extends into the western portion of the site and has resulted in the deposition of coarse grained alluvial soils composed of sands, gravels, cobbles and silty sands. Regional geologic mapping, the absence of significant soil profile development, absence of cementation, little cobble decomposition, and geomorphic position indicates the soil is Holocene in age.

- Banning Bench Outwash Younger Alluvium (Qal_{BB})

The Banning Bench Outwash younger alluvium consists primarily of reddish brown silty sand that contains widely scattered, randomly oriented, subangular to subrounded gravel and some cobbles. Rock clasts show little weathering. These soils are essentially massive (poorly sorted to essentially unsorted) with few stone lines. These features indicate rapid deposition of soils during flood events and/or mudflows. The soils are fairly porous in many areas. The soil profile at the top of the unit is poorly developed. Some translocated clays are present at the base of the unit where underlain by Banning Bench older alluvium. Based on stratigraphic position, all but a small upper portion of this unit is older than the Montgomery Creek alluvium. Minimal soil profile development, absence of cementation and little cobble decomposition indicates the soil is Holocene in age.

- Valley Older Alluvium (Qoal_V)

Valley older alluvium was encountered in borings drilled during this investigation. These soils consist primarily of reddish brown, dark reddish brown and dusty red silty sands and are differentiated from younger alluvial soils by their clay content, greater density and rubification to a deeper red color. Based on their stratigraphic position, regional age dating and rubification, it appears these soils are Pleistocene in age and younger than the Banning Bench older alluvium. The Valley older alluvium is older than both the Banning Bench Outwash younger alluvium and the Montgomery Creek younger alluvium.

- Banning Bench Older Alluvium (Qoal_{BB})

Banning Bench Older alluvium was exposed at the north ends of Trenches T-2, T-3 and T-4. It was also

exposed by a cut slope in the northeast corner of Tract 30642 and by offsite cut slopes to the north. Two stratigraphic units were exposed in trenches: a yellowish brown silty sand with gravel and scattered cobbles underlain by jumbled cobbles and boulders in a matrix of yellowish brown silty sand. The bedding contact between these two units dips approximately 20 to 30 degrees to the south. The inability to follow this unit at depth in borings and the opposite dip direction of the contact between the Banning Bench older alluvium and Valley older alluvium in Borings B-4 and B-6 leads to the interpretation that a fault is present in the subsurface. Many cobbles and boulders in this unit are highly decomposed indicating the unit is Pleistocene in age, which is in agreement with regional geologic maps. Treiman (1994) estimates older alluvial fans on the Banning Bench are about 50,000 to 80,000 years old confirming that the Banning Bench older alluvium is Pleistocene in age.

Summary of Cut Slope and Trench Logs

- Cut Slope CS-1

A slot eroded through a 16-foot high cut slope in the northeastern part of the site was examined and logged. It exposed massive Banning Bench Outwash younger alluvium consisting of massive, reddish brown silty sand with scattered gravel and cobbles. No faults, fracture zones or other evidence of faulting was exposed in the eroded slot or other adjacent parts of the cut slope (Figure 7).

- Fault Trench T-1

Fault Trench T-1 was excavated in the northeast part of the site through an area of cut and a small desilting basin. Total length of the trench was 238 feet and its depth ranged from 10 to 12 feet. The trench exposed artificial fill resting on Banning Bench Outwash younger alluvium. The fill consisted of brown silty sand that locally contained pieces of man-made debris. The Banning Bench Outwash alluvium consisted of massive, reddish brown silty sand with scattered gravel and cobbles. Older alluvial deposits were not exposed by the trench. No faults, fracture zones, or other evidence of faulting was exposed by the trench.

- Fault Trench T-2

Fault Trench T-2 was excavated in the central part of the site. It was extended to nearly the southern boundary of the Alquist-Priolo Zone within the site. The total length of the trench was 518 feet and its depth ranged from about 10 to 18 feet.

The northern end of the trench exposed Banning Bench Outwash alluvium composed primarily of massive, reddish brown silty sand with scattered gravel and cobbles resting on Banning Bench older alluvium composed of a yellowish brown silty with gravel and scattered cobbles underlain by jumbled cobbles and boulders in a matrix of yellowish brown silty sand. A slight soil development profile was present at the top of the Banning Bench Outwash alluvium and translocated clays were present at the base of the younger alluvium, just above its contact with the underlying Banning Bench older alluvium. A paleosol composed of red sandy clay was exposed above the Banning Bench older alluvium between Stations 54 and 71.

The central part of the trench exposed massive Banning Bench older alluvium. Underlying older alluvial units were not exposed.

The southern end of the trench exposed Montgomery Creek younger alluvium composed of channelized layers of silty sand and gravelly sands with cobbles resting on Banning Bench younger alluvium. A thin layer of recent Banning Bench younger alluvium composed of brown silty sand covered the Montgomery Creek alluvium.

No faults, fracture zones, or other evidence of faulting was exposed by the trench.

- Fault Trench T-3

Fault Trench T-3 was excavated in the western part of the site. The total length of the trench was 215 feet and its depth ranged from 11 to 18 feet.

The northern end of the trench exposed Banning Bench Outwash alluvium composed primarily of massive, reddish brown silty sand with scattered gravel and cobbles resting on Banning Bench older alluvium composed of a yellowish brown silty with gravel and scattered cobbles underlain by jumbled cobbles and boulders in a matrix of yellowish brown silty sand. Translocated clays were present at the base of the younger alluvium, just above its contact with the underlying Banning Bench older alluvium.

The central part of the trench exposed massive Banning Bench younger alluvium. Underlying older alluvial units were not exposed.

The southern end of the trench exposed Montgomery Creek younger alluvium composed of channelized layers of silty sand and gravelly sands with cobbles resting on Banning Bench younger alluvium.

No faults, fracture zones, or other evidence of faulting was exposed by the trench.

- Fault Trench T-4

Trench T-4 was excavated just west of Tract 30642 in an area that had not been previously graded. The total length of the trench was 90 feet and its depth ranged from 11 to 17 feet.

The trench exposed Banning Bench Outwash alluvium composed primarily of massive, reddish brown silty sand with scattered gravel and cobbles resting on Banning Bench older alluvium composed of composed of a yellowish brown silty with gravel and scattered cobbles underlain by jumbled cobbles and boulders in a matrix of yellowish brown silty sand. Translocated clays were present at the base of the younger alluvium, just above its contact with the underlying Banning Bench older alluvium. A paleosol composed of red sandy clay was exposed above the Banning Bench older alluvium between Stations 38 and 51.

- Fault Trench T-5

Trench T-5 was excavated within a graded pad between Trenches T-1 and T-4. The total length of the trench was 34 feet and it extended to a depth of 8 feet. It exposed Banning Bench Outwash younger alluvium composed of massive, reddish brown silty sand with scattered gravel and cobbles. The upper foot of the soil appeared compacted from prior grading. Older alluvial deposits were not exposed by the trench.

No faults, fracture zones, or other evidence of faulting was exposed by the trench.

Summary of Boring Logs

Borings were drilled after the initial logging and partial backfilling of Trenches T-2, T-3 and T-4. The purpose of the borings was to determine if the Banning Bench older alluvium encountered at the north ends of the trenches continued at a relatively uniform gradient below more recent alluvial deposits or if the older alluvium might be faulted at depths greater than the bottoms of these trenches. Borings were drilled through trench backfill. The northern ends of the trenches were not backfilled to allow visual comparison of soil samples retrieved from the borings and soils exposed by the trenches, and to align the borings along the centerlines of the trenches.

Three borings were drilled along Trench T-4 at Stations 50, 62.5 and 75. The borings encountered trench backfill, younger alluvium and older Valley alluvium typically characterized by a reddish brown color. Banning Bench older alluvium was not encountered. Boring depths ranged from 31.5 to 39.5 feet deep.

Four borings were drilled along Trench T-2 at Stations 50, 60, 65 and 70. Two borings (B-4 and B-6) encountered trench backfill, Banning Bench older alluvium and older Valley alluvium. The older Valley alluvium was found to underlie the Banning Bench older alluvium and the contact between the two units is interpreted to be a fault. Cross sectional analysis indicates that the fault dips approximately 15 to 20 degrees to the north. The other two borings encountered trench backfill, a paleosol, and Valley older alluvium, but did not encounter the Banning Bench older alluvium. Boring depths ranged from 31.5 to 41.5 feet deep.

One boring was drilled along Trench T-3 at Station 50. The boring encountered trench backfill, younger alluvium and Valley older alluvium, but did not encounter Banning Bench older alluvium. The depth of the boring was 35 feet.

Surveying

Deepened portions of Trenches T-2, T-3 and T-4 were surveyed by Tuttle Engineering (Appendix D). At the direction of the client, other trench locations were not surveyed.

Trench Backfill

Exploratory trenches were backfill with a front end loader by Clark Grading, Inc. At the direction of the client, Diversified Pacific Development, the backfill was loosely placed and was not compacted. At the time this report was prepared the northern ends of Trenches T-2, T-3 and T-4 had not yet been backfilled.

3.07 Age Dating Techniques

Qualitative estimates of the ages of soils encountered during this study were made by evaluating in situ weathering of rock clasts, soil profile development, rubification of soils, geomorphic position and published data. Materials suitable for radiocarbon age dating were not encountered. Estimated ages of soil units are described in Section 3.06 of this report.

4.00 CONCLUSIONS

4.01 Fault Location

Trenches excavated for this study did not expose offset soils, shear zones, fractures, planes of weakness, slickensides or other features indicative of faulting. However, borings drilled along the alignment of Trench T-2 did encounter evidence of faulting which consisted of an abrupt lateral change from Banning Bench older alluvium to Valley older alluvium and in two borings (B-4 and B-6) Banning Bench older alluvium was found to overly relative younger Valley older alluvium at a depth of about 25 feet. Cross sectional analysis indicates that this fault dips about 15 to 20 degrees to the north (see Cross Section BB). The southernmost extent of the fault is estimated to be at approximately Station 64 of Trench T-2. Overlying younger alluvium (Banning Bench Outwash) was not disturbed indicating that rate of alluvial deposition is greater than the rate of uplift along the fault, fault inactivity since the younger alluvium was deposited or that faulting within the younger alluvium was not visible.

Borings drilled along of Trenches T-3 and T-4 also revealed a rapid lateral change from Banning Bench older alluvium to Valley older alluvium (see Cross Sections AA and CC). Based on data generated along the alignment of Trench T-2, it is believed that the fault identified along Trench T-2 is present at a depth just north of the borings drilled along Trenches T-3 and T-4 at approximately Stations 47 and 43, respectively. Borings along these trenches could not be extended further north because those portions of the trenches had not been backfilled at the time the borings were drilled.

Trench T-1 in the northeast corner of the site encountered approximately $\frac{1}{2}$ to $2\frac{1}{2}$ feet of fill resting on up to 10 feet of younger alluvium (Banning Bench Outwash). The trench was excavated in an area that was cut during grading of Tract 30642. As a result, the bottom of Trench T-1 was excavated to depths of approximately 8 to 21 feet below the original, natural ground surface (see Cross Section EE). Banning Bench older alluvium and Valley older alluvium was not encountered in Trench T-1. An eroded slot in a cut slope north of the Trench T-1 (CS-1) also exposed only younger alluvium (Banning Bench outwash). The bottom of the slot was approximately 6 to 17 feet below the original, natural ground surface. In addition, cut slopes along the northern boundary of Tract 30642 extending approximately 700 feet to the west of CS-1 and 125 feet to the east CS-1 exposed younger Banning Bench outwash alluvium, but no older alluvium. The height of these cut slopes ranged from 14 to 23 feet. The cut slopes did not expose offset soils, shear zones, fractures, planes of weakness, slickensides or other features indicative of faulting. Based on these observations and offsite breaks in slope indicating the contact of younger and older alluvial deposits, it is concluded that the San Gorgonio Pass fault is most likely just north of this portion of the site.

Trench T-5, which was extended to a depth of 8 feet, also encountered younger alluvium (Banning Bench Outwash). The bottom of the trench was approximately 14 to 16 feet below the original, natural ground surface (see Cross Section DD). A 13-foot high cut slope was previously excavated directly north of Trench T-5. The trench and cut slope did not expose offset soils, shear zones, fractures, planes of weakness, slickensides or other features indicative of faulting. Based on the data generated from adjacent Trenches T-1 and T-4, also well as the distance to the base of the Banning Bench at this location, it is concluded that the San Gorgonio Pass fault is most likely north of the existing building pad in the area near the northern property line of the tract in this portion of the site.

Surveying of exact fault locations was not possible because faulting was not exposed in trenches. Survey data of trench locations, boring locations and cross sectional analyses were used to estimate fault locations at depth. The fault location between trench locations was extrapolated using trench data and surface geomorphology. The interpretive fault location is presented on the accompanying Site Geologic Map (Figures 6 and 7).

4.02 Potential for Future Fault Displacement within the Site

The U.S. Geological Western Earth Surface Processes Team (2006) reports that Holocene fault displacement has been identified along the eastern portion of the San Gorgonio Pass fault zone between Beaumont and Whitewater. The site is in this segment of the fault zone. Between Beaumont and Calimesa, it appears that the fault zone has been active only in

late Pleistocene time. However, the Team cautions “future ground ruptures throughout the entire extent of the San Gorgonio Pass fault zone cannot be ruled out”. The fault revealed by Borings B-4 and B-6 may be overlain by a Pleistocene age paleosol, however it is uncertain whether or not the paleosol may have experienced some offset, as its contact with the underlying fault could not be reached with the equipment used to excavate the trenches. Given the cautionary warning of the U.S. Geological Western Earth Surface Processes Team, the presence of a large geomorphic feature (the Banning Bench) adjoining the site, and the occurrence of Holocene surface fault rupture along the San Gorgonio Pass fault zone to the east as documented by Clopine (1988, 1989), Rasmussen (1994), Yule (2003, 2009) and Razman (2012), it is our opinion that the onsite fault should be considered active unless disproved by more extensive study.

Tamiyama and Watanabe (2001) report that fault rupture along reverse faults will propagate through sandy soils to the ground surface if vertical fault movement in the underlying medium exceeds 3 to 7 percent of the alluvial thickness and the alluvial thickness is less than approximately 900 feet. The alluvial thickness overlying the fault at Trench T-2 is approximately 22 feet. Therefore, using the model of Tamiyama and Watanabe, vertical fault movements greater than about 8 to 18 inches would likely result in surface fault displacement at the site. We were not able to estimate vertical fault movements at the site due to the depth of fault; however, Treiman (1994) estimated a vertical slip rate of 0.9 to 1.6mm/yr at or near the Banning Bench. Ramzan (2012) reported most recent movement along the San Gorgonio Pass fault zone east of the site may have occurred as recently as 500 years ago. Using these data, potential future vertical movements along the fault can be estimated to range from approximately 18 to 31 inches in a single event. This appears to be consistent with approximately 3 feet of vertical displacement reported by Gary Rasmussen along the San Gorgonio Pass fault approximately 5 miles east of the site and an estimated 3 to 5 feet of vertical displacement reported by Ramzan along the San Gorgonio Pass fault approximately 9 miles east of the site. Therefore, it is considered possible that the Tamiyama and Watanabe threshold could be exceeded at the site, resulting in surface fault displacement.

5.00 RECOMMENDATIONS

5.01 Recommended Fault Setback Zone

Based on the results of this investigation and regional geologic studies as discussed above, it is our opinion that a segment of the San Gorgonio Pass fault passes through the northern part of the Tract 32429 and the northwest portion of Tract 30642, and that in the northeast part of Tract 30642 it closely parallels the northern boundary of the tract. Considering all the data generated during this study, it is our opinion that the fault it should be considered active, unless disproven by more extensive study. Thus we recommend establishment of a fault setback zone. Based on the requirements of the Alquist-Priolo Act, no human habitation structures can be built within this zone, however other land uses are permitted.

Because the fault encountered during this study did not extend to the ground surface, the potential rupture surface of the fault must be projected from the fault through overlying alluvial soils to the ground surface. The phenomenon of earthquake fault rupture propagating through overlying soils is not well understood and has been the subject of several scientific studies including Cole and Poul (1984), Bray and others (1994), Tamiyama and Watanabe (2001), and Lee and others (2004 and 2005).

Lee and others (2004) developed a method to predict fault rupture propagation through and an overlying sandy soil deposit that considers the dip of the fault, soil density and the thickness (H) of the soil deposit. From this, a width (W) from the subsurface fault location to its expected rupture location at the ground surface is determined. The paper evaluated both normal and reverse faults. Extrapolating their data to a low angle thrust fault with a dip of approximately 15 to 20 degrees yields the ratio $W/H \approx 2.0$. We have used this ratio and establish and anticipated future fault rupture location. The southerly limit of our recommended fault setback zone is based on a 50-foot setback extending south of the expected rupture location. The recommended northerly limit of the recommended fault zone is the northern property line of the two tracts, as it appears there is not enough useable land in that area to warrant a more detailed evaluation of a

setback zone north of the fault. The recommended fault setback locations based on existing site conditions are presented in the table below.

Recommended Fault Setback Zone Boundaries

Tract Number	North Boundary	South Boundary
32429	North property line	130' south of north property line along lot line of Lots 1 & 2
	North property line	130' south of north property line along lot line of Lots 3 & 4
	North property line	130' south of north property line along lot line of Lots 5 & 6
	North property line	155' south of north property line along lot line of Lots 7 & 8
	North property line	145' south of north property line along lot line of Lots 9 & 10
	North property line	135' south of north property line along lot line of Lots 11 & 12
	North property line	135' south of north property line along lot line of Lots 13 & 14
	North property line	155' south of north property line along lot line of Lots 15 & 16
32429/30642	North property line	180' south of north property line along lot line of Lots 17 & 21
30642	North property line	185' south of north property line along lot line of Lots 21 & 22
	North property line	100' south of north property line along lot line of Lots 23 & 25
	North property line	65' south of north property line along lot line of Lots 26 & 27
	North property line	50' south of the intersection of the north property line and Lots 28 & 29 measured perpendicular to the north property line
	North property line	50' south of the intersection of the north property line and Lots 32 & 33 measured perpendicular to the north property line

It may be possible to reduce the width of the setback zone south of the fault by lowering grades, thereby reducing the "H" value of Lee and others (2004).

5.02 Other Risks and Additional Mitigation Measures

Ground Shaking

The site is expected to experience strong ground shaking from regional seismic activity. Ground shaking should be mitigated by implementation of building code standards and any other site specific measures that may be developed during future geotechnical studies of the site.

Landsliding

Due to the relatively low gradient of the site, the massive nature of subsurface soils, the strength of these soils and the absence of known landslides within or immediately adjacent to the site, the potential for landsliding at the site is judged to be low. This assumes that any slopes created during development of the site are properly designed and constructed. The potential for landsliding and slope stability should be further evaluated during future geotechnical site studies.

Liquefaction

The site is not situated within a known liquefaction hazard area and borings drilled to a maximum depth of 41½ feet during this study did not encounter groundwater. Consequently, the potential for soil liquefaction at the site appears unlikely. This should be further evaluated during future geotechnical studies.

Seismically Induced Flooding

Two steel water storage reservoirs are located on a hill north of the western part of the site. A canyon below the tanks drains directly towards proposed Lots 3 and 4 in Tract 32429. Consequently, the potential for seismically induced flooding originating from these reservoirs should be evaluated and appropriate mitigation measures should be implemented as determined to be necessary.

Alluvial Removals

Younger alluvium underlying the site is porous and might be subject to consolidation under loads. Due to the observed porosity, younger alluvial soils might also be prone to hydrocollapse. The potential for settlement and hydrocollapse will need to be evaluated during geotechnical studies of the site.

Mudflow – Debris Flow Potential

Several canyons direct runoff from the Banning Bench directly onto the site. Younger alluvial soils are massive and very poorly sorted indicating rapid deposit and the possibility of prior deposition of mudflows on the site. The potential for mudflows and debris flows impacting the site should be evaluated during future geotechnical studies. The area of greatest concern is the canyon north of Lots 23 and 26 of Tract 30642. Also of concern are the canyons north of proposed Lots 3, 4, 11, 12, 15, 16 and 17 of Tract 32429. The need for mitigation measures, such as debris basins or catchment areas, should be evaluated during planning and implemented during development of the tracts as needed.

Explosive Hazards

A natural gas transmission pipeline crosses the fault indentified during this study and could cross offsite faults. The potential for pipeline rupture as a result of surficial movement along faults during a local seismic event should be considered during planning and development of the site. Integrity of the pipeline as a whole should also be evaluated.

5.03 Plan Review and In-Grading Geologic Mapping

This report was prepared prior to preparation of grading plans for Tract 32429 or evaluation of existing pads within Tract 30624 with respect to surface fault rupture potential. RMA Group should be consulted during the preparation of development plans to verify the recommendations of this report are implemented and to develop additional recommendations, as needed.

Geologic mapping should be performed during the course of grading in order to verify the findings of this report.

5.04 Trench Backfills

Trench backfills will be prone to settlement and are not suitable for support of future structures or improvements. Consequently, all backfill placed in the trenches will need to be re-excavated down to competent native soils and replaced as compacted fill during grading of the property.

The client, Diversified Pacific Development, did not retain a land surveyor to document the locations of Trenches T-1
Tract 30642 and 32469, Banning, CA

Diversified Pacific

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and T-5, or the southern ends of T-2, T-3 or T-4. As a part of our work, trench locations were documented using a Garmin 12 Channel Etrex hand held GPS. The locations recorded are presented in Appendix D. The manufacturer claims the Garmin Etrex is accurate to 15 horizontal feet. However, accuracy can be adversely affected by the number and strength of satellite connections and other factors. Consequently, the Etrex GPS locations presented in Appendix D are only approximate and the actual locations of trench backfills will need to be determined at the time of grading. It is recommended several slots be cut perpendicular to the trenches excavated during this study during to locate the backfill soils. Once the backfill soils are located, removal may proceed in the direction of the backfilled trenches.

The northern ends of Trenches T-2, T-3 and T-4 were surveyed by Tuttle Engineering. Their data is also presented in Appendix D. It is recommended that at the time of grading the trenches be re-surveyed to determine removal limits.

Removal of the backfill will need to be confirmed by the project geotechnical engineer or geologist. A representative of the geotechnical engineer will need to approve the excavation bottom prior to backfilling and will need to observe and test the placement of compacted soils into the re-excavated trenches. Backfill requirements will need to be determined by the geotechnical engineer. Typically, a minimum of 90% relative compaction is required. Higher compaction requirements could be specified by the geotechnical engineer.

5.05 Limitations of Data

Our conclusions and recommendations contained in this report are based on the assumption that conditions encountered in the cut slopes, outcrops, trenches and borings are representative for the site as a whole. However, there can be unforeseen and unanticipated variations between these points and standard of practices and geologic knowledge of the region can change. Hence, the geologic consultant should monitor earthwork during grading of the site to verify the anticipated geologic conditions or to provide additional recommendations if needed.

6.00 CLOSURE

The findings, conclusions and recommendations in this report were prepared in accordance with generally accepted engineering and geologic principles and practices. No other warranty, either express or implied, is made.

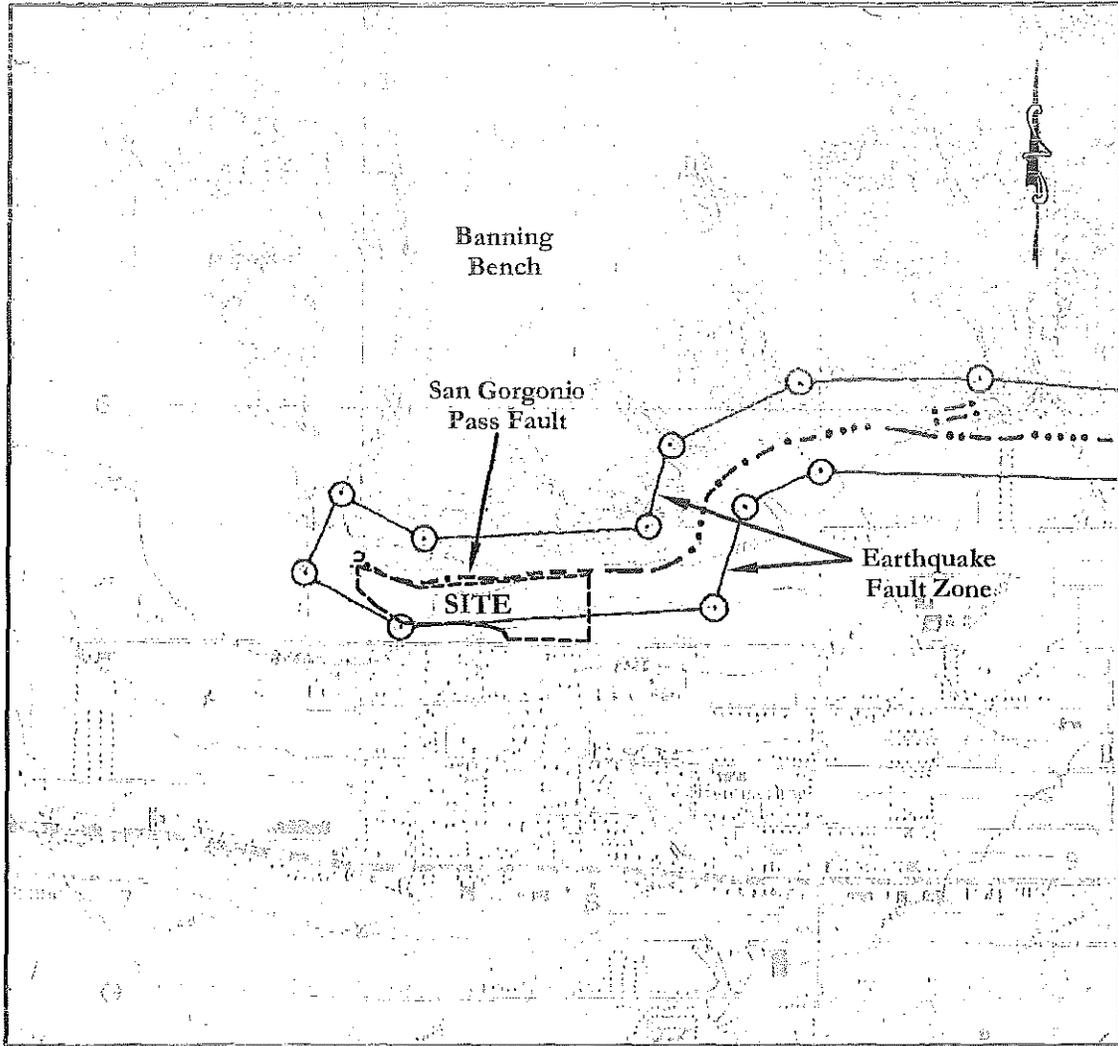
This report has been prepared for Diversified Pacific to be used solely evaluating potential impacts of faulting upon residential development of the site. Anyone using this report for any other purpose must draw their own conclusions regarding subsurface conditions described herein as well as our conclusions and recommendations.

This report is subject to review by the City of Banning. The City could require clarification, further analysis or additional investigation as a part of the review and approval process.



GEOTECHNICAL CONSULTANTS

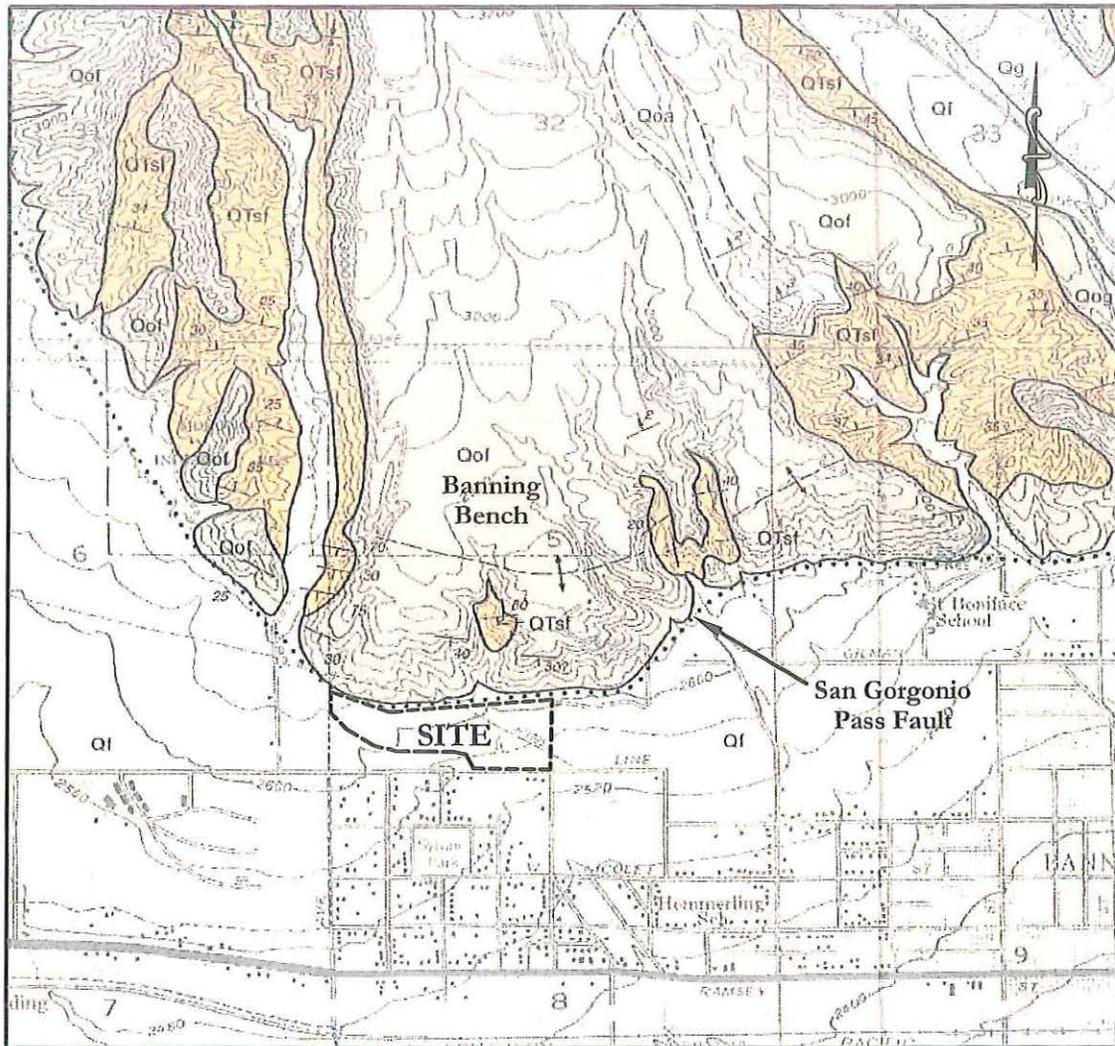
FIGURES AND TABLES



SITE LOCATION AND EARTHQUAKE FAULT ZONE MAP

Scale: 1" ~ 2,000'

Base Map: California Division of Mines and Geology, Seismic Hazard Zone Map, Beaumont Quadrangle, 1995



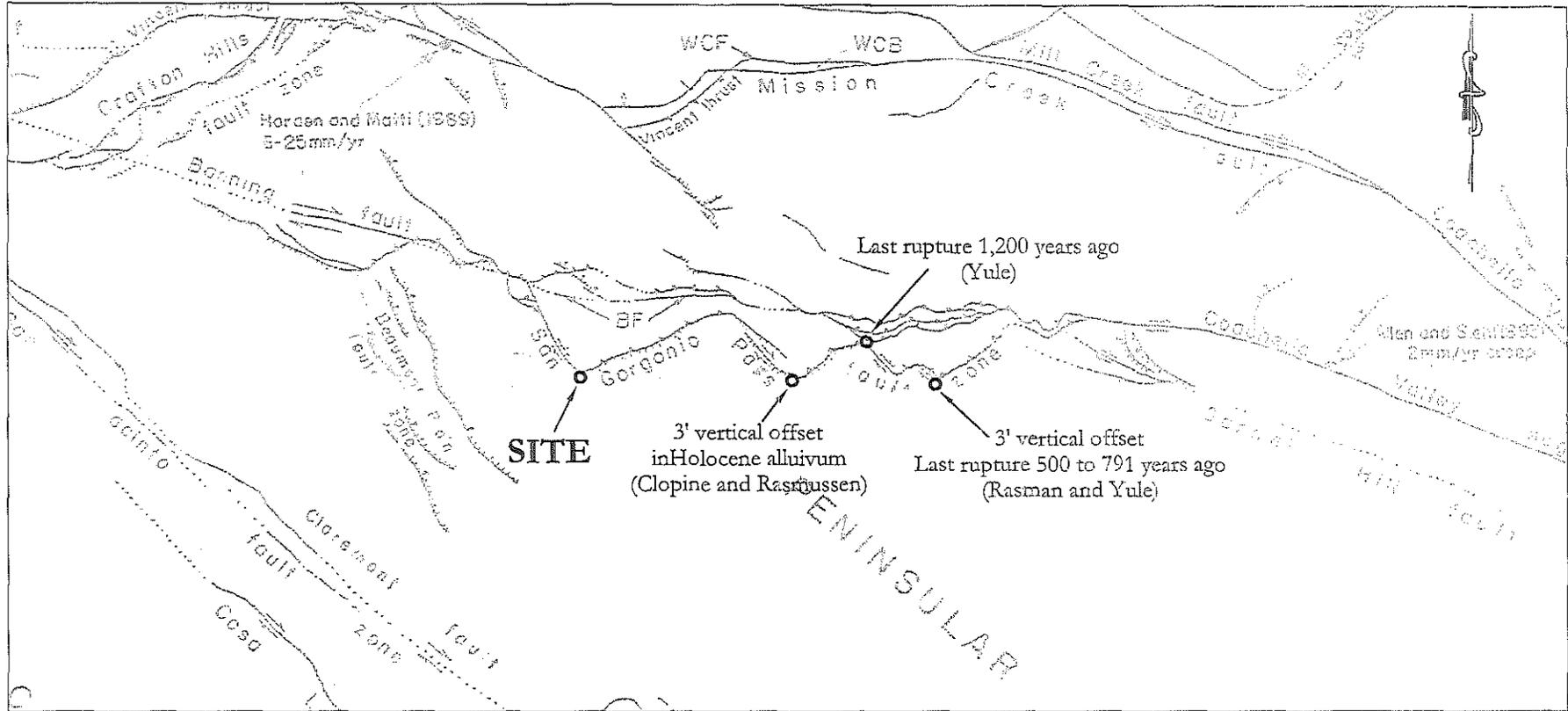
REGIONAL GEOLOGIC MAP

Scale: 1" ~ 2,000'

Partial Legend

- Qg - Stream channel deposits
- Qf - Alluvial fan deposits
- Qof - Older alluvium
- QTsf - San Timoteo formation - conglomerate

Source: Geologic Map of Beaumont Quadrangle, Dibblee (2003)

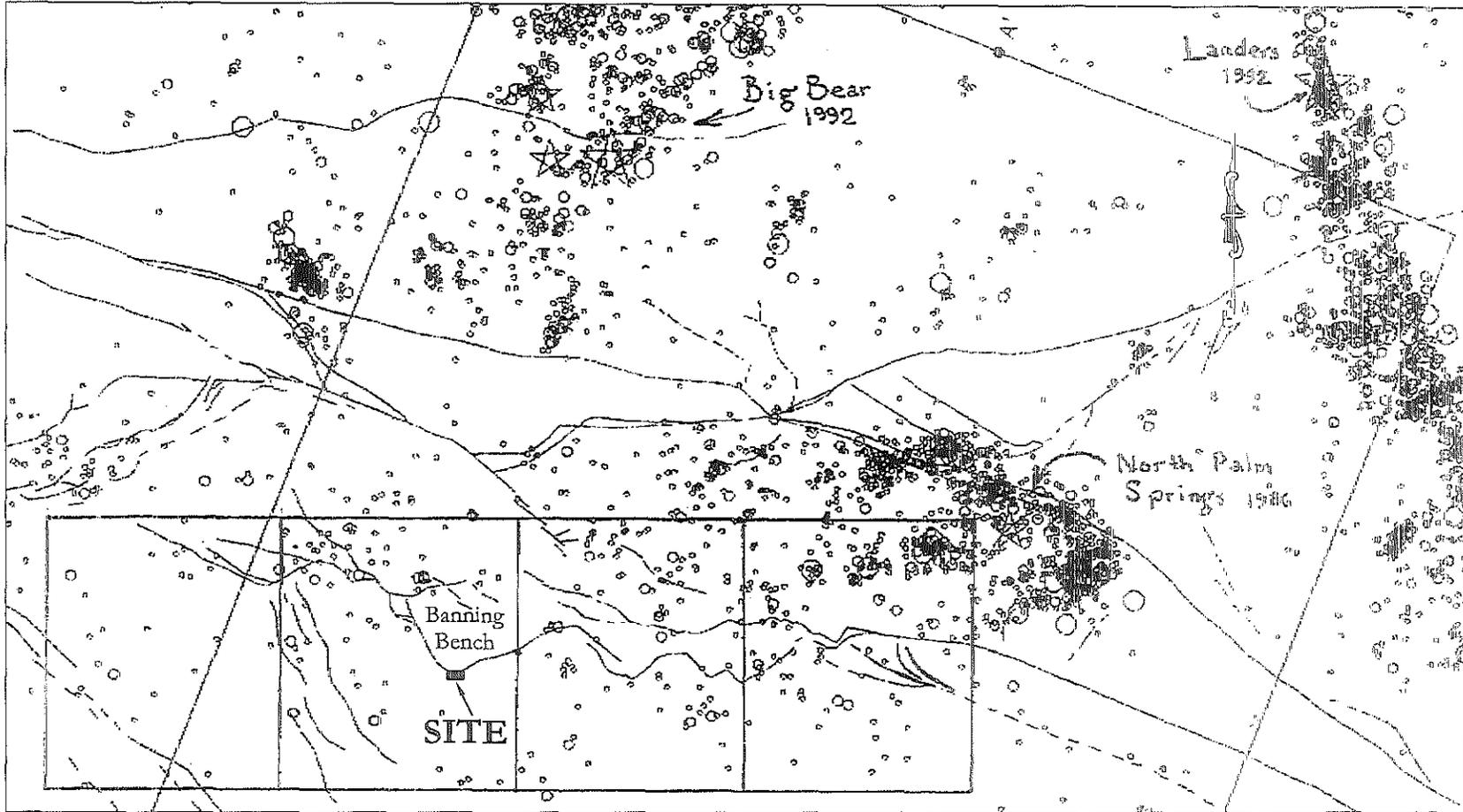


REGIONAL FAULT MAP
 Scale: 1.5" = 1 mile

Base map: U.S. Geological Survey OFR 92-354

Tracts 30642 and 32429, Banning, CA
 Diversified Pacific

RMA No.: 13-773-01
 Figure 3



HISTORIC SEISMICITY MAP, 1984-1992

Scale: 1" ~ 4 miles

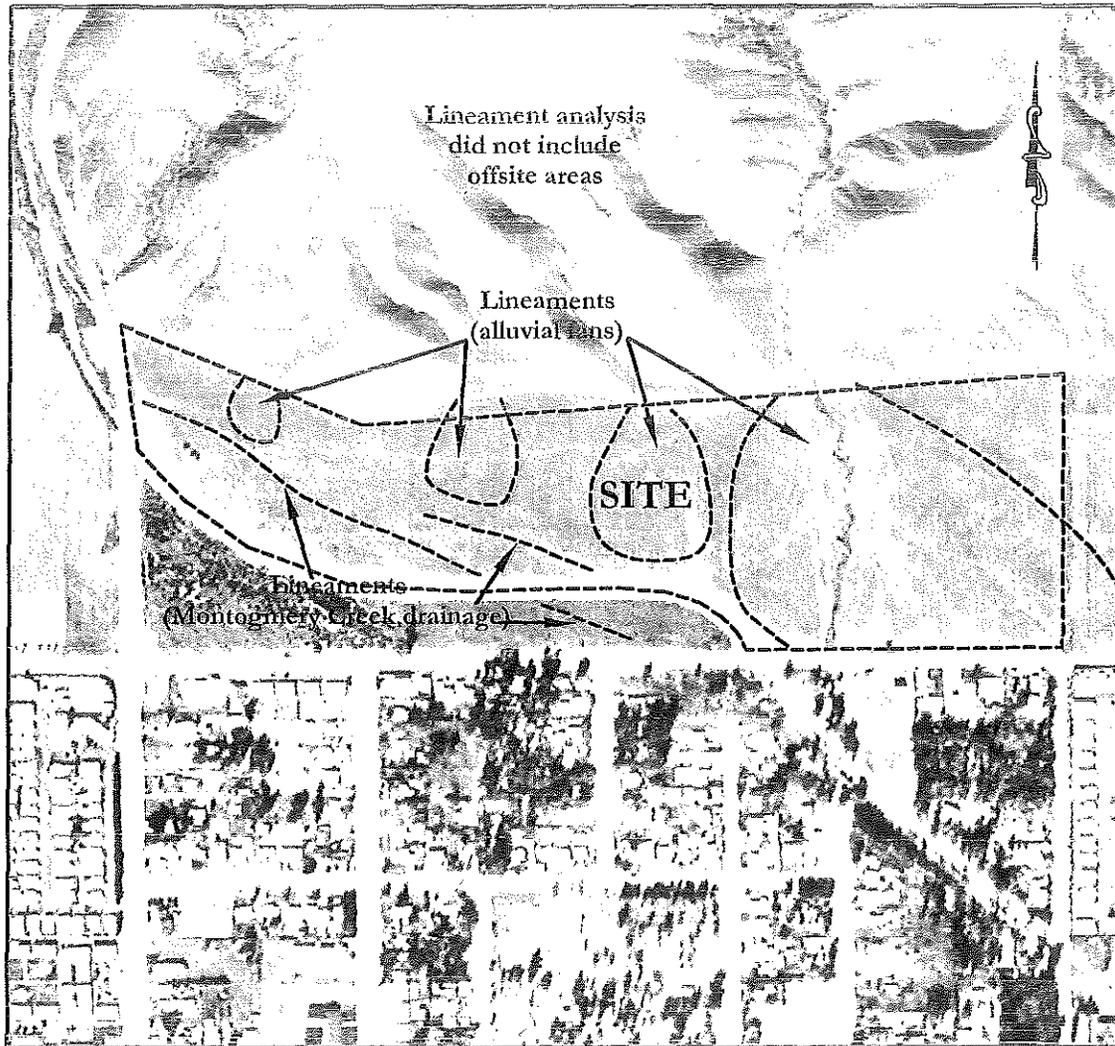
Circles and dots = Earthquake epicenters

Lines = Faults

Source - California Division of Mines and Geology FER-235 (1994), Figure 4

Tracts 30642 and 32429, Banning, CA
 Diversified Pacific

RMA No.: 13-773-01
 Figure 4



AERIAL PHOTOGRAPH LINEAMENT MAP
Scale: 1" ~ 500'

Background Aerial Photograph: Riverside County Flood Control District, Photograph No. 1545, 2-7-84.

GEOLOGIC LEGEND

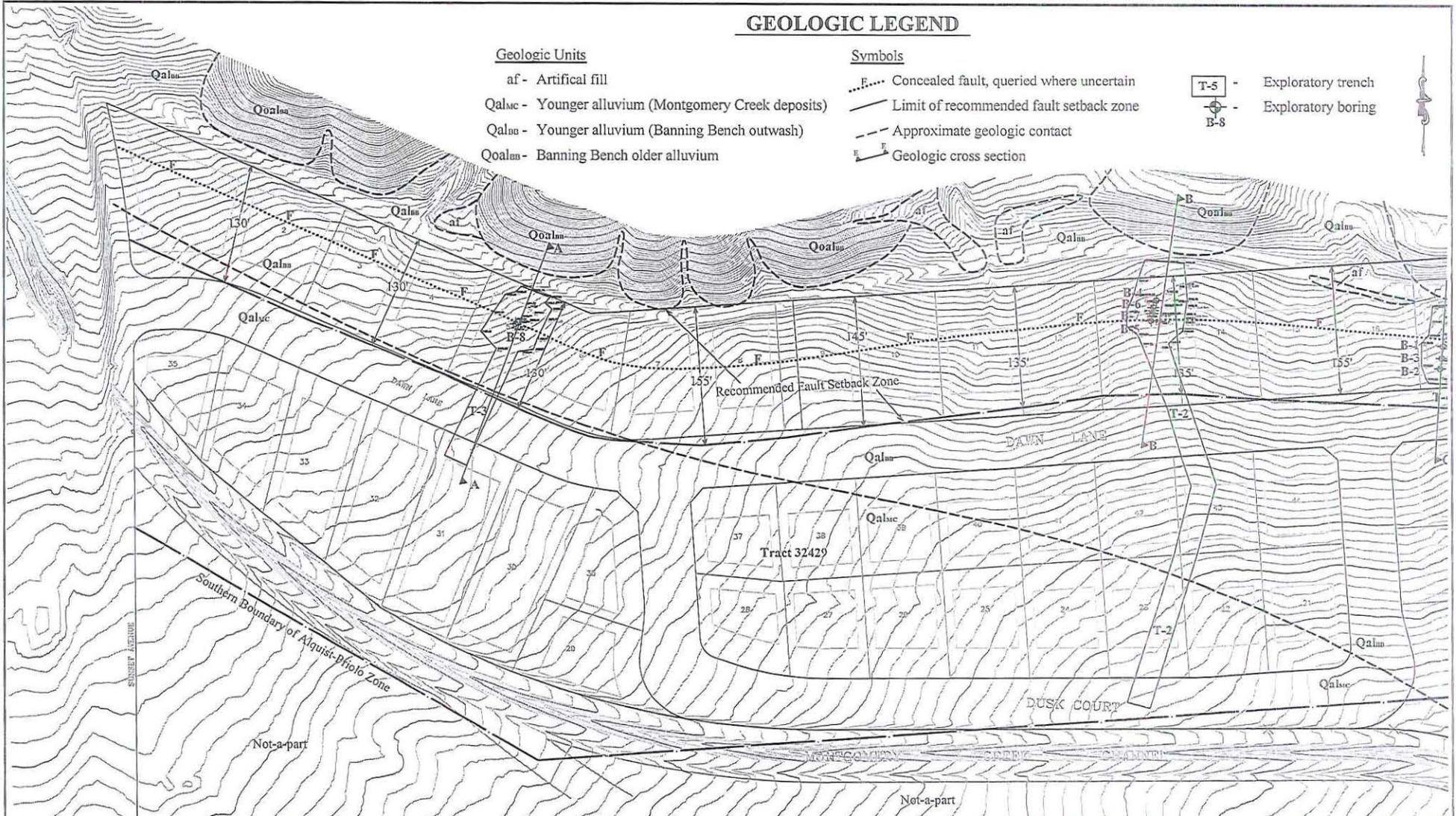
Geologic Units

- af - Artificial fill
- Qaluc - Younger alluvium (Montgomery Creek deposits)
- Qaloo - Younger alluvium (Banning Bench outwash)
- Qoaloo - Banning Bench older alluvium

Symbols

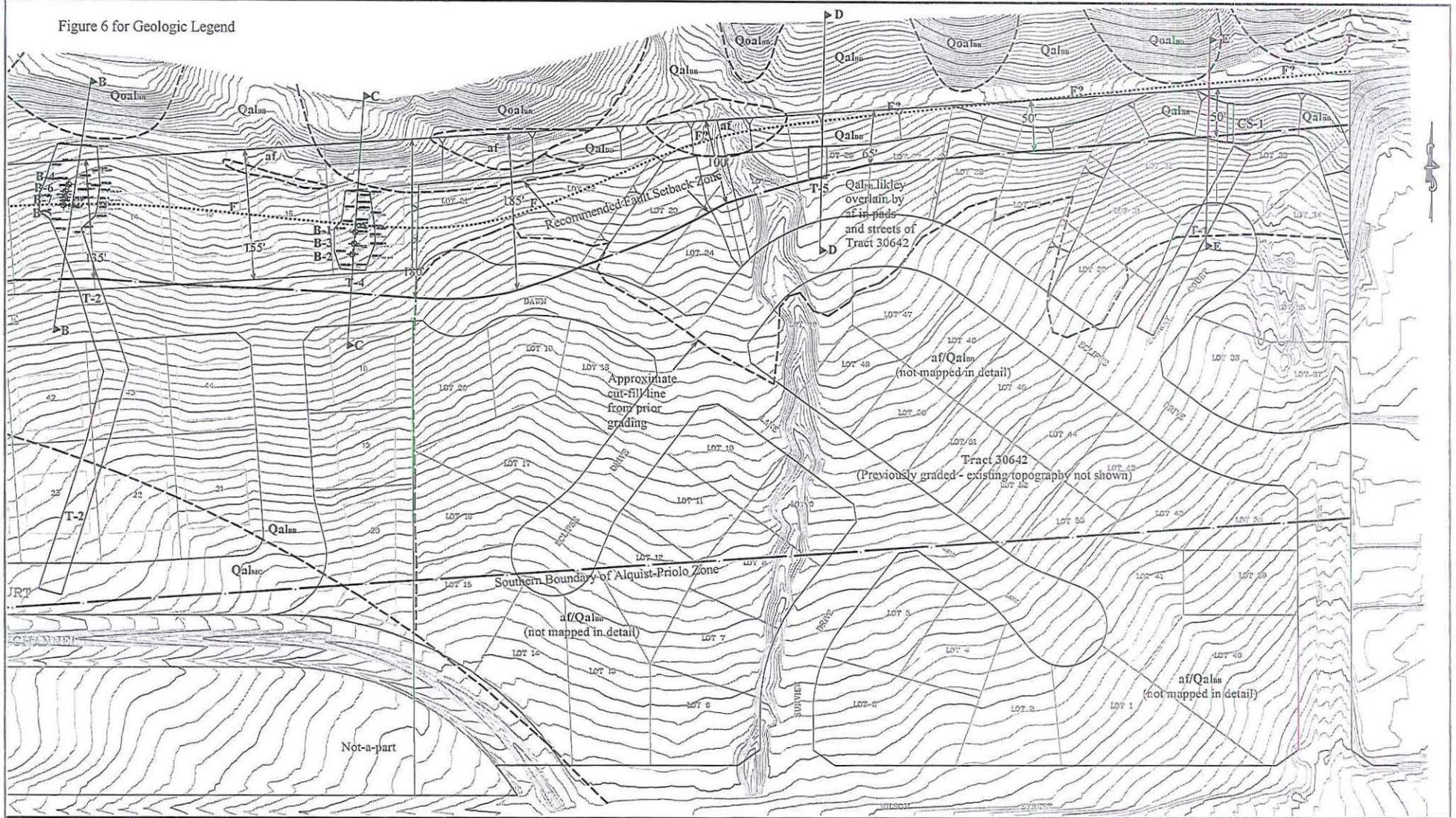
- Concealed fault, queried where uncertain
- Limit of recommended fault setback zone
- Approximate geologic contact
- Geologic cross section

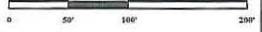
- Exploratory trench
- Exploratory boring

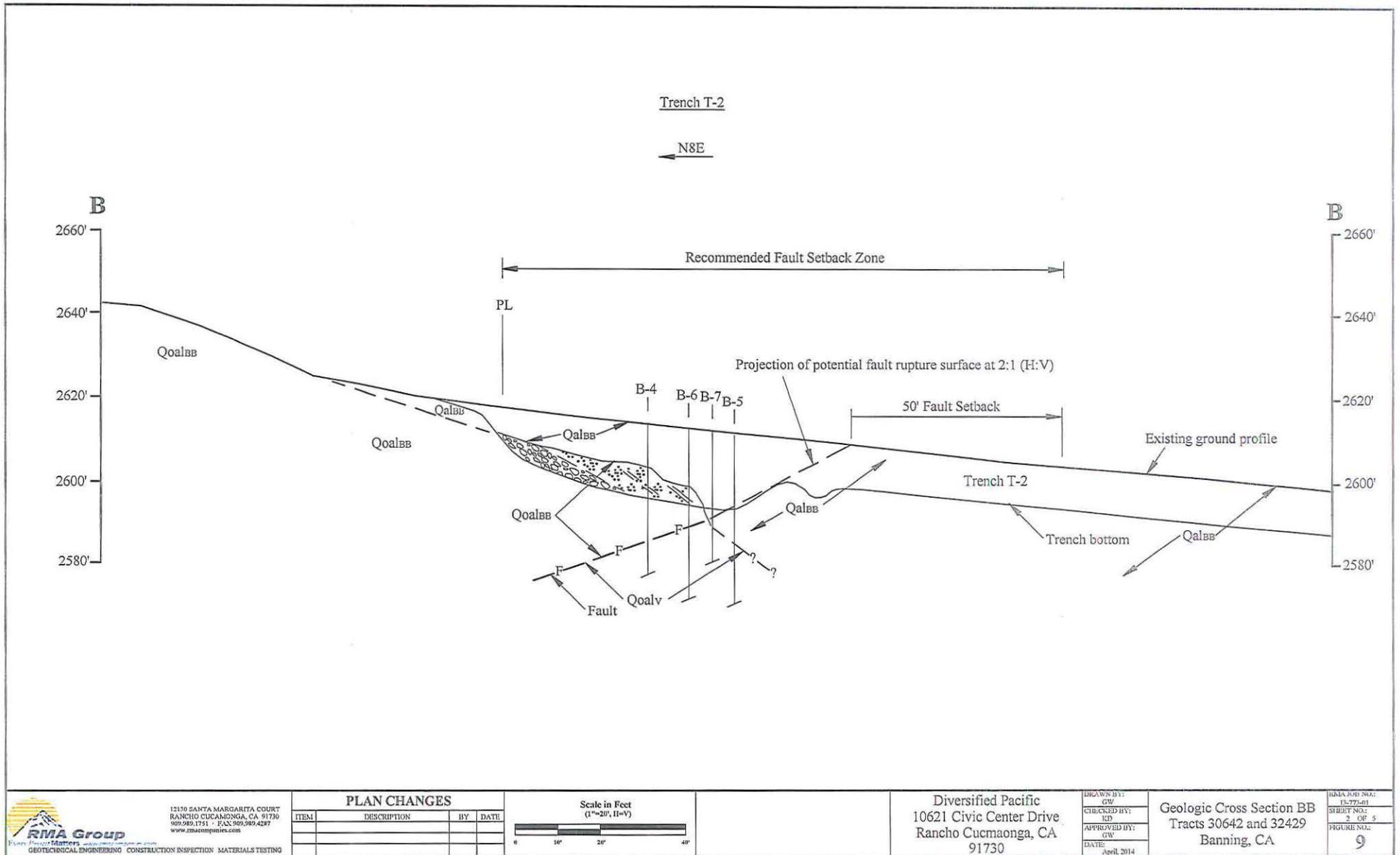


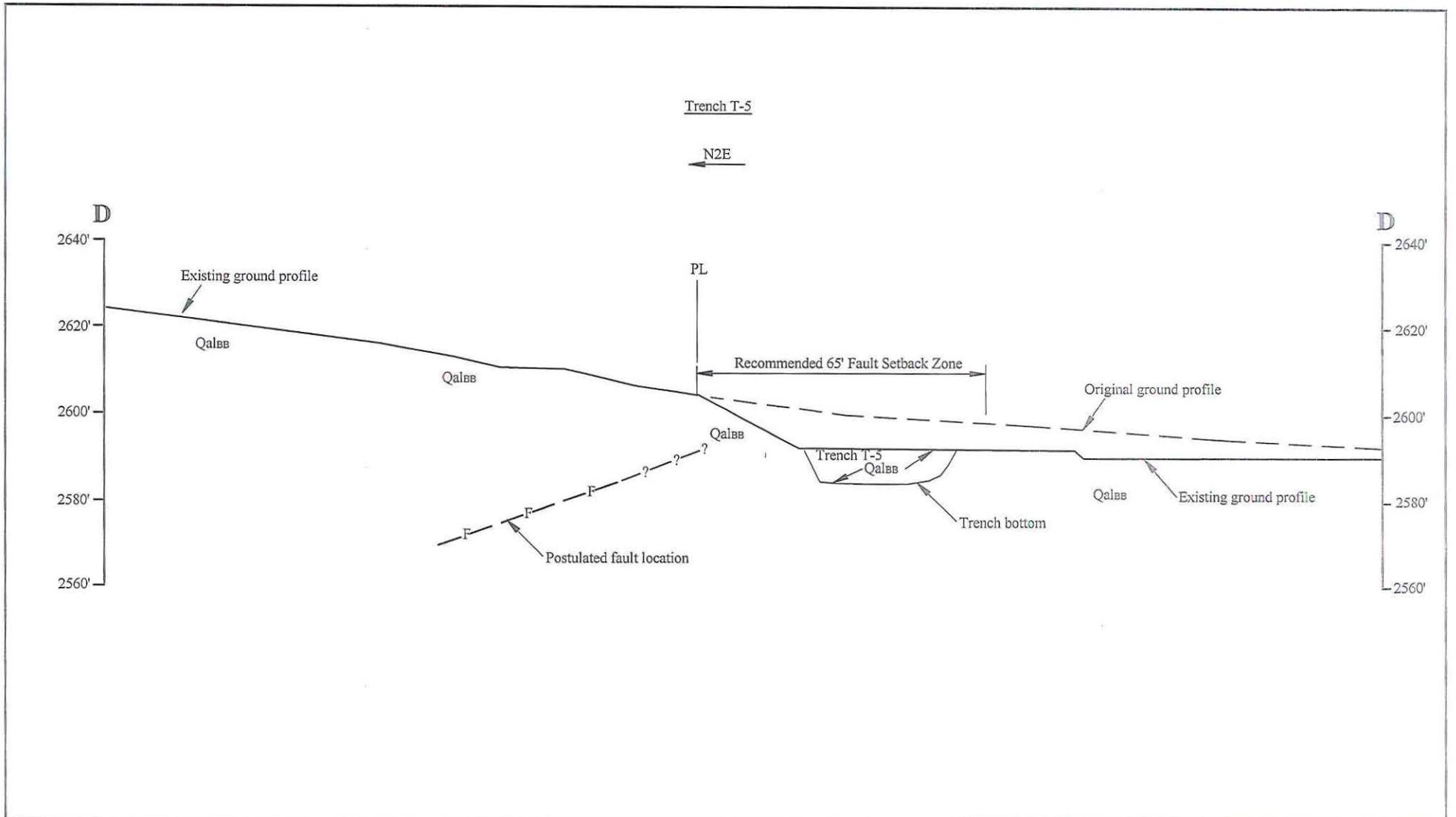
	12130 SANTA MARGARITA COURT RANCHO CUCAMONGA, CA 91730 909.989.1751 • FAX 909.989.4287 www.rmacompanies.com	PLAN CHANGES	Scale in Feet (1"=100')	BASE MAP PROVIDED BY: TUTTLE ENGINEERING THIS PLAN HAS BEEN PREPARED FOR USE AS A SITE GEOLOGICAL MAP AND IS NOT INTENDED FOR CONSTRUCTION.	Diversified Pacific 10621 Civic Center Drive Rancho Cucamonga, CA 91730	DRAWN BY: GW CHECKED BY: ED APPROVED BY: GW DATE: 2 April, 2014	Site Geologic Map Tracts 30642 & 32429 Banning, CA	RMA JOB NO.: 14-773-01 SHEET NO.: 1 OF 2 FIGURE NO.: 6																
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Figure 6 for Geologic Legend

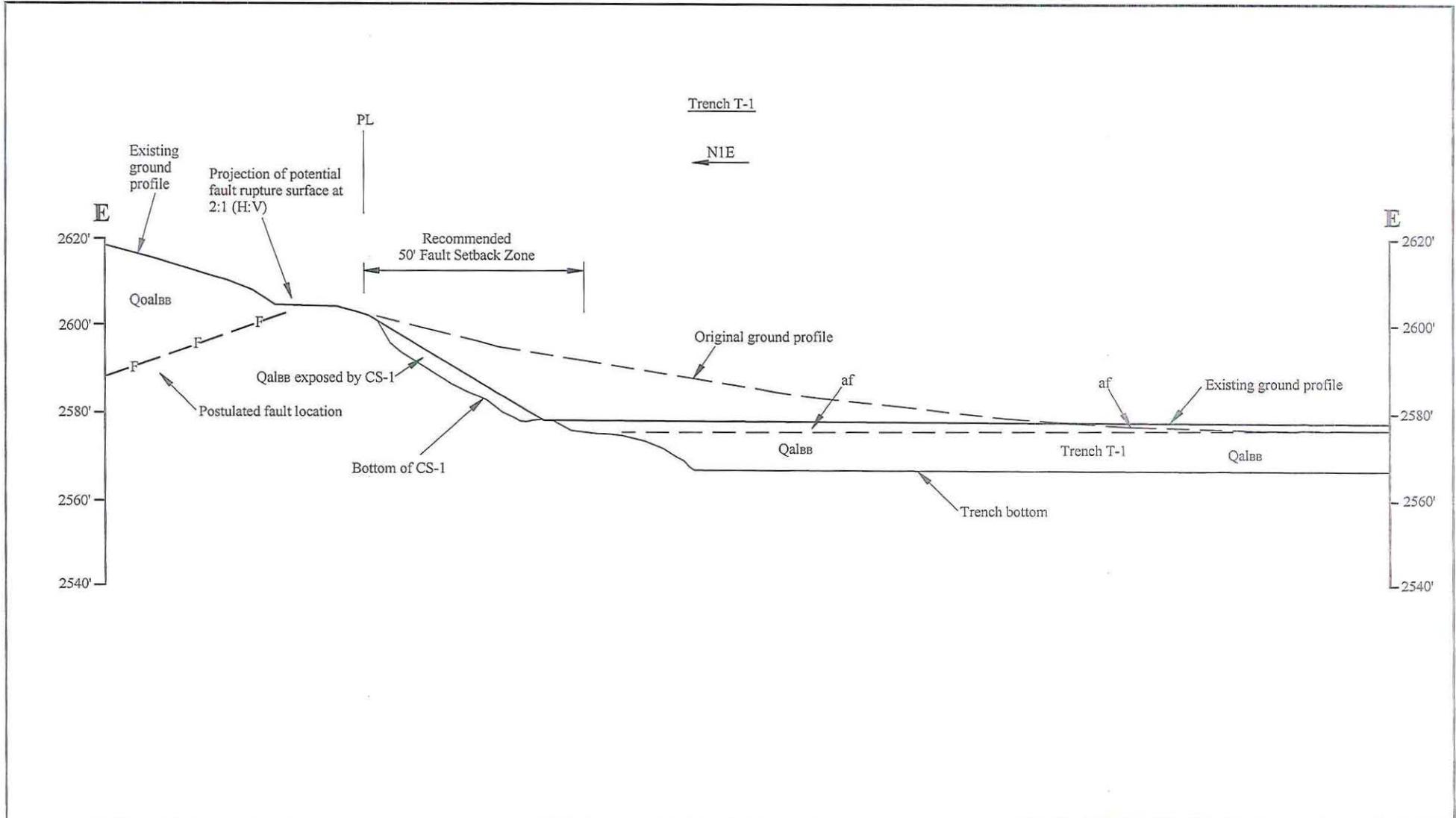


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<p>Not-a-part</p>	<p>PLAN CHANGES</p>	<p>Scale in Feet</p>	<p>BASE MAP PROVIDED BY: TUTTLE ENGINEERING</p>	<p>Diversified Pacific</p>	<p>DRAWN BY:</p>	<p>Site Geologic Map</p>	<p>RMA 30642</p>														



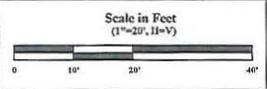


 <p>RMA Group <small>Form 7/10/11</small> GEOTECHNICAL ENGINEERING CONSTRUCTION INSPECTION MATERIALS TESTING</p>	12130 SANTA MARGARITA COURT RANCHO CUCAMONGA, CA 91730 909.989.1751 • FAX 909.989.4287 www.rmicorp.com	PLAN CHANGES <table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th style="width: 10%;">ITEM</th> <th style="width: 60%;">DESCRIPTION</th> <th style="width: 10%;">BY</th> <th style="width: 20%;">DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	ITEM	DESCRIPTION	BY	DATE													Scale in Feet (1"=20', H=V) 	Diversified Pacific 10621 Civic Center Drive Rancho Cucamonga, CA 91730	DRAWN BY: GW CHECKED BY: KD APPROVED BY: CW DATE: April, 2014	Geologic Cross Section DD Tracts 30642 and 32429 Banning, CA	RMA ID# NO: 13-776-01 SHEET NO: 4 OF 5 FIGURE NO: 11
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 April, 2014

Geologic Cross Section EE
 Tracts 30642 and 32429
 Banning, CA

RMA JOB NO.:
 15-7740
 SHEET NO.:
 5 OF 5
 FIGURE NO.:
 12

NOTABLE FAULTS WITHIN 100 KILOMETERS AND SEISMIC DATA

Fault Zone & geometry	Distance (km)	Distance (mi.)	Maximum Moment Magnitude	Slip Rate (mm/yr)
Calico-Hidalgo (rl-ss)	76	47	7.3	0.6
Chino-Central Ave. (rl-r-o)	62	39	6.7	1.0
Clamshell-Sawpit (r)	93	58	6.5	0.5
Cleghorn (ll-ss)	48	30	6.5	3.0
Cucamonga (r)	56	35	6.9	5.0
Elsinore - Glen Ivy (rl-ss)	52	32	6.8	5.0
Eureka Peak (rl-ss)	52	32	6.4	0.6
Helendale - S Lockhart (rl-ss)	49	30	7.3	0.6
Johnson Valley (rl-ss)	59	37	6.7	0.6
Landers (rl-ss)	51	32	7.3	0.6
Lenwood-Lockhart (rl-ss)	53	33	7.5	0.6
Newport-Inglewood (rl-ss)	93	58	6.9	1.5
North Frontal - Western (r)	46	29	7.2	1.0
Pinto Mountain (ll-ss)	22	14	7.2	2.5
Pisgah-Bullion Mtn. (rl-ss)	83	52	7.3	0.6
Puente Hills Blind Thrust (r)	89	55	7.1	0.7
San Andreas (rl-ss)	10	6	7.5	24.0
San Jacinto (rl-ss)	15	9	6.7	12.0
San Joaquin Hills (r)	80	50	6.6	0.5
San Jose (ll-r-o)	75	47	6.4	0.5
Sierra Madre (r)	80	50	7.2	2.0
Whittier (rl-ss)	68	42	6.8	2.5

Notes:

Fault geometry - (ss) strike slip, (r) reverse, (n) normal, (rl) right lateral, (ll) left lateral, (o) oblique
 Fault and Seismic Data - California Geological Survey (Cao), 2003

HISTORIC STRONG EARTHQUAKES IN SOUTHERN CALIFORNIA SINCE 1812

Date	Event	Causitive Fault	Magnitude	Epicentral Distance (miles)
Dec. 12, 1812	Wrightwood	San Andreas?	7.3	63
Jan. 9, 1857	Fort Tejon	San Andreas	7.9	278
Dec. 16, 1858	San Bernardino Area	uncertain	6.0	24
Feb. 9, 1890	San Jacinto	uncertain	6.3	51
May 28, 1892	San Jacinto	uncertain	6.3	53
July 30, 1894	Lytle Creek	uncertain	6.0	48
July 22, 1899	Cajon Pass	uncertain	6.4	43
Dec. 25, 1899	San Jacinto	San Jacinto	6.7	11
Sept. 20, 1907	San Bernardino Area	uncertain	5.3	22
May 15, 1910	Elsinore	Elsinore	6.0	33
April 21, 1918	Hemet	San Jacinto	6.8	14
July 23, 1923	San Bernardino	San Jacinto	6.0	24
March 11, 1933	Long Beach	Newport-Inglewood	6.4	66
April 10, 1947	Manix	Manix	6.4	76
Dec. 4, 1948	Desert Hot Springs	San Andreas or Banning	6.5	31
July 21, 1952	Wheeler Ridge	White Wolf	7.3	145
Feb. 9, 1971	San Fernando	San Fernando	6.6	94
July 8, 1986	North Palm Springs	Banning or Garnet Hills	5.6	18
Oct. 1, 1987	Whittier Narrows	Puente Hills Thrust	6.0	70
Feb. 28, 1990	Upland	San Jose	5.5	49
June 28, 1991	Sierra Madre	Clamshell Sawpit	5.8	68
April 22, 1992	Joshua Tree	Eureka Peak	6.1	35
June 28, 1992	Landers	Johnson Valley & others	7.3	16
June 28, 1992	Big Bear	uncertain	6.5	17
Jan. 17, 1994	Northridge	Northridge Thrust	6.7	98
Oct. 16, 1999	Hector Mine	Lavie Lake	7.1	60

Notes:

Earthquake data: U.S. Geological Survey P.P. 1515 & online data, Southern California Earthquake Center & California Geological Survey online data

Magnitudes prior to 1932 are estimated from intensity.

Magnitudes after 1932 are moment, local or surface wave magnitudes.

Site Location:

Site Longitude: 116.9076

Site Latitude: 33.9336



GEOTECHNICAL CONSULTANTS

APPENDIX A
TRENCH LOGS

Cut Slope Log

Cut Slope No. CS-1

Project: Tracts 30642 and 32429, Banning, CA
 Equipment: Shovel, pick and broom

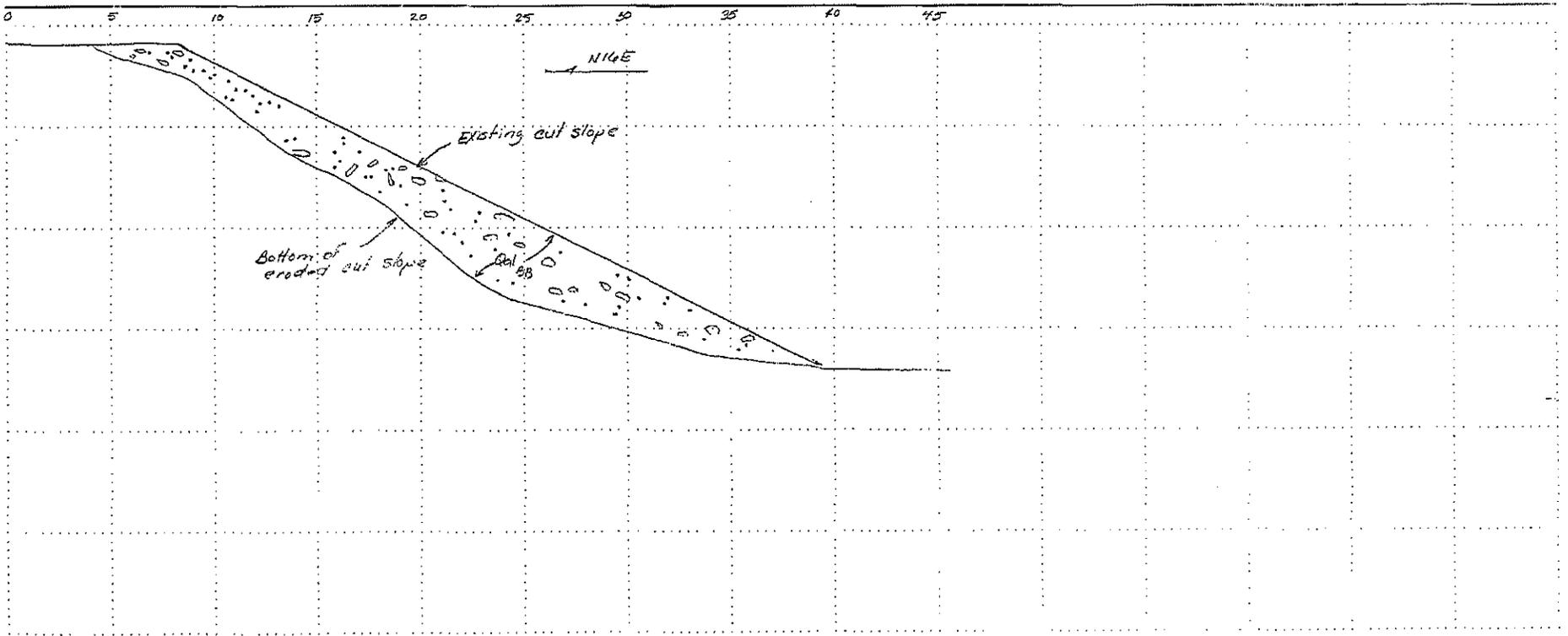
Date logged: 11-25-13
 Logged by: GW

Scale: 1"=5', H=V
 East side of eroded gully

Description:

Younger Alluvium - Banning Bench Outwash (Qal^{BP})

- Reddish brown (5YR 5/4) silty sand (SM), fine to coarse grained with ~5% to 10% fine gravel, ~1% coarse gravel, and 1% to 2% cobbles, moist, medium dense, slightly porous, very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered, widely scattered and randomly orientated. Surficial soils horizons were removed by prior grading. No carbonate deposits or rootting.





Geologic Fault Trench Log

Trench No. T-1

Project: Tracts 30642 and 32429, Banning, CA
Equipment: Excavator

Date logged: 11-25-13
Logged by: GW

Scale: 1"=5', H=V
Log of east wall

Description:

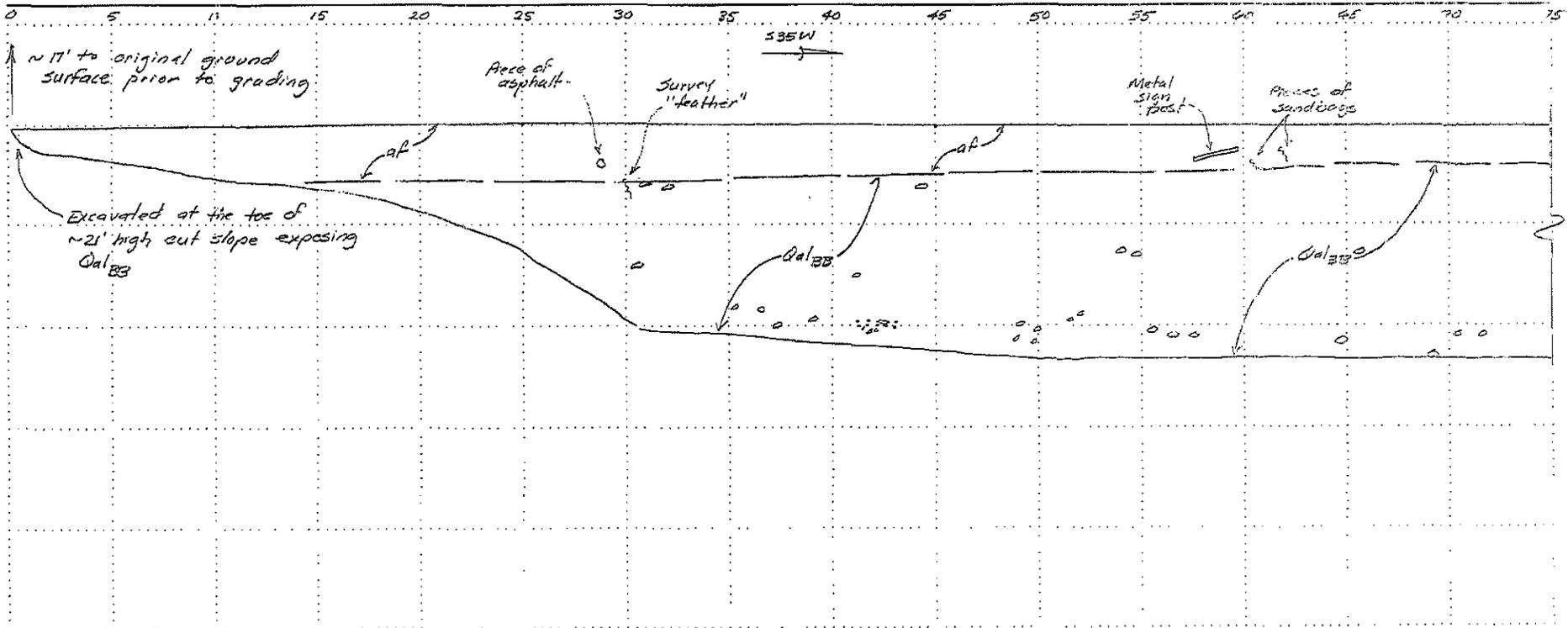
Artificial Fill (af)

- Brown (7.5YR 5/4) silty sand (SM), fine grained with coarse sand, ~5% to 10% gravel, ~1% cobbles and some scattered man-made debris (a piece of asphalt, a survey feather, a metal sign post, pieces of plastic, and pieces of a sand bag), moist, dense, compacted, poorly sorted. Contact with unit below is gradational.

Younger Alluvium - Banning Bench Outwash (Qal_{bb})

- Reddish brown (5YR 5/4) silty sand (SM), fine to coarse grained with ~5% to 10% fine gravel, ~1% coarse gravel, and 1% to 2% cobbles, moist, medium dense, slightly porous, very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered, widely scattered, randomly orientated with only a few stone lines. Surficial soils horizons were removed by prior grading. No carbonate deposits or motting.

Note: Trench was excavated in an area that was cut during prior grading.





Geologic Fault Trench Log

Trench No. T-1

Project: Tracts 30642 and 32429, Banning, CA

Date logged: 11-27-13

Scale: 1"=5', H=V

Equipment: Excavator

Logged by: GW

Log of east wall

Description:

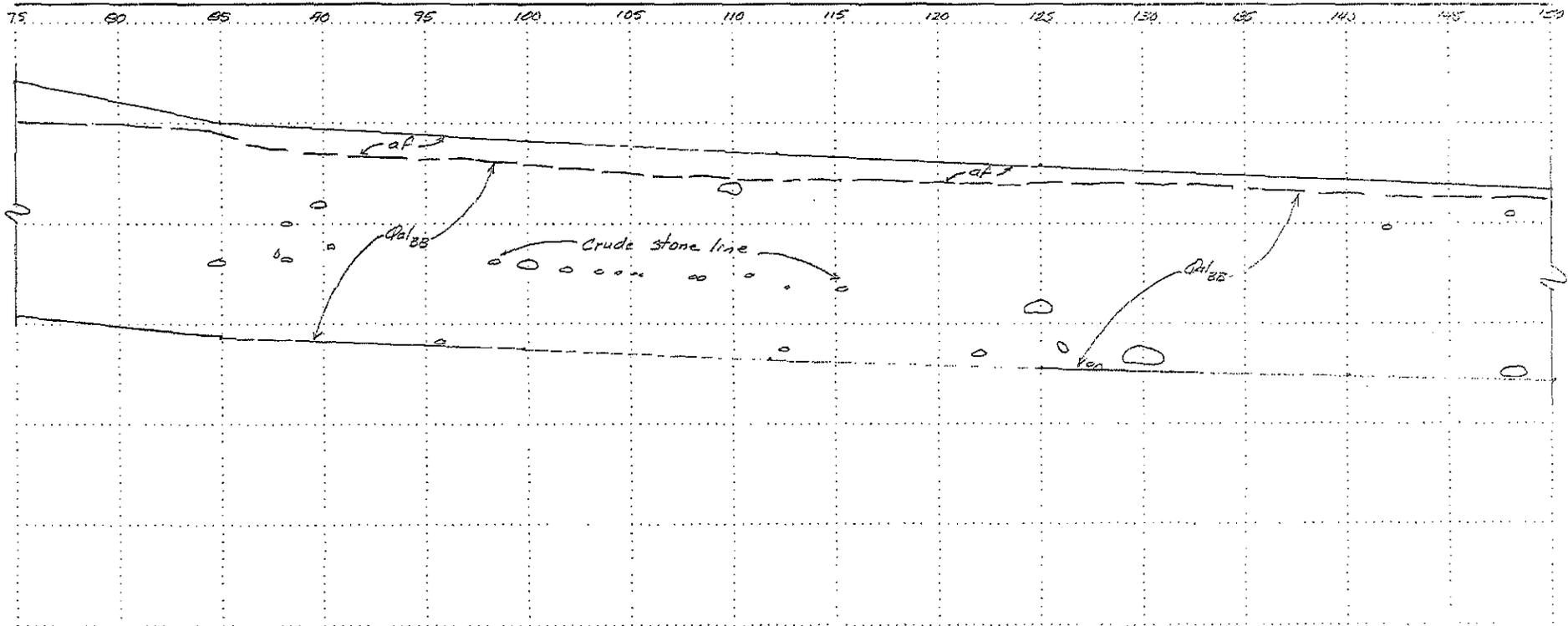
Artificial Fill (af)

- Brown (7.5YR 5/4) silty sand (SM), fine grained with coarse sand, ~5% to 10% gravel, ~1% cobbles and some scattered man-made debris (a piece of asphalt, a survey feather, a metal sign post, pieces of plastic and pieces of a sand bag), moist, dense, compacted, poorly sorted. Contact with unit below is gradational.

Younger Alluvium - Banning Bench Outwash (Qal_{3B})

- Reddish brown (5YR 5/4) silty sand (SM), fine to coarse grained with ~5% to 10% fine gravel, ~1% coarse gravel, moist, medium dense, slightly porous, very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subrounded mixed igneous and metamorphic rocks that are slightly weathered, widely scattered, randomly orientated with only a few stone lines. Surficial soils horizons were removed by prior grading. No carbonate deposits or mottling.

Note: Trench was excavated in an area that was cut during prior grading.





Geologic Fault Trench Log

Trench No. T-1

Project: Tracts 30642 and 32429, Banning, CA
Equipment: Excavator

Date logged: 11-27-13
Logged by: GW

Scale: 1"=5', H=V
Log of east wall

Description:

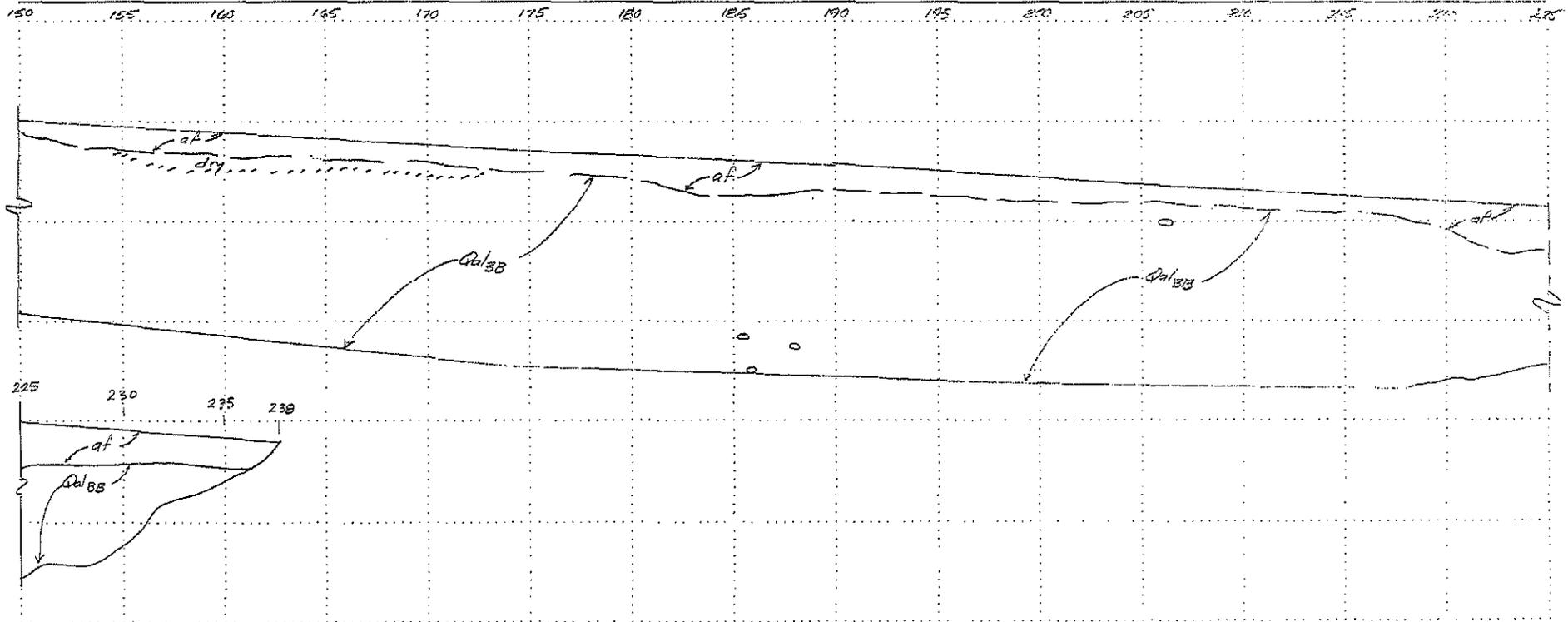
Artificial Fill (af)

- Brown (7.5YR 5/4) silty sand (SM), fine grained with coarse sand, ~5% to 10% gravel, ~1% cobbles and some scattered man-made debris (a piece of asphalt, a survey feather, a metal sign post, pieces of plastic and pieces of a sand bag), moist, dense, compacted, poorly sorted. Contact with unit below is gradational.

Younger Alluvium - Banning Bench Outwash (Qal_{BB})

- Reddish brown (5YR 5/4) silty sand (SM), fine to coarse grained with ~5% to 10% fine gravel, ~1% coarse gravel, moist, medium dense, slightly porous, very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered, widely scattered, randomly orientated with only a few stone lines. Surficial soils horizons were removed by prior grading. No carbonate deposits or morticing.

Note: Trench was excavated in an area that was cut during prior grading.





Geologic Fault Trench Log

Trench No. T-2

Project: Tracts 30642 and 32429, Banning, CA
 Equipment: Excavator

Date logged: 11-27-13
 Logged by: GW

Scale: 1"=5', H=V
 Log of east wall

Description:

Younger Alluvium - Banning Bench Outwash (Qal_{yy})

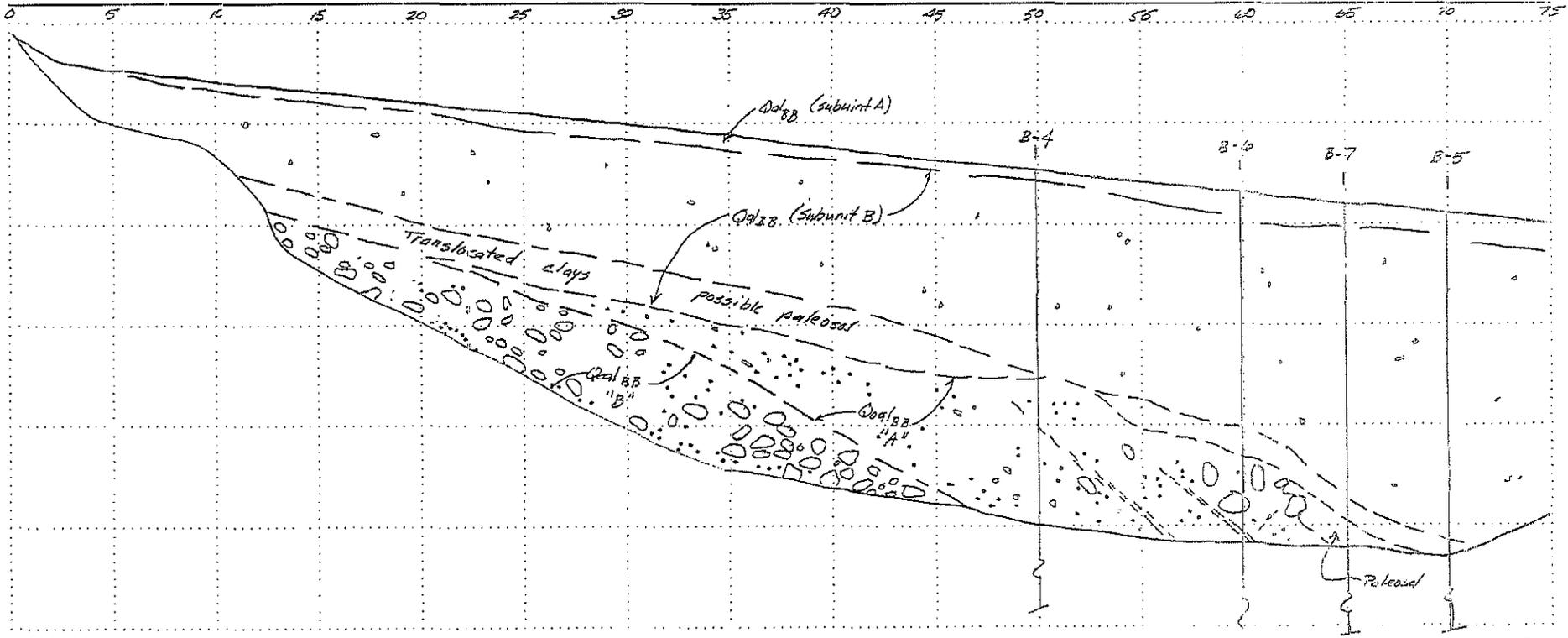
- **Subunit A (Surficial silty sand)** - Dark reddish gray (5R 4/2) silty sand (SM), fine grained with gravel and widely scattered cobbles, moist, loose, poorly sorted. Roots hairs and occasional animal borrows to a depth of about 18 inches. No appreciable development of soil horizons.
- **Subunit B (Silty sand)** - Reddish brown (5YR 5/4) silty sand (SM), fine grained with scattered gravel (~5% to 10%) and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores), very poorly sorted, massive-granular soil structure with few stone lines. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered and randomly orientated. No carbonate deposits or mottling.

Paleosol

- Red (2.5YR 5/6) clayey sand (SC) with silt, medium to coarse grained sand, fine gravel and decomposed cobbles, moist, dense, porous (pin-hole size pores). No carbonates, mottling or fracture zones.

Banning Bench Older Alluvium (Qoal_{yy})

- **Subunit A (Silty Sand)** - Yellowish brown (10YR 5/8) silty, gravelly sand (SM), fine to medium grained with scattered cobbles, moist, dense, moderately decomposed rock clasts with no fracture or shear zones.
- **Subunit B (Cobbles and Boulders)** - Reddish yellow (7.5YR 6/6) granitic and metamorphic cobbles in a matrix of silty sand with gravel and a few boulders (GP). Rock clasts are randomly orientated, chaotic, and highly weathered (most can be broken by hand or with one or two blows with a rock hammer). The unit is moderately well indurated, massive with no fracture or shear zones.





Geologic Fault Trench Log

Trench No. T-2

Project: Tracts 30642 and 32429, Banning, CA
Equipment: Excavator

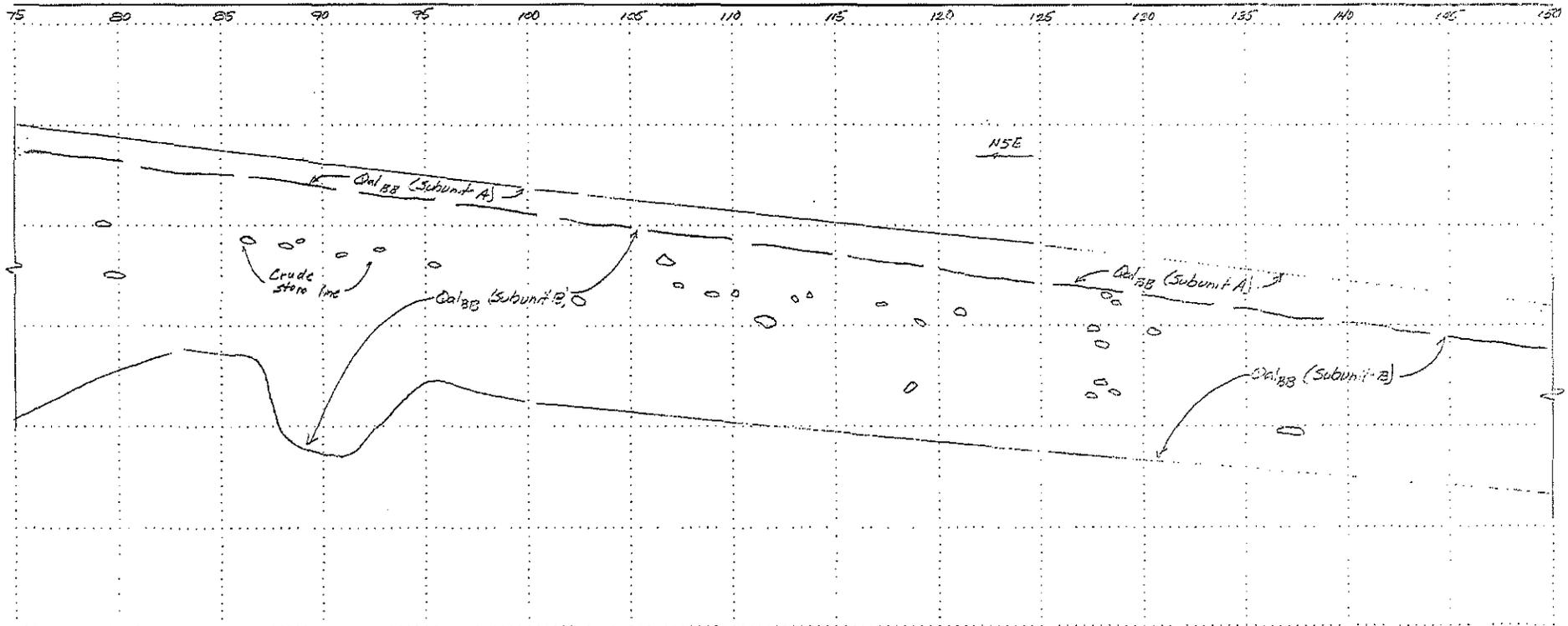
Date logged: 11-27-13
Logged by: GW

Scale: 1"=5', H=V
Log of east wall

Description:

Younger Alluvium - Banning Bench Outwash (Qalbb)

- Subunit A (Surficial silty sand) - Dark reddish gray (5R 4/2) silty sand (SM), fine grained with gravel and widely scattered cobbles, moist, loose, poorly sorted. Roots hairs and occasional animal borrows to a depth of about 18 inches. No appreciable development of soil horizons.
- Subunit B (Silty sand) - Reddish brown (5YR 5/4) silty sand (SM), fine grained with scattered gravel (~5% to 10%) and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores), very poorly sorted, massive-granular soil structure with few stone lines. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered and randomly orientated. No carbonate deposits or mottling.



Geologic Fault Trench Log

Trench No. T-3

Project: Tracts 30642 and 32429, Banning, CA
 Equipment: Excavator

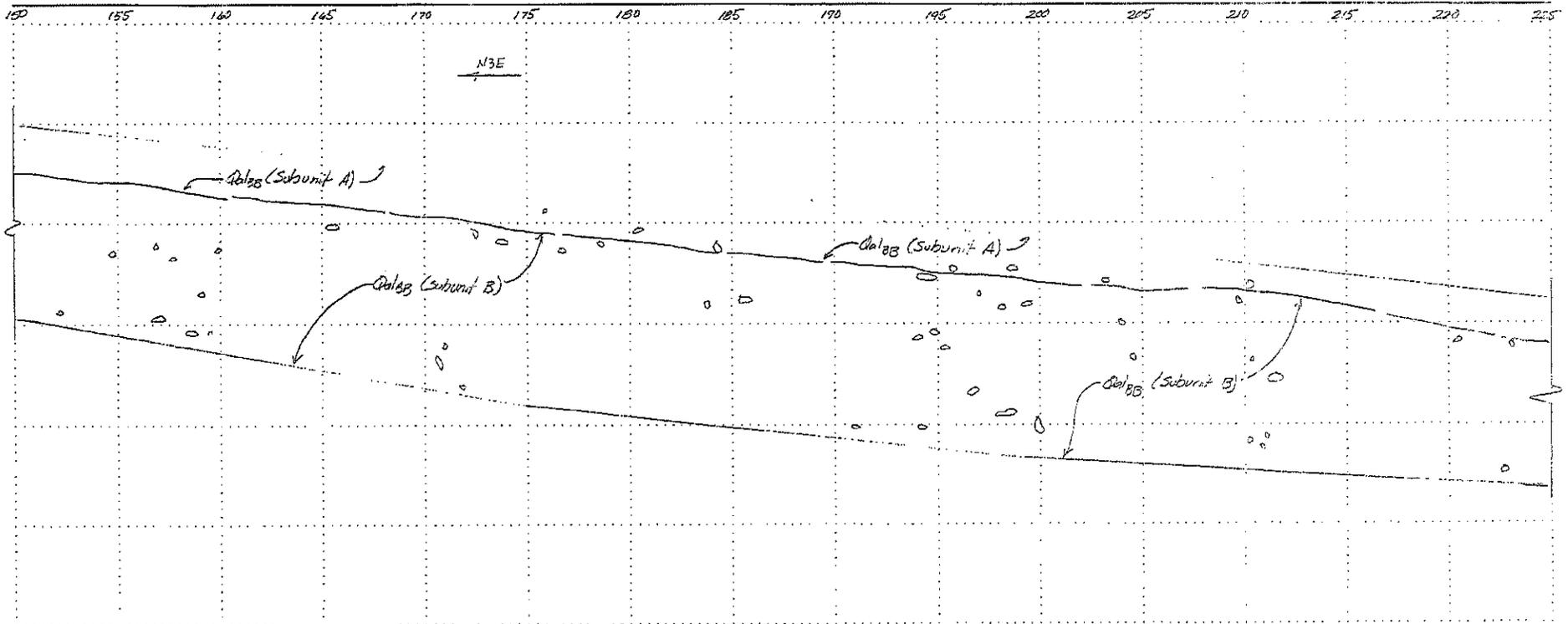
Date logged: 12-2-13
 Logged by: GW

Scale: 1"=5', H=V
 Log of east wall

Description:

Younger Alluvium - Banning Bench Outwash (Qalgg)

- **Subunit A (Superficial silty sand)** - Dark reddish gray (SR 4/2) silty sand (SM), fine grained with gravel and widely scattered cobbles, moist, loose, poorly sorted. Roots hairs and occasional animal borrows to a depth of about 18 inches. No appreciable development of soil horizons.
- **Subunit B (Silty sand)** - Reddish brown (5YR 5/4) silty sand (SM), fine grained with scattered gravel (~5% to 10%) and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores), very poorly sorted, massive-granular soil structure with few stone lines. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered and randomly orientated. No carbonate deposits or mottling.



Geologic Fault Trench Log

Trench No. T-2

Project: Tracts 30642 and 32429, Banning, CA
Equipment: Excavator

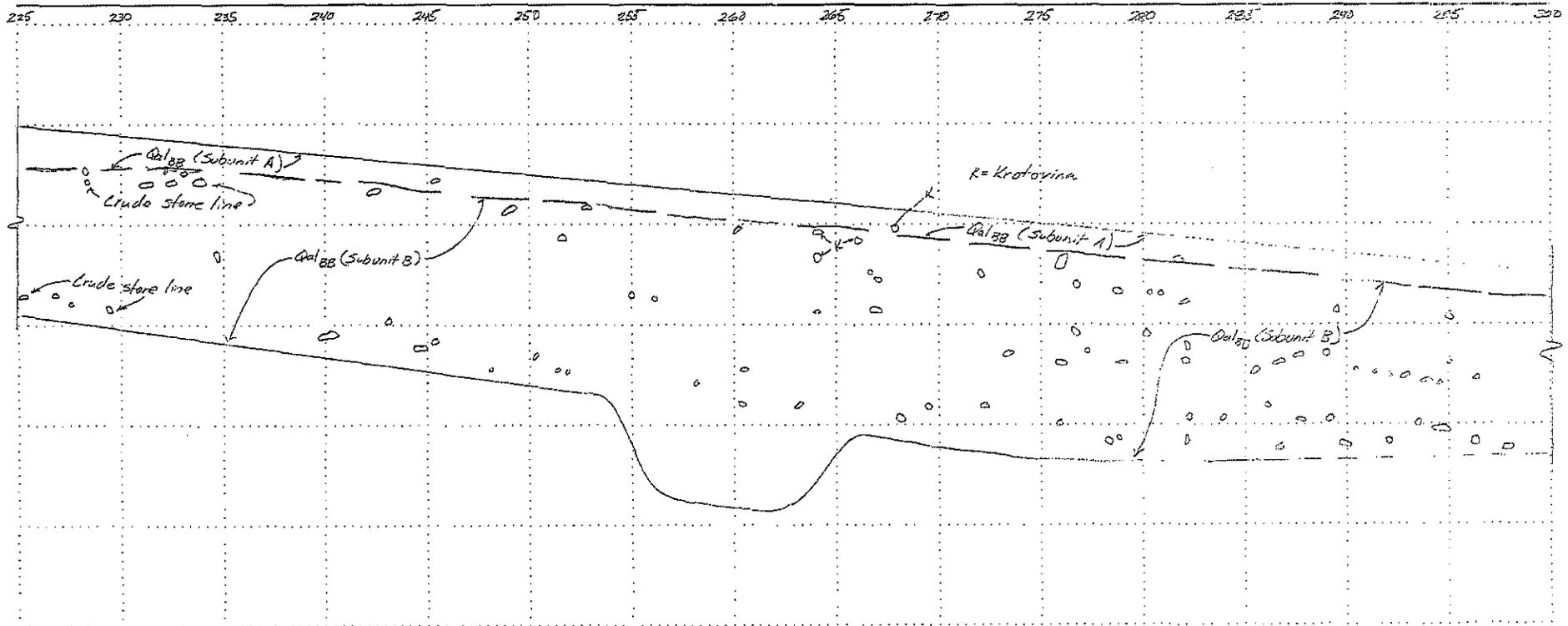
Date logged: 12-2-13
Logged by: GW

Scale: 1"=5', H=V
Log of east wall

Description:

Younger Alluvium - Banning Bench Outwash (Qal_{BB})

- Subunit A (Superficial silty sand) - Dark reddish gray (5R 4/2) silty sand (SM), fine grained with gravel and widely scattered cobbles, moist, loose, poorly sorted. Roots hairs and occasional animal borrows to a depth of about 18 inches. No appreciable development of soil horizons.
- Subunit B (Silty sand) - Reddish brown (5YR 5/4) silty sand (SM), fine grained with scattered gravel (~5% to 10%) and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores), very poorly sorted, massive-granular soil structure with few stone lines. Gravel and cobbles consist of subangular to sub rounded mixed igneous and metamorphic rocks that are slightly weathered and randomly orientated. No carbonate deposits or mottling.



Geologic Fault Trench Log

Trench No. T-3

Project: Tracts 30642 and 32429, Banning, CA
 Equipment: Excavator

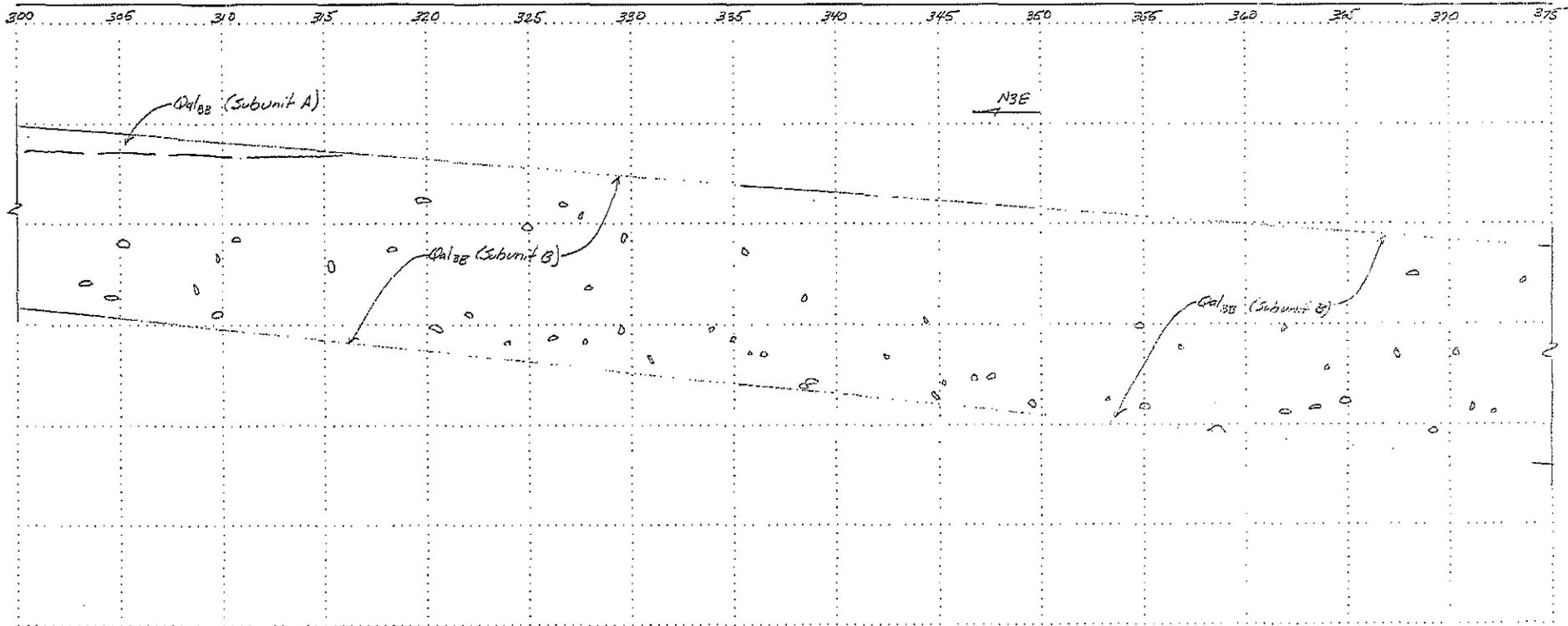
Date logged: 12-3-13
 Logged by: GW

Scale: 1"=5', H=V
 Log of east wall

Description:

Younger Alluvium - Banning Bench Outwash (Qalgg)

- Subunit A (Surficial silty sand) - Dark reddish gray (5R 4/2) silty sand (SM), fine grained with gravel and widely scattered cobbles, moist, loose, poorly sorted. Roots hairs and occasional animal borrows to a depth of about 18 inches. No appreciable development of soil horizons.
- Subunit B (Silty sand) - Reddish brown (5YR 5/4) silty sand (SM), fine grained with scattered gravel (~5% to 10%) and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores), very poorly sorted, massive-granular soil structure with few stone lines. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered and randomly orientated. No carbonate deposits or mottling.



Geologic Fault Trench Log

Trench No. T-1

Project: Tracts 30642 and 32429, Banning, CA

Date logged: 12-3-13

Scale: 1"=5', 11"=V

Equipment: Excavator

Logged by: GW

Log of east wall

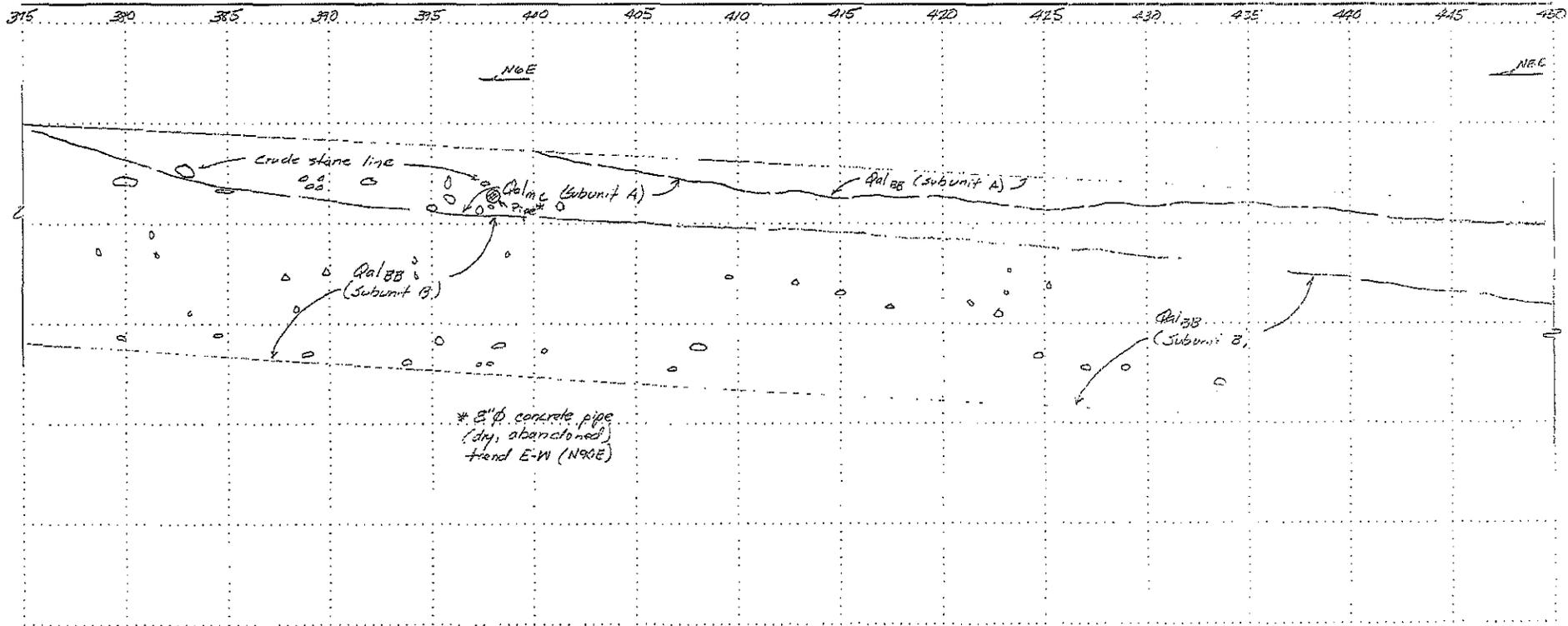
Description:

Younger Alluvium - Montgomery Creek Deposits (Qal_{MC})

- Subunit A (Silty sand) - Brown (7.5YR 4/4) silty sand (SM), fine grained with coarse sand, gravel and a few cobbles, moist, loose, poorly sorted, massive-granular soils structure except near the ground surface which is platy. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered, widely scattered. No appreciable development of soil horizons.

Younger Alluvium - Banning Bench Outwash (Qal_{BB})

- Subunit A (Superficial silty sand) - Dark reddish gray (5R 4/2) silty sand (SM), fine grained with gravel and widely scattered cobbles, moist, loose, poorly sorted. Roots hairs and occasional animal burrows to a depth of about 18 inches. No appreciable development of soil horizons.
- Subunit B (Silty sand) - Reddish brown (5YR 5/4) silty sand (SM), fine grained with scattered gravel (~5% to 10%) and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores), very poorly sorted, massive-granular soil structure with few stone lines. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered and randomly orientated. No carbonate deposits or mottling.



Geologic Fault Trench Log

Trench No. T-2

Project: Tracts 30642 and 32429, Banning, CA
 Equipment: Excavator

Date logged: 12-10-13
 Logged by: GW

Scale: 1"=5', H=V
 Log of east wall

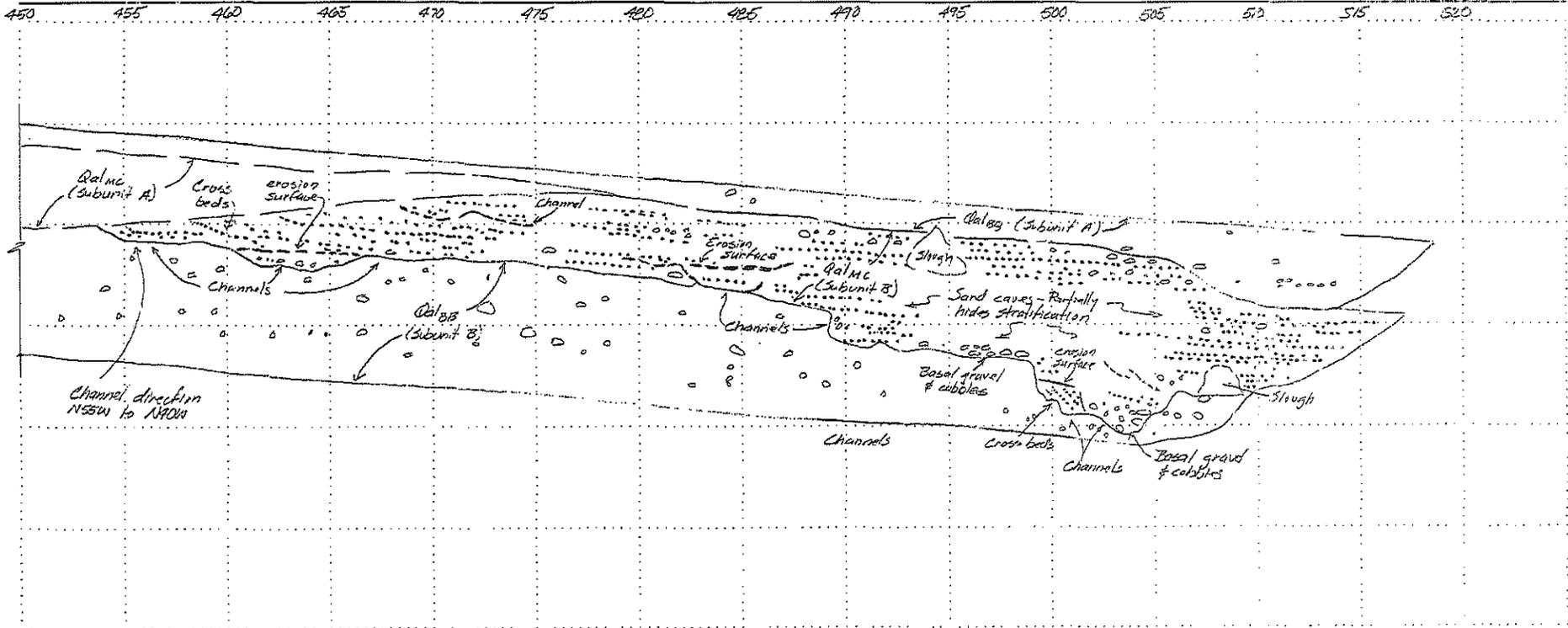
Description:

Younger Alluvium - Montgomery Creek Deposits (Qal_{MC})

- Subunit A (Silty sand) - Brown (7.5YR 4/4) silty sand (SM), fine grained with coarse sand, gravel and a few cobbles, moist, loose, poorly sorted, massive-granular soils structure except near the ground surface which is clay. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered, widely scattered. No appreciable development of soil horizons.
- Subunit B (Sand) - Light gray (5YR 7/1) sand (SP), fine to coarse grained with ~ 10% to 15% gravel and ~2% to 3% cobbles, moist, loose to medium dense, horizontally stratified (laminated) and locally cross bedded, granular, with eroded channel contacts into the unit below and intercal erosional channel contacts. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered.

Younger Alluvium - Banning Bench Outwash (Qal_{BB})

- Subunit A (Surficial silty sand) - Dark reddish gray (5R 4/2) silty sand (SM), fine grained with gravel and widely scattered cobbles, moist, loose, poorly sorted. Roots hairs and occasional animal borrows to a depth of about 18 inches. No appreciable development of soil horizons.
- Subunit B (Silty sand) - Reddish brown (5YR 5/4) silty sand (SM), fine grained with scattered gravel (~5% to 10%) and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores), very poorly sorted, massive-granular soil structure with few stone lines. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered and randomly orientated. No carbonate deposits or mottling.



Geologic Fault Trench Log

Trench No. T-3

Project: Tracts 30642 and 32429, Banning, CA
Equipment: Excavator

Date logged: 12-6-13
Logged by: GW

Scale: 1"=5', H=V
Log of east wall

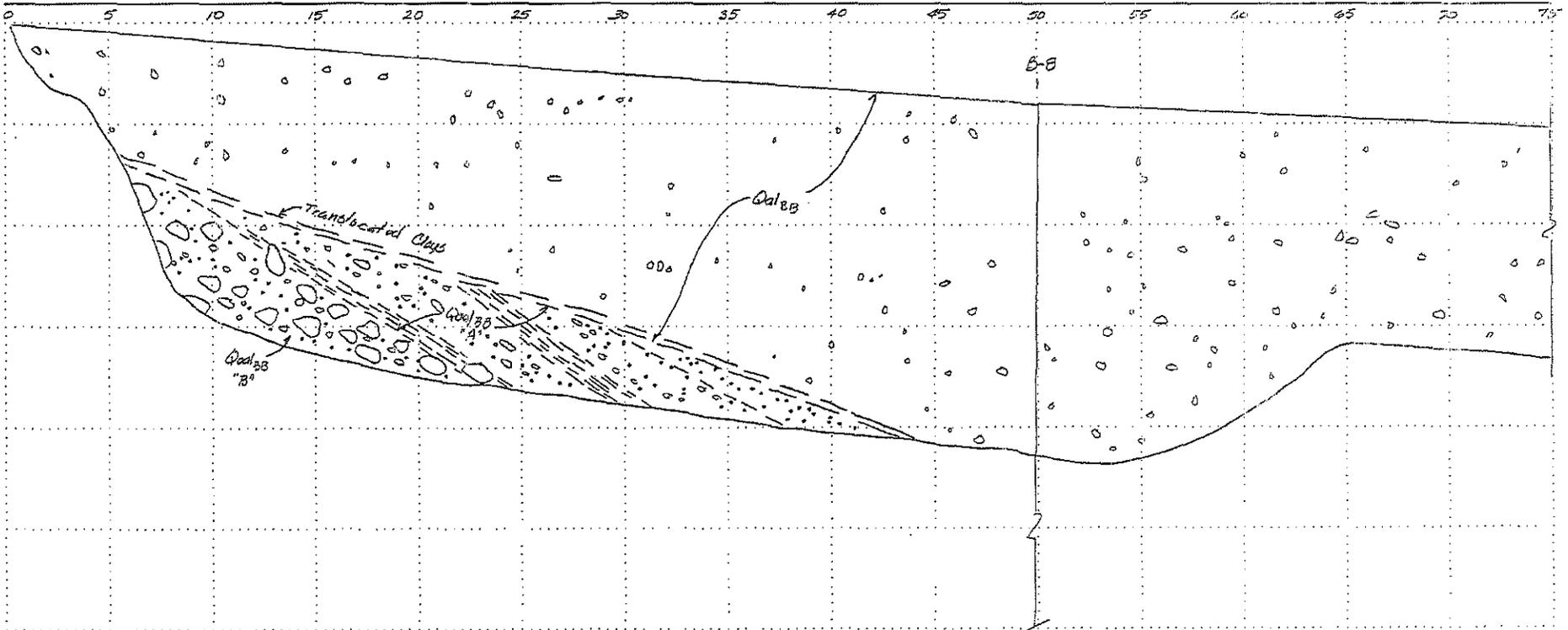
Description:

Younger Alluvium - Banning Bench Outwash (Qalnp)

- Reddish brown (5YR 4/4) silty sand (SM), fine grained, with scattered gravel and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores with no infilling), very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subangular to subrounded, randomly orientated, slightly weathered mixed igneous and metamorphic rocks.

Banning Bench Older Alluvium (Qalbb)

- **Subunit A (Silty Sand)** - Yellowish brown (10YR 5/8) silty, gravelly sand (SM), fine to medium grained with scattered cobbles, moist, dense, moderately decomposed rock clasts with no fracture or shear zones.
- **Subunit B (Cobbles and Boulders)** - Yellowish brown (10YR 4/6) decomposed igneous and metamorphic cobbles and boulders (gneisses, schists and granitics) in a matrix of silty fine sand (GP) with coarse sand and gravel, massive, moist, dense. Rock clasts are randomly orientated, chaotic, and highly weathered (most can be broken by hand or with one or two blows with a rock hammer). The unit is well indurated, massive with no fracture or shear zones.



Geologic Fault Trench Log

Trench No. T-5

Project: Tracts 30642 and 32429, Banning, CA

Date logged: 12-6-13

Scale: 1"=3', H=V

Equipment: Excavator

Logged by: GW

Log of last wall

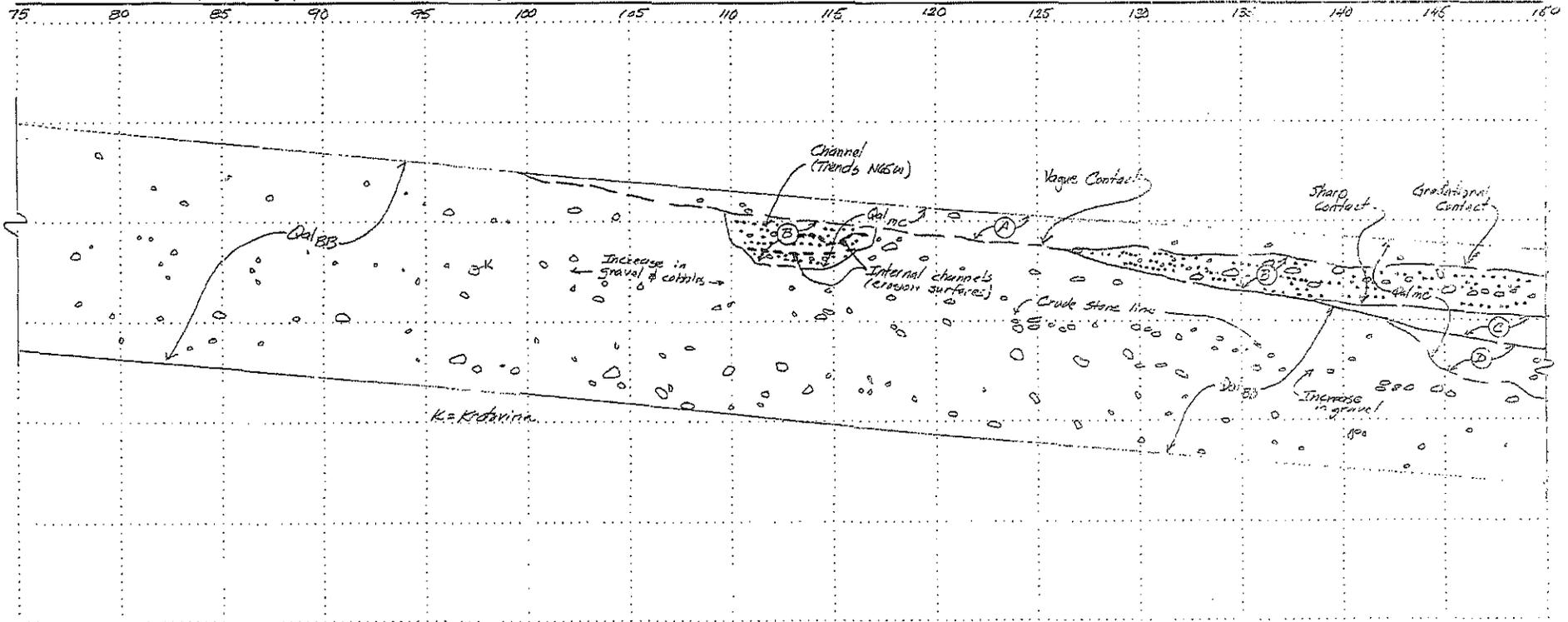
Description:

Younger Alluvium - Montgomery Creek Deposits (Qal_{mc})

- Subunit A (Silty sand) - Brown (7.5YR 4/4) silty sand (SM), fine grained with coarse sand, gravel and a few cobbles, moist, loose, poorly sorted, massive-granular soil structure except near the ground surface which is platy. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered and widely scattered. No appreciable development of soil horizons.
- Subunit B (Sand) - Light gray (5YR 7/1) sand (SP), fine to coarse grained, with ~ 10% to 15% gravel and ~1% to 2% cobbles, moist, loose to medium dense, horizontally stratified (laminated) and locally cross bedded, granular, with eroded channel contacts into the unit below and internal erosional channel contacts. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered.
- Subunit C (Silty sand) - Brown (7.5YR 4/4) silty sand (SM), fine grained with medium to coarse sand, gravel, a few cobbles and a few roots, moist, loose, slightly porous, poorly sorted, massive-granular soil structure. Clear wavy contact with unit below. No carbonate deposits or mottling.
- Subunit D (Sand) - Strong brown (5YR 5/6) sand (SP), fine to coarse grained, with gravel and ~1% cobbles, moist, loose to medium dense, horizontally stratified (laminated), locally cross bedded and massive, granular, with sharp eroded channel contacts into the unit below and internal erosional channel contacts. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered.
- Subunit E (Silty sand) - Brown (7.5YR 4/4) silty sand (SM), fine grained with medium to coarse sand, gravel, moist, medium dense, slightly porous, poorly sorted, massive-granular soil structure.
- Subunit F (Sand) - Brown (7.5YR 4/4) sand (SP), fine to coarse grained with gravel and scattered cobbles, moist, medium dense. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered.

Younger Alluvium - Banning Bench Outwash (Qal_{bb})

- Reddish brown (5YR 4/4) silty sand (SM), fine grained, with scattered gravel and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores with no infilling), very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subangular to subrounded, randomly orientated, slightly weathered mixed igneous and metamorphic rocks.



Geologic Fault Trench Log

Trench No. T-3

Project: Tracts 30642 and 32429, Banning, CA
 Equipment: Excavator

Date logged: 12-6-13
 Logged by: GW

Scale: 1"=5', H=V
 Log of east wall

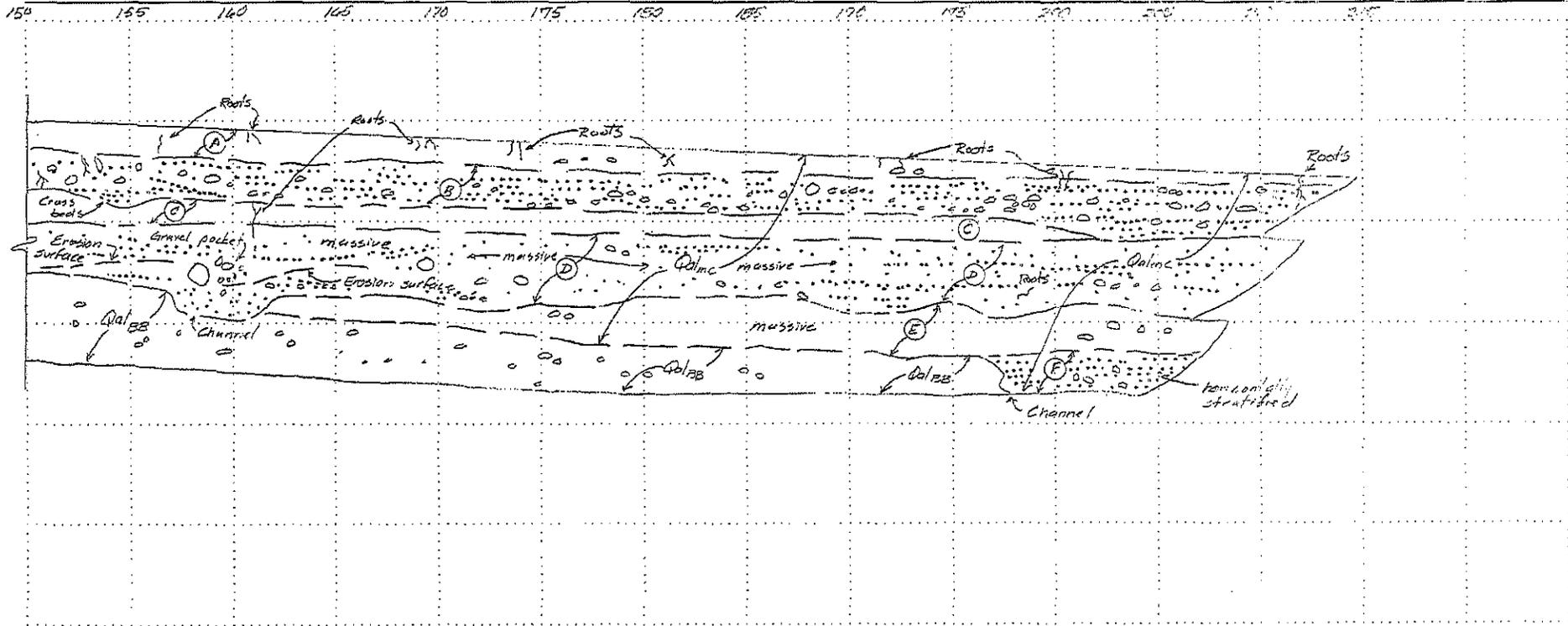
Description:

Younger Alluvium - Montgomery Creek Deposits (Qal_{mc})

- **Subunit A (Silty sand)** - Brown (7.5YR 4/4) silty sand (SM), fine grained with coarse sand, gravel and a few cobbles, moist, loose, poorly sorted, massive-granular soil structure except near the ground surface which is platy. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered, widely scattered. No appreciable development of soil horizons.
- **Subunit B (Sand)** - Light gray (5YR 7/1) sand (SP) fine to coarse grained, with ~ 10% to 15% gravel and ~1% to 2% cobbles, moist, loose to medium dense, horizontally stratified (laminated) and locally cross bedded, granular, with eroded channel contacts into the unit below and internal erosional channel contacts. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered.
- **Subunit C (Silty sand)** - Brown (7.5YR 4/4) silty sand (SM), fine grained with medium to coarse sand, gravel, a few cobbles and a few roots, moist, loose, slightly porous, poorly sorted, massive-granular soil structure. Clear wavy contact with unit below. No carbonate deposits or mottling.
- **Subunit D (Sand)** - Strong brown (5YR 5/6) sand (SP) fine to coarse grained, with gravel and ~1% cobbles, moist, loose to medium dense, horizontally stratified (laminated), locally cross bedded and massive, granular, with sharp eroded channel contacts into the unit below and internal erosional channel contacts. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered.
- **Subunit E (Silty sand)** - Brown (7.5YR 4/4) silty sand (SM), fine grained with medium to coarse sand, gravel, moist, medium dense, slightly porous, poorly sorted, massive-granular soil structure.
- **Subunit F (Sand)** - Brown (7.5YR 4/4) sand (SP), fine to coarse grained with gravel and scattered cobbles, moist, medium dense. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered.

Younger Alluvium - Banning Bench Outwash (Qal_{bb})

- Reddish brown (5YR 4/4) silty sand (SM), fine grained, with scattered gravel and cobbles (~1%), moist, medium dense, slightly to moderately porous (pin-hole size pores with no infilling), very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subangular to subrounded, randomly orientated, slightly weathered mixed igneous and metamorphic rocks.





Geologic Fault Trench Log

Trench No. T-4

Project: Tracts 30642 and 32429, Banning, CA

Date logged: 12-10-13

Scale: 1"=5', E=V

Equipment: Excavator

Logged by: GW

Log of east wall

Description:

Younger Alluvium - Banning Bench Outwash (Qalgs)

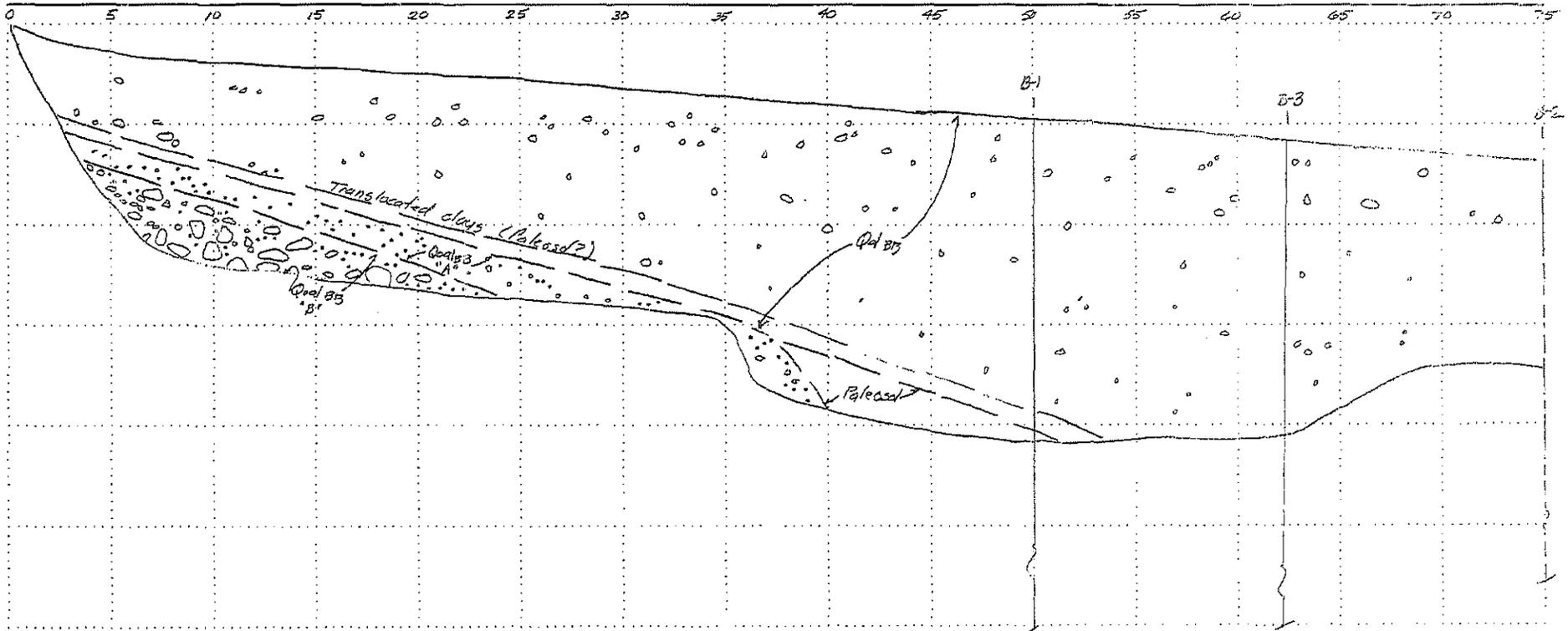
- Reddish brown (5YR 5/4) silty sand (SM), fine grained with ~5% to 10% gravel, ~1% coarse gravel, and ~1% to 2% cobbles, moist, medium dense, slightly porous, very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered, widely scattered, randomly orientated. No carbonate deposits and no mottling. No appreciable development of soil horizons.

Paleosol

- Red (2.5YR 5/6) clayey sand (SC) with silt, medium to coarse grained sand, fine gravel and decomposed cobbles, moist, dense, porous (pin-hole size pores). No carbonates, mottling or fracture zones.

Banning Bench Older Alluvium (Qolgs)

- Subunit A (Silty Sand) - Yellowish brown (10YR 5/8) silty, gravelly sand (SM), fine to medium grained with scattered cobbles, moist, dense, moderately decomposed rock clasts with no fracture or shear zones.
- Subunit B (Cobbles and Boulders) - Reddish yellow (7.5YR 6/6) granitic and metamorphic cobbles in a matrix of silty sand with gravel and a few boulders (GP). Rock clasts are randomly orientated, chaotic, and highly weathered (most can be broken by hand or with one or two blows with a rock hammer). The unit is moderately well indurated, massive with no fracture or shear zones.



Geologic Fault Trench Log

Trench No. T-4

Project: Tracts 30542 and 32429, Banning, CA

Date logged: 12-10-13

Scale: 1"=5', H=V

Equipment: Excavator

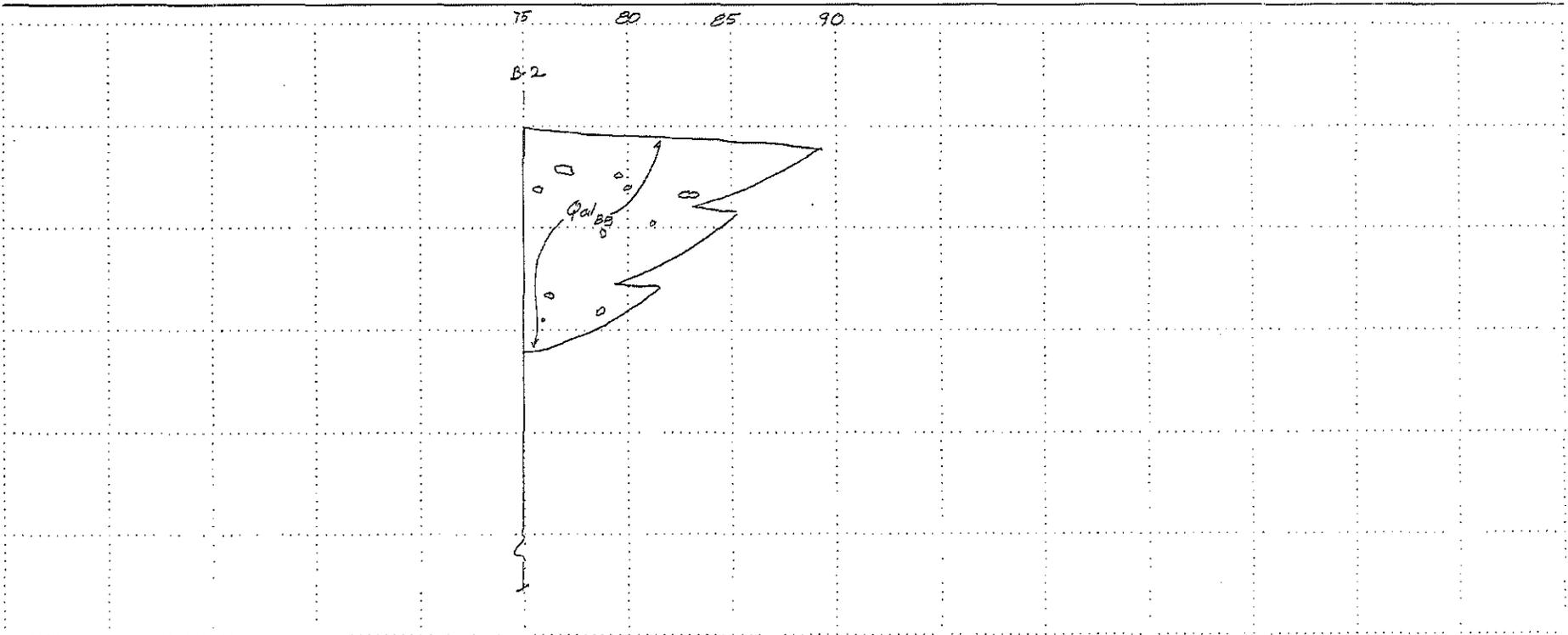
Logged by: GW

Log of east wall

Description:

Younger Alluvium - Banning Bench Outwash (Qal_{BB})

- Reddish brown (5YR 5/4) silty sand (SM), fine grained with ~5% to 10% gravel, ~1% coarse gravel, and ~1% to 2% cobbles, moist, medium dense, slightly porous, very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subangular to subrounded mixed igneous and metamorphic rocks that are slightly weathered, widely scattered, randomly orientated. No carbonate deposits and no mottling. No appreciable development of soil horizons.



Geologic Fault Trench Log

Trench No. T-5

Project: Tracts 30642 and 32429, Banning, CA

Date logged: 12-10-13

Scale: 1"=5', H=V

Equipment: Excavator

Logged by: GW

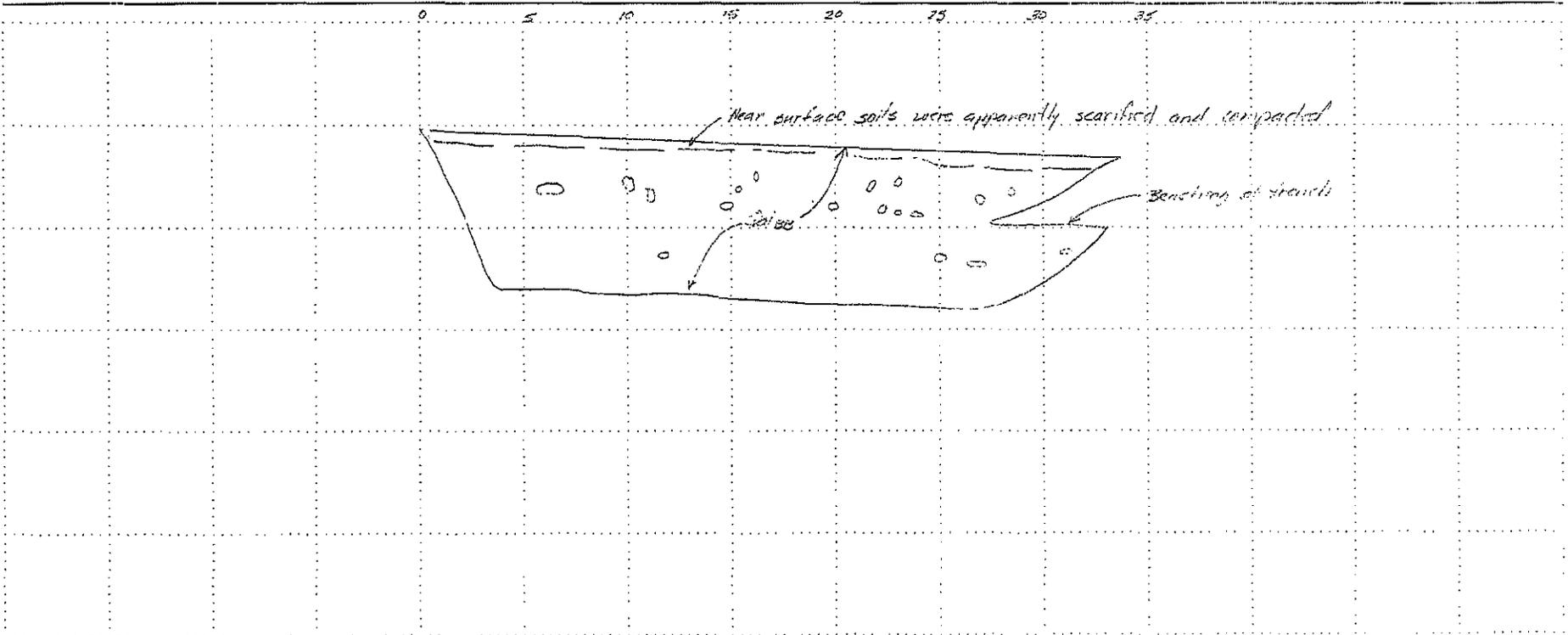
Log of east wall

Description:

Younger Alluvium - Banning Bench Outwash (Qalgn)

- Reddish brown (5YR 4/4) silty sand (SM), fine grained with widely scattered gravel and a few cobbles, moist, medium dense, slightly to moderately porous, very poorly sorted, massive-granular soil structure. Gravel and cobbles consist of subangular to sub-rounded mixed igneous and metamorphic rocks that are slightly weathered and randomly orientated. Surficial soil horizons were removed by prior grading. No carbonate deposits and no mottling. Near surface soils are moderately compacted.

Note: Trench was excavated in an area that was cut during prior grading.





GEOTECHNICAL CONSULTANTS

**APPENDIX B
BORING LOGS**

APPENDIX B

BORING LOGS

B-1.00

B-1.01 Number of Borings

A total of 8 borings were drill with a CME-75 hollow drill rig equipped with hollow stem augers.

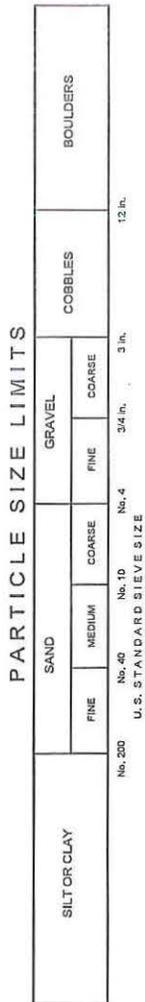
B-1.02 Location of Borings

A Site Geologic Map showing the approximate locations of the borings is presented as Figures 6 and 7.

B-1.03 Boring Logging

Logs of borings were prepared by one of our staff and are attached in this appendix. The logs contain factual information and interpretation of subsurface conditions between samples. The strata indicated on these logs represent the approximate boundary between earth units and the transition may be gradual. The logs show subsurface conditions at the dates and locations indicated, and may not be representative of subsurface conditions at other locations and times.

Identification of the soils encountered during the subsurface exploration was made using the field identification procedure of the Unified Soils Classification System (ASTM D2488). A legend indicating the symbols and definitions used in this classification system and a legend defining the terms used in describing the relative compaction, consistency or firmness of the soil are attached in this appendix. Bag samples of the major earth units were obtained for laboratory inspection and testing, and the in-place density of the various strata encountered in the exploration was determined



MAJOR DIVISIONS		GROUP SYMBOLS		TYPICAL NAMES		
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size.)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravel, gravel-sand mixtures, little or no fines.		
			GP	Poorly graded gravel or gravel-sand mixtures, little or no fines.		
		GRAVELS WITH FINES (Appreciable amt. of fines)	GM	Silty gravels, gravel-sand-silt mixtures.		
			GC	Clayey gravels, gravel-sand-clay mixtures.		
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.		
			SP	Poorly graded sands or gravelly sands, little or no fines.		
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures.		
				SC	Clayey sands, sand-clay mixtures.	
			FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit LESS than 50)	ML	Inorganic silts and very fine sands, rock flour silty or clayey fine sands or clayey silts with slight plasticity
					CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
OL	Organic silts and organic silty clays of low plasticity.					
SILTS AND CLAYS (Liquid limit GREATER than 50)	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.				
	CH	Inorganic clays of high plasticity, fat clays.				
	OH	Organic clays of medium to high plasticity, organic silts.				
	HIGHLY ORGANIC SOILS	Pt	Peat and other highly organic soils.			

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

UNIFIED SOIL CLASSIFICATION SYSTEM

I. SOIL STRENGTH/DENSITY

BASED ON STANDARD PENETRATION TESTS

Compactness of sand		Consistency of clay	
Penetration Resistance N (blows/Ft)	Compactness	Penetration Resistance N (blows/ft)	Consistency
0-4	Very Loose	<2	Very Soft
4-10	Loose	2-4	Soft
10-30	Medium Dense	4-8	Medium Stiff
30-50	Dense	8-15	Stiff
>50	Very Dense	15-30	Very Stiff
		>30	Hard

N = Number of blows of 140 lb. weight falling 30 in. to drive 2-in OD sampler 1 ft.

BASED ON RELATIVE COMPACTION

Compactness of sand		Consistency of clay	
% Compaction	Compactness	% Compaction	Consistency
<75	Loose	<80	Soft
75-83	Medium Dense	80-85	Medium Stiff
83-90	Dense	85-90	Stiff
>90	Very Dense	>90	Very Stiff

II. SOIL MOISTURE

Moisture of sands		Moisture of clays	
% Moisture	Description	% Moisture	Description
<5%	Dry	<12%	Dry
5-12%	Moist	12-20%	Moist
>12%	Very Moist	>20%	Very Moist, wet

SOIL DESCRIPTION LEGEND

Exploratory Boring Log

Boring No. B-1
 Sheet 1 of 2

Date Drilled: 1-2-14 Drilling Equipment: CME-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: T-4 @ Sta. 50' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample					
0 - 5						SM		Artificial fill (trench backfill): Brown to dark brown (7.5YR 4/2) to reddish brown (5YR 4/3) silty fine sand with trace gravel.
5 - 9	S	9				SM		Dark reddish brown (5YR 3/4) silty fine sand with trace coarse sand.
9 - 14	S	14				SC		Paleosol: Red (2.5YR 4/6) clayey sand with silt and trace coarse sand and gravel, very dense, cohesive.
14 - 15	S	29				SM		Older valley alluvium (Qoalv): Reddish brown (5YR 4/3) silty sand with coarse sand, clay and fine gravel. Sample at 14' driven through a piece of large gravel or a cobble.
15 - 19	S	26				SM		Yellowish red (5YR 4/6) silty sand with trace coarse sand.
19 - 20	S	29				SM		Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.
20 - 21	S	20				SM		Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.
21 - 22	S	19				SM		Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.
22 - 25	S	21				SM		Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.
25 - 30	S	22				SM		Dark reddish brown (5YR 3/4) silty fine sand with trace coarse sand.

Sample Type: S - SPT Sample

 - End of Boring



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Exploratory Boring Log

Boring No. B-1

Sheet 2 of 2

Date Drilled: 1-2-14

Drilling Equipment: CMI E-75

Logged By: GW

Boring Hole Diameter: 8"

Location: T-4 @ Sta. 50'

Drive Weights: 140 lbs.

Note: Boring was drilled through trench backfill

Drop: 30"

Depth (ft)	Samples				Dry Density (pcf)	USCS	Graphic Symbol	Material Description <small>This log contains factual information and interpretation of the subsurface conditions between the samples. The stratum indicated on this log represent the approximate boundary between earth units and the transition may be gradual. The log show subsurface conditions at the date and location indicated, and may not be representative of subsurface conditions at other locations and times.</small>
	Sample Type	Blows (blows/ft)	Bulk Sample	Moisture Content (%)				
35	S	39				SM	 <p>Valley older alluvium (Qoaly): Dark reddish brown (5YR 3/3) silty fine sand with trace coarse sand.</p> <p>Total depth 31.5' No groundwater Hole backfilled with cuttings</p>	
40								

Sample Type: S - SPT Sample

 - End of Boring

Exploratory Boring Log

Boring No. B-2

Sheet 1 of 2

Date Drilled: 1-2-14

Drilling Equipment: CMB -75

Logged By: GW

Boring Hole Diameter: 8"

Location: T-4 @ Sta. 75'

Drive Weights: 140 lbs.

Note: Boring was drilled through trench backfill

Drop: 30"

Depth (ft)	Samples				Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample	Moisture Content (%)				
0 - 10						SM	Artificial fill (trench backfill): Brown to dark brown (7.5YR 4/2) to reddish brown (5YR 4/3) silty fine sand with trace gravel.	
8	S	8				SM	Banning Bench Outwash younger alluvium (Qa _{1bb}): Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.	
9	S	9						
15	S	9				SM	Brown to dark brown (7.5YR 4/4) silty fine sand with trace coarse sand and fine gravel.	
	S	9				SM	Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.	
	S	9				SM	Yellowish red (5YR 4/6) silty sand with trace coarse sand.	
20	S	11				SM	Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.	
	S	12						
	S	15						
25	S	11				SM	Valley older alluvium (Qo _{alv}): Dark reddish brown (5YR 3/4) silty fine sand with trace coarse sand.	
	S	12				SM	Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.	
	S	11				SM	Dark reddish brown (5YR 3/3) silty fine sand with trace coarse sand.	
	S	15						
	S	20						

Sample Type:  - SPT Sample

 - End of Boring



Exploratory Boring Log

Boring No. B-2
Sheet 2 of 2

Date Drilled: 1-2-14 Drilling Equipment: CMLE-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: T-4 @ Sta. 75' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples				Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample	Moisture Content (%)				
35	S	26				SM	<p>Valley older alluvium (Qoalv): Dark reddish brown (5YR 3/3) silty fine sand with trace coarse sand.</p> <p>Brown to dark brown (7.5YR 4/4) silty fine sand with trace coarse sand and fine gravel.</p> <p>Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.</p> <p>Brown to dark brown (7.5YR 4/4) silty fine sand with trace coarse sand and fine gravel.</p> <p>Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.</p> <p>Yellowish red (5YR 4/6) silty sand with trace coarse sand.</p> <p>Total depth 39.5' No groundwater Hole backfilled with cuttings</p>	
	S	23				SM		
	S	20				SM		
	S	21				SM		
	S	22				SM		
	S	23				SM		

Sample Type: S - SPT Sample
 - End of Boring

Exploratory Boring Log

Boring No. B-3
 Sheet 1 of 2

Date Drilled: 1-2-14 Drilling Equipment: CME-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: T-4 @ Sta. 62.5' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (ft)	Bulk Sample					
5						SM		Artificial fill (trench backfill): Brown to dark brown (7.5YR 4/2) to reddish brown (5YR 4/3) silty fine sand with trace gravel.
6	S	6				SM		Banning Bench Outwash younger alluvium (Qa _{1bb}): Yellowish red (5YR 4/6) silty sand with trace coarse sand.
12	S					SM		Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.
16	S							
20	S					SM		Reddish brown (5YR 4/4) silty fine sand with trace coarse sand.
19	S							
15	S							
20	S	15				SM		Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.
	S	16				SM		Valley older alluvium (Qo _{1v}): Dark reddish brown (5YR 3/4) silty fine sand with trace coarse sand.
	S	16				SM		Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.
25	S	14				SM		Dark reddish brown (5YR 3/4) silty fine sand with trace coarse sand
	S	16						
	S	28						
	S	35						

Sample Type: S - SPT Sample
 - End of Boring

Exploratory Boring Log

Boring No. B-3

Sheet 2 of 2

Date Drilled: 1-2-14 Drilling Equipment: CME-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: T-4 @ Sta. 62.5' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample					
26	S	26				SM		Valley older alluvium (Qoal): Dark reddish brown (5YR 3/3) silty fine sand with trace coarse sand.
18	S	18				SM		Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.
28	S	28						
35								Total depth 35' No groundwater Hole backfilled with cuttings

Sample Type:  - SPT Sample

 - End of Boring



Exploratory Boring Log

Boring No. B-4

Sheet 1 of 2

Date Drilled: 1-2-14
 Logged By: GW
 Location: T-2 @ Sta. 50'
 Note: Boring was drilled through trench backfill

Drilling Equipment: CME-75
 Boring Hole Diameter: 8"
 Drive Weights: 140 lbs.
 Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample					
0 - 5						SM		Artificial fill (trench backfill): Brown to dark brown (7.5YR 4/2) to reddish brown (5YR 4/3) silty fine sand with trace gravel.
5 - 10						SM		Banning Bench older alluvium (Qoalbb): Strong brown (7.5YR 4/6) silty fine sand with trace coarse sand and fine gravel.
10 - 15	S	22				SM		Brown (7.5YR 5/4) silty fine sand with trace coarse sand and fine gravel.
15 - 20	S	56				SM		Brown (7.5YR 5/4) silty fine sand with trace coarse sand and fine gravel.
20 - 25	S	35				SM		Strong brown (7.5YR 5/6) silty fine sand with trace coarse sand and fine gravel.
25 - 30	S	45				SM		Strong brown (7.5YR 5/6) silty fine sand with trace coarse sand and fine gravel.
30 - 35	S	49				SM		Strong brown (7.5YR 5/6) silty fine sand with trace coarse sand and fine gravel.
35 - 40	S	59				SM		Brown (7.5YR 5/4) silty fine sand with trace coarse sand and fine gravel.
40 - 45	S	65				SM		Brown (7.5YR 5/4) silty fine sand with trace coarse sand and fine gravel.
45 - 50	S	52				SM		Brown (7.5YR 5/4) silty fine sand with trace coarse sand and fine gravel.
50 - 55	S	43				SM		Brown (7.5YR 5/4) silty fine sand with trace coarse sand and fine gravel.
55 - 60	S	50/3"				SM		Brown (7.5YR 5/4) silty fine sand with trace coarse sand and fine gravel.
60 - 65	S	40				SM		Valley older alluvium (Qoalv): Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.

Sample Type: S - SPT Sample

- End of Boring

Exploratory Boring Log

Boring No. B-4
 Sheet 2 of 2

Date Drilled: 1-6-14 Drilling Equipment: CME-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: T-2 @ Sta. 50' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample					
32	S	32				SM		Valley older alluvium (Qoalv); Dark reddish brown (5YR 3/4) silty fine sand with trace coarse sand.
35	S	29				SM		Dark reddish brown (2.5YR 3/4) silty fine sand with trace coarse sand and fine gravel.
36.5	S	29						Total depth 36.5' No groundwater Hole backfilled with cuttings

Sample Type: S - SPT Sample

 - End of Boring

Exploratory Boring Log

Boring No. B-5
 Sheet 1 of 2

Date Drilled: 1-3-14 Drilling Equipment: CME-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: 1-2 @ Sta. 70' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample					
0 - 10						SM		Artificial fill (trench backfill): Brown to dark brown (7.5YR 4/2) to reddish brown (5YR 4/3) silty fine sand with trace gravel.
10	S	10				SM		Banning Bench Outwash younger alluvium (Qalbn): Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.
11	S	21				SC		Dark red (2.5YR 3/6) Clayey sand with silt, fine sand with trace coarse sand.
12	S	18				SM		Reddish brown (2.5YR 4/4) silty fine sand with trace coarse sand and fine gravel.
13	S	28						
14	S	28				SM		Yellowish red (5YR 4/6) silty fine sand with trace coarse sand and fine gravel.
15	S	31				SM		Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.
16	S	23				SM		Yellowish red (5YR 4/6) silty fine sand with trace coarse sand and fine gravel.
17	S	23						
18	S	28				SM		Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.
19	S	32						
20	S	26						
21	S	17				SM		Valley older alluvium (Qoalv): Dark reddish brown (2.5YR 3/4) silty fine sand with trace coarse sand.
22	S	18				SM		Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.

Sample Type: **S** - SPT Sample

 - End of Boring

Exploratory Boring Log

Boring No. B-5

Sheet 2 of 2

Date Drilled: 1-3-14 Drilling Equipment: CMiE-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: T-2 @ Sta. 70' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample					
29	S	29				SM		Valley older alluvium (Qoaly): Dark reddish brown (5YR 3/4) silty fine sand with trace coarse sand.
29	S	29				SM		Dusky red (2.5YR 3/2) silty fine sand with trace coarse sand and fine gravel.
31	S	31				SM		Dark reddish brown (2.5YR 3/4) silty fine sand with trace coarse sand and fine gravel.
33	S	33						
Total depth 41.5' No groundwater Hole backfilled with cuttings								

Sample Type:  - SPT Sample

 - End of Boring

Exploratory Boring Log

Boring No. B-6
 Sheet 1 of 2

Date Drilled: 1-3-14 Drilling Equipment: CMB-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: T-2 @ Sta. 60' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples				Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample						
0 - 10								Artificial fill (trench backfill): Brown to dark brown (7.5YR 4/2) to reddish brown (5YR 4/3) silty fine sand with trace gravel.	
10 - 11	S	27						Paleosol: Red (2.5YR 4/6) clayey sand with silt, fine sand and trace coarse sand.	
11 - 12	S	47						Banning Bench older alluvium (QoalB): Strong brown (7.5YR 4/6) silty fine sand with trace coarse sand and fine gravel.	
12 - 13	S	47							
13 - 14	S	24							
14 - 15	S	43							
15 - 16	S	38						SM Yellowish red (5YR 4/6) silty sand with trace coarse sand.	
16 - 17	S	29						SM Strong brown (7.5YR 4/6) silty fine sand with trace coarse sand and fine gravel.	
17 - 18	S	54						SM Brown (7.5YR 5/4) silty fine sand with trace coarse sand and fine gravel.	
18 - 19	S	45						SM Brown (7.5YR 5/4) silty fine sand with trace coarse sand and fine gravel.	
19 - 20								Approximate contact based on cross sectional analysis	
20 - 25								SM Valley older alluvium (QoalV): Dark reddish brown (2.5YR 2.5/4) silty fine sand with trace coarse sand and fine gravel.	

Sample Type: S - SPT Sample
 - End of Boring

Exploratory Boring Log

Boring No. B-6

Sheet 2 of 2

Date Drilled: 1-3-14

Drilling Equipment: CME -75

Logged By: GW

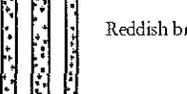
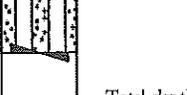
Boring Hole Diameter: 8"

Location: T-2 @ Sta. 60'

Drive Weights: 140 lbs.

Note: Boring was drilled through trench backfill

Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample					
28	S	28				SM		Valley older alluvium (Qoaly); Dark reddish brown (2.5YR 2.5/4) silty fine sand with trace coarse sand and fine gravel.
35	S	30				SM		Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.
40	S	40						
Total depth 41.5' No groundwater Hole backfilled with cuttings								

Sample Type:  - SPT Sample

 - End of Boring



Exploratory Boring Log

Boring No. B-7
Sheet 1 of 2

Date Drilled: 1-3-14
 Logged By: GW
 Location: T-2 @ Sta. 65'
 Note: Boring was drilled through trench backfill

Drilling Equipment: CME-75
 Boring Hole Diameter: 8"
 Drive Weights: 140 lbs.
 Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample					
0 - 18						SM	(Artificial fill symbol)	Artificial fill (trench backfill); Brown to dark brown (7.5YR 4/2) to reddish brown (5YR 4/3) silty fine sand with trace gravel.
18	S	18				SM	(SM symbol)	Banning Bench Outwash younger alluvium (Qa _{1BB}): Yellowish red (5YR 4/6) silty fine sand with trace coarse sand and fine gravel.
35	S	35				SM	(SM symbol)	Reddish brown (2.5YR 4/4) silty fine sand with trace coarse sand and fine gravel.
67	S	67				SC	(SC symbol)	Red (2.5YR 4/6) clayey sand with silt, fine sand with trace coarse sand and fine gravel.
51	S	51						
31	S	31				SM	(SM symbol)	Red (2.5YR 4/6) silty fine sand with trace coarse sand and fine gravel.
31	S	31				SM	(SM symbol)	Yellowish red (5YR 4/6) silty fine sand with trace coarse sand and fine gravel.
20 - 25								Depth of contact estimated from trench and boring data.
25	S	18				SM	(SM symbol)	Valley older alluvium (Qo _{alv}): Reddish brown (2.5YR 4/4) silty fine sand with trace coarse sand and fine gravel.

Sample Type: S - SPT Sample

- End of Boring

Exploratory Boring Log

Boring No. B-7
Sheet 2 of 2

Date Drilled: 1-3-14 Drilling Equipment: CME-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: T-2 @ Sta. 65' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples					Dry Density (pcf)	USCS	Graphic Symbol	Material Description <small>This log contains factual information and interpretation of the subsurface conditions between the samples. The stratum indicated on this log represent the approximate boundary between earth units and the transition may be gradual. The log show subsurface conditions at the date and location indicated, and may not be representative of subsurface conditions at other locations and times.</small>
	Sample Type	Blows (blows/ft)	Bulk Sample	Moisture Content (%)					
31.5	S	40					SM		Valley older alluvium (Qoalv): Dusky red (2.5YR 3/2) silty fine sand with trace coarse sand and fine gravel. Total depth 31.5' No groundwater Hole backfilled with cuttings

Sample Type: S - SPT Sample

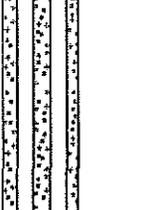
 - End of Boring

Exploratory Boring Log

Boring No. B-8

Sheet 1 of 2

Date Drilled: 1-6-14 Drilling Equipment: CME-75
 Logged By: GW Boring Hole Diameter: 8"
 Location: T-3 @ Sta. 50' Drive Weights: 140 lbs.
 Note: Boring was drilled through trench backfill Drop: 30"

Depth (ft)	Samples			Moisture Content (%)	Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample					
0 - 14.5						SM		Artificial fill (trench backfill): Brown to dark brown (7.5YR 4/2) to reddish brown (5YR 4/3) silty fine sand with trace gravel.
14.5 - 17.5	S	8				SM		Banning Bench Outwash younger alluvium (Qa _{bb}): Reddish brown (5YR 4/4) silty fine sand with trace coarse sand and fine gravel.
17.5 - 18.5	S	8						
18.5 - 19.5	S	10						
19.5 - 20.5	S	11						
20.5 - 21.5	S	14						Valley older alluvium (Qo _{al}): Reddish brown (2.5YR 4/4) clayey sand with silt, fine sand with trace coarse sand and fine gravel.
21.5 - 22.5	S	27				SM		Dark reddish brown (2.5YR 3/4) silty fine sand with trace coarse sand and fine gravel.
22.5 - 23.5	S	30						
23.5 - 24.5	S	30						
24.5 - 25.5	S	23						
25.5 - 26.5	S	21				SM		Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel.
26.5 - 27.5	S	14						
27.5 - 28.5	S	14						
28.5 - 29.5	S	22						

Sample Type:  - SPT Sample
 - End of Boring

Exploratory Boring Log

Boring No. B-8
 Sheet 2 of 2

Date Drilled: 1-6-14	Drilling Equipment: CMB -75
Logged By: GW	Boring Hole Diameter: 8"
Location: T-2 @ Sta. 50'	Drive Weights: 140 lbs.
Note: Boring was drilled through trench backfill	Drop: 30"

Depth (ft)	Samples				Dry Density (pcf)	USCS	Graphic Symbol	Material Description
	Sample Type	Blows (blows/ft)	Bulk Sample	Moisture Content (%)				
35	S	37				SM		Valley older alluvium (Qoalv): Dark reddish brown (5YR 3/4) silty fine sand with trace coarse sand. Reddish brown (5YR 4/3) silty fine sand with trace coarse sand and fine gravel. Total depth 35' No groundwater Hole backfilled with cuttings
	S	40						
	S	29				SM		
40								

Sample Type: S - SPT Sample

 - End of Boring

APPENDIX C
PHOTOGRAPHS OF FAULT TRENCHES



Trench T-1 looking to the northeast



Trench T-1, Sta. 0 to 50



Trench T-1, Sta. 50 to 100



Trench T-1, Sta. 100 to 150



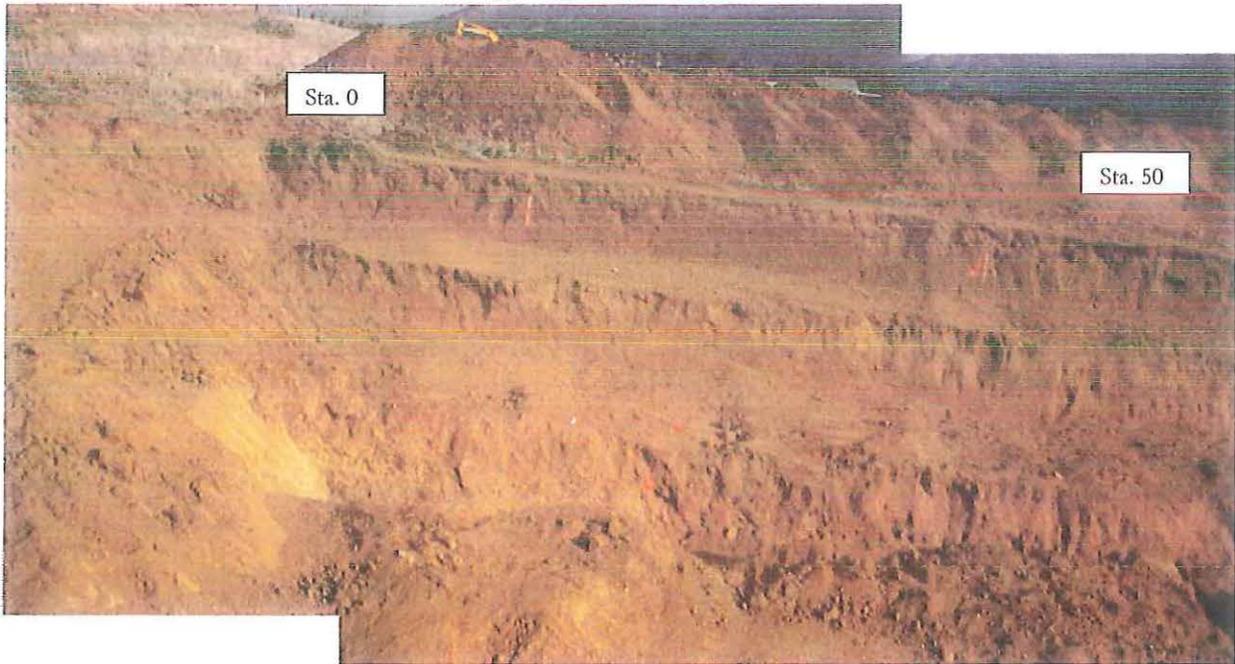
Trench T-1, Sta. 150 to 200



Trench T-1, Sta. 200 to 238



Trench T-2, Looking from the south end of the trench to the north.



Trench T-2, Sta. 0 to 50



Trench T-2, Sta. 50-100



Trench T-2, Sta. 100 to 150



Trench T-2, Sta. 150 to 200



Trench T-2, Sta. 200 to 250



Trench T-2, Sta. 250 to 300



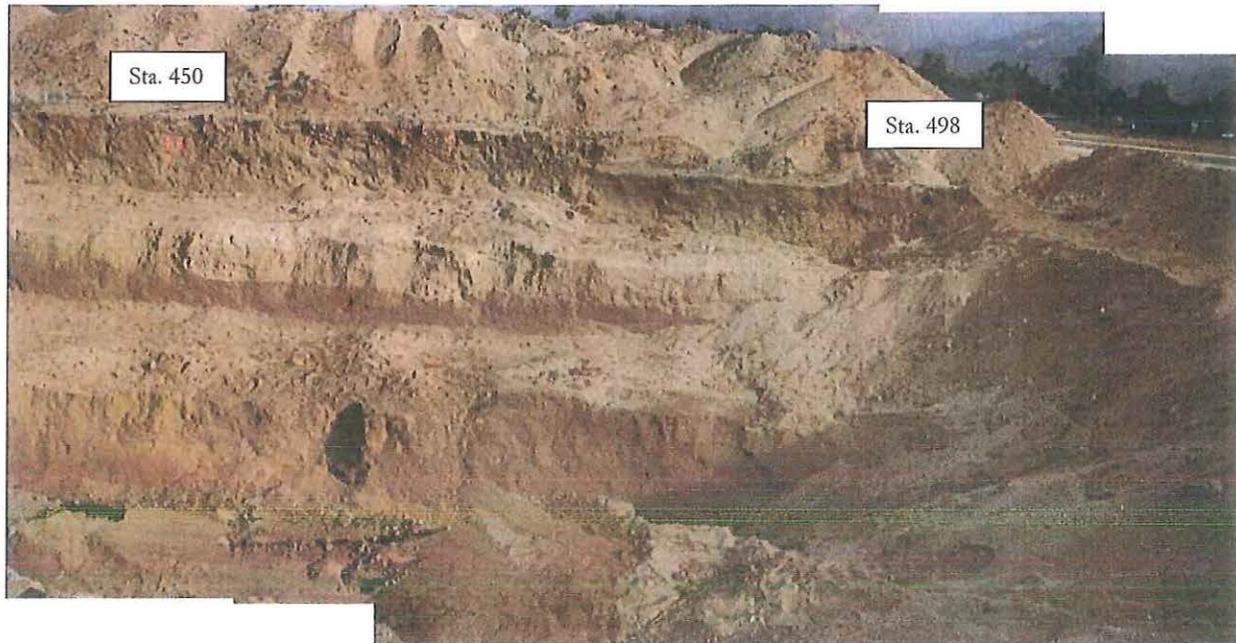
Trench T-2, Sta. 300 to 350



Trench T-2, Sta. 350 to 400



Trench T-2, Sta. 400 to 450



Trench T-2, Sta. 450 to 498



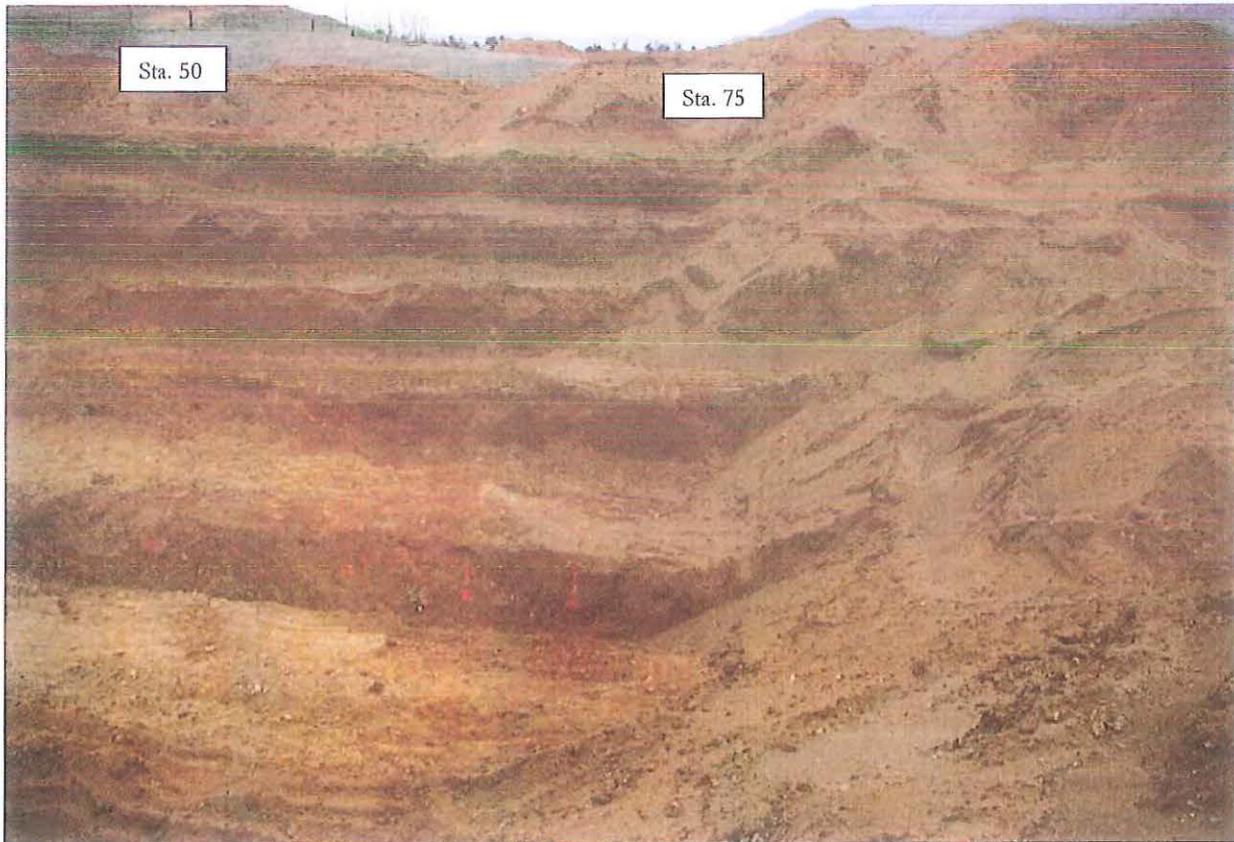
Trench T-2, Sta. 475 to 519



Deepened portion of T-2 looking north



Deepened portion of T-2, Sta. 0 to 75



Deepened portion of T-2, Sta. 50 to 75



Trench T-3 Looking from south end to the north



Trench T-3, Sta. 0 to 50



Trench T-3, Sta. 50 to 100



Trench T-3, Sta. 100 to 150



Trench T-3, Sta. 150' to 200'



Trench T-3, Sta. 200 to 215



Deepened portion of T-3 looking north



Deepened portion of T-3, Sta. 0 to 65



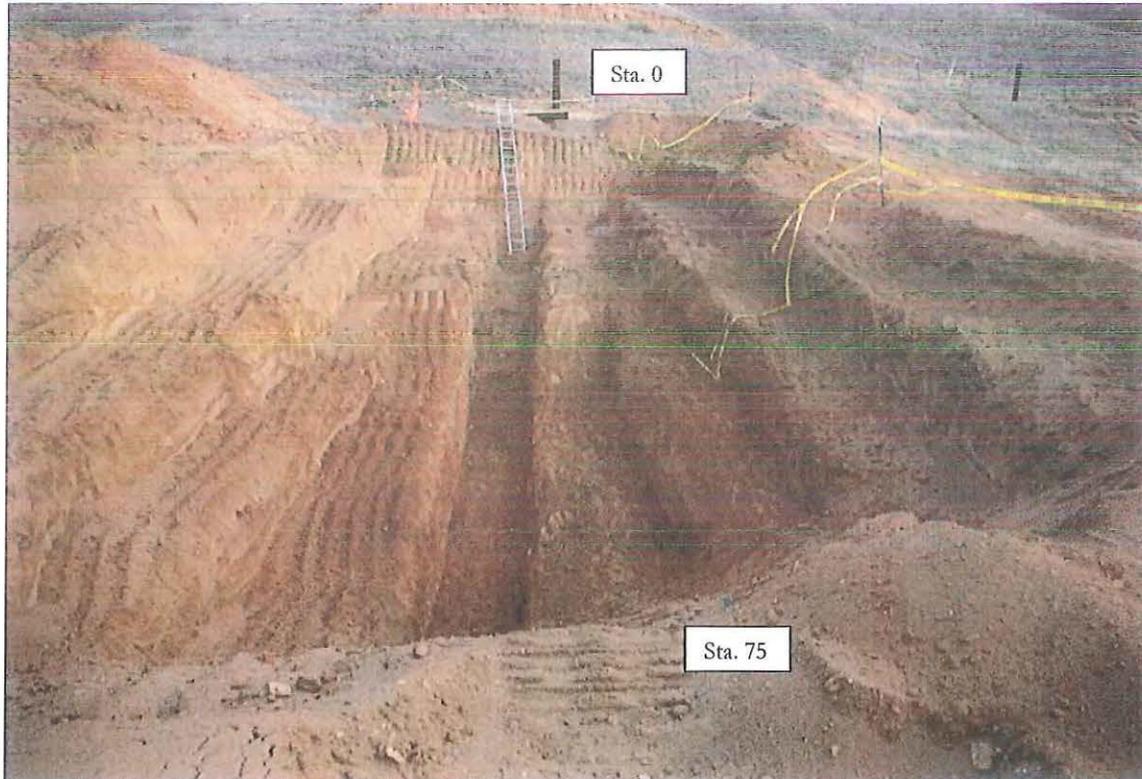
Trench T-4 looking from south end to north.



Trench T-4, Sta. 0 to 50



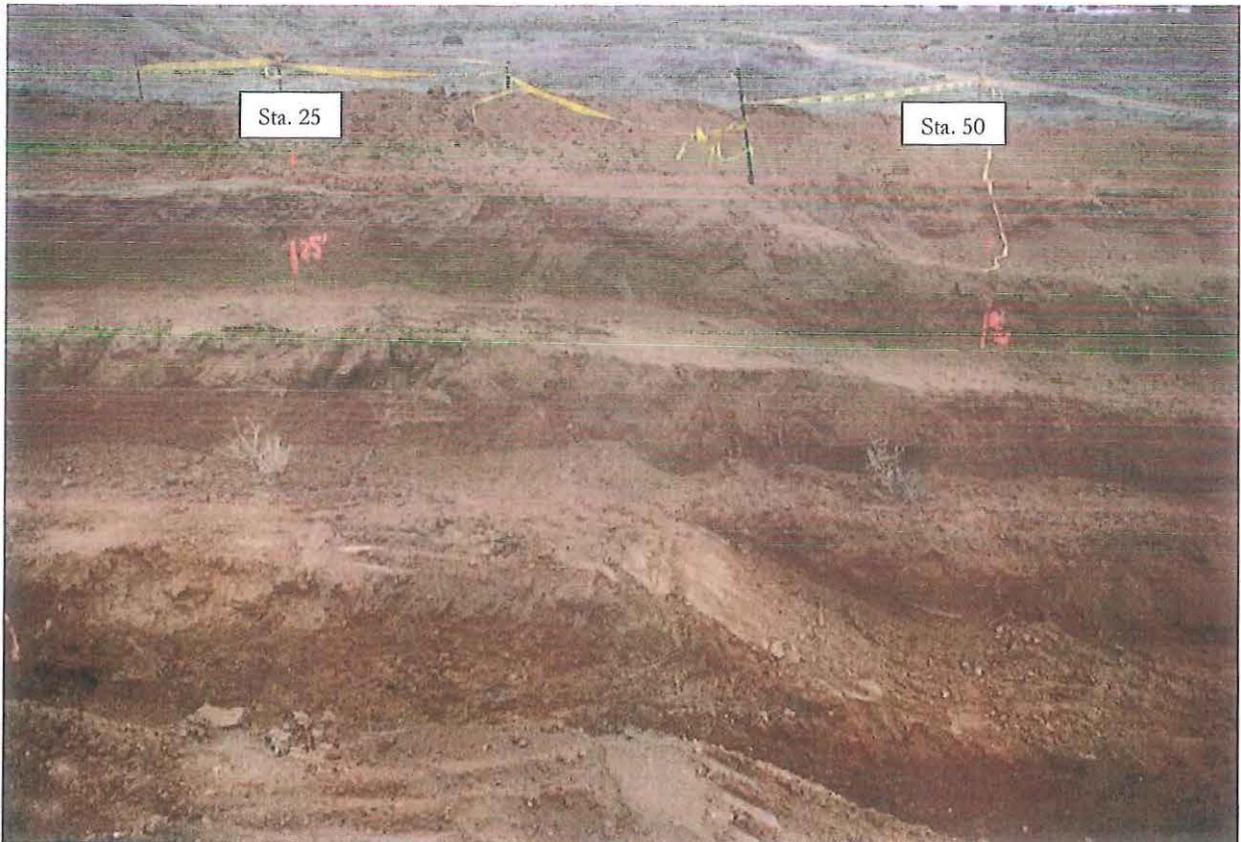
Trench T-4, Sta. 50 to 90



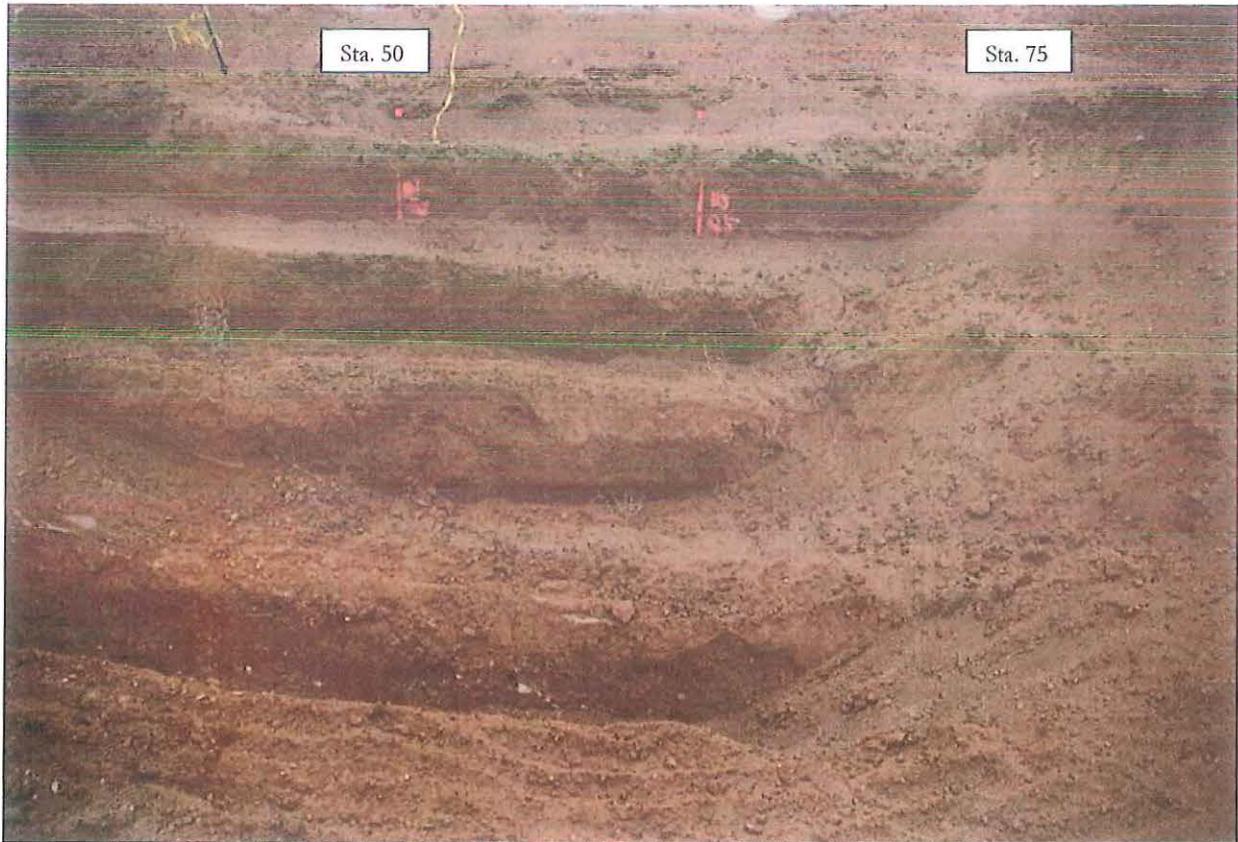
Deepened portion of Trench T-4 looking to the north



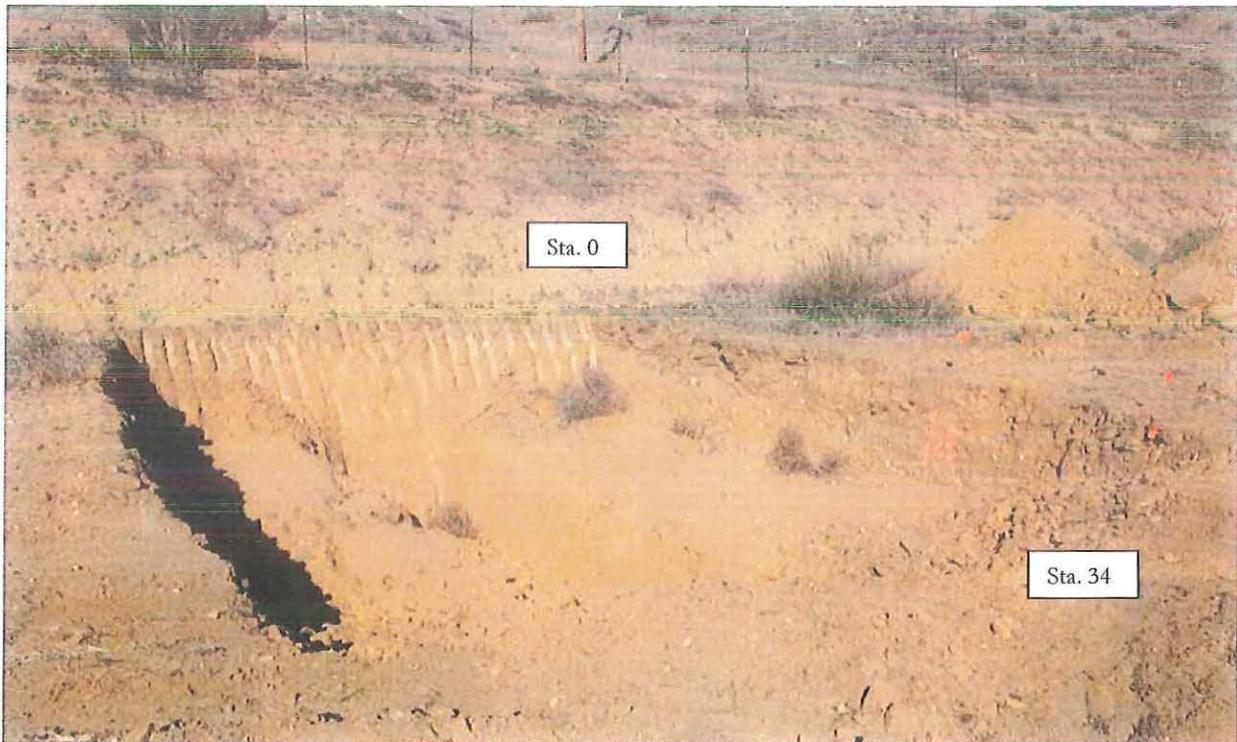
Deepened portion of Trench T-4, Sta. 0 to 25



Deepened portion of Trench T-4, Sta. 25 to 50



Deepened portion of Trench T-4, Sta. 50 to 75



Trench T-5 looking from south to north.



Trench T-5, Sta. 0 to 34

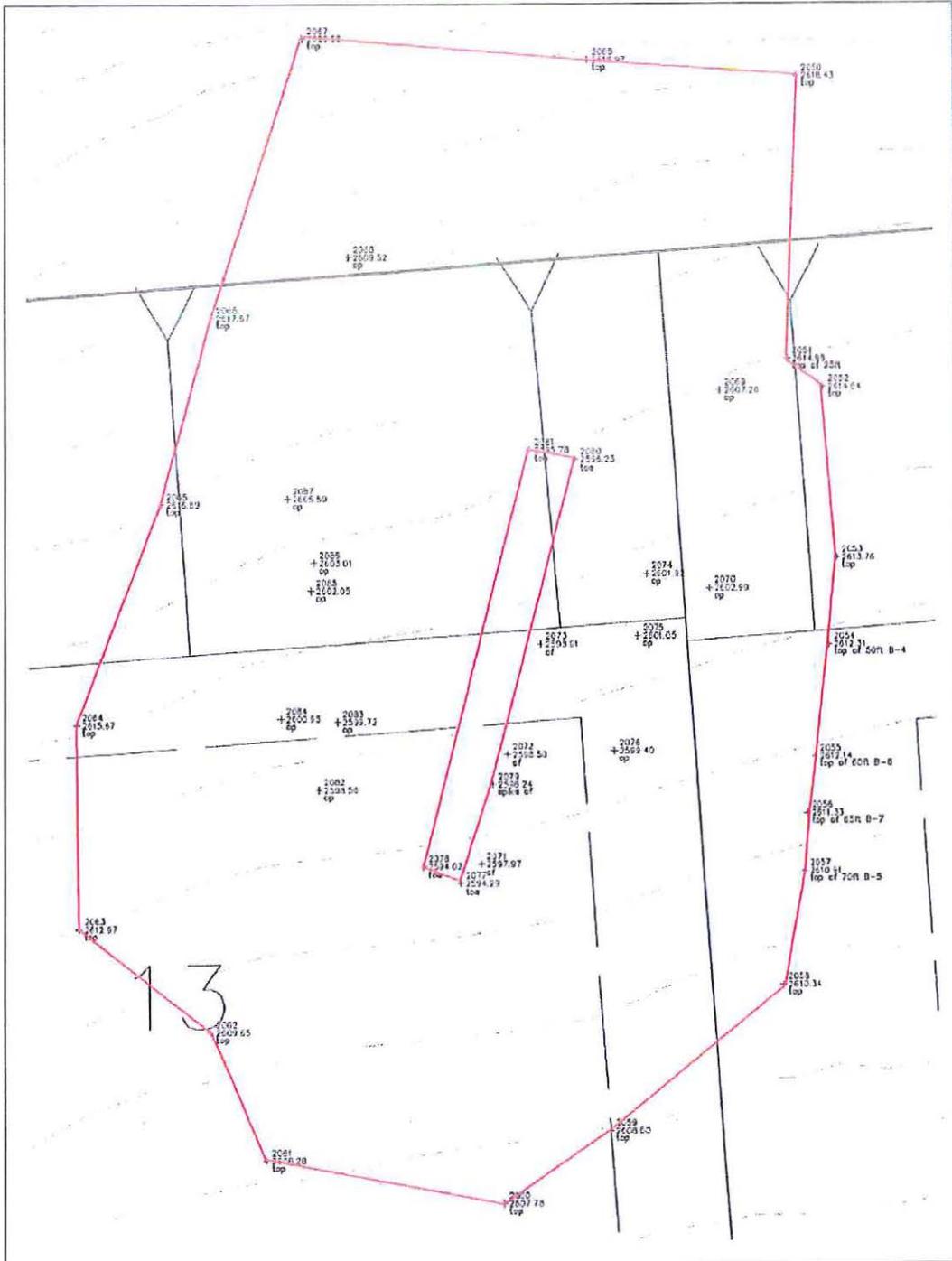
APPENDIX D
TRENCH LOCATIONS

**TRENCH LOCATIONS PRIOR TO DEEPENING T-2, T-3 AND T-4
BY ETREX GPS**

Trench	Station	Center Line		West Edge		East Edge	
		Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
T-1	0	33.93469°	-116.90351°	33.93469°	-116.90353°	33.93468°	-116.90336°
	100	33.93446°	-116.90361°	33.93445°	-116.90375°	33.93444°	-116.90356°
	200	33.93424°	-116.90374°	33.93434°	-116.90374°	33.93422°	-116.90374°
	South end	33.93420°	-116.90378°	33.93426°	-116.90378°	33.93415°	-116.90375°
T-2	0	33.93462°	-116.90780°	33.93460°	-116.90780°	33.93465°	-116.90774°
	100	33.93444°	-116.90789°	33.93428°	-116.90776°	33.93435°	-116.90773°
	200	33.93422°	-116.90770°	33.93403°	-116.90770°	33.93408°	-116.90773°
	300	33.93394°	-116.90768°	33.93379°	-116.90768°	33.93382°	-116.90773°
	350	33.93380°	-116.90772°	--	--	--	--
	400	33.93364°	-116.90774°	33.93358°	-116.90784°	33.93355°	-116.90774°
	450	33.93350°	-116.90785°	33.93343°	-116.90785°	33.93340°	-116.90777°
	500	--	--	--	--	33.93328°	-116.90781°
T-3	0	33.93454°	-116.91026°	33.93454°	-116.91022°	33.93451°	-116.91010°
	100	33.93427°	-116.91035°	33.93432°	-116.91036°	33.93430°	-116.91025°
	200	33.93404°	-116.91044°	--	--	---	--
	215	--	--	33.93406°	-116.91050°	33.93401°	-116.9037°
T-4	0	33.93451°	-116.90677°	33.93451°	-116.90684°	33.93451°	-116.90672°
	90	33.93425°	-116.90680°	33.93425°	-116.90685°	33.93427°	-116.90674°
T-5	0	33.93468°	-116.90504°	33.93464°	-116.90508°	33.93468°	-116.90500°
	35	33.93457°	-116.90505°	33.93457°	-116.90505°	33.93459°	-116.90501°

**LOCATIONS OF DEEPEEN PORTIONS OF T-2, T-3 AND T-4
BY ETREX GPS**

Trench	Station	Center Line		West Edge		East Edge	
		Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
T-1	North end	33.93441°	-116.90688°	33.93441°	-116.90684°	33.93443	-116.90675°
	South end	33.93424°	-116.90688°	33.93427°	-116.90682°	33.93421°	-116.90672°
T-2	North end	33.93452°	-116.90786°	33.93463°	-116.90796°	33.93779°	-116.90779°
	South end	33.93447°	-116.90788°	33.93801°	-116.90801°	33.93778°	-116.90778°
T-3	North end	33.93464°	-116.91032°	33.93471°	-116.91030°	33.93467°	-116.91010°
	South end	33.93454°	-116.91030°	33.93456°	-116.91045°	33.93451°	-116.91016°



Tuttle Engineer survey points – Trench T-2

SURVEY DATA BY TUTTLE ENGINEERING

<u>NO.</u>	<u>NORTHING</u>	<u>EASTING</u>	<u>ELEV.</u>	<u>RAW DESC</u>
2000	61240.2180	35918.2700	2558.68	SSPK
2001	61931.7560	34995.8480	2629.55	SRBR
2003	61588.0280	36086.8940	2559.77	FD N&F 3
2006	61228.2070	36108.5640	2539.89	FD BM 13BM
2007	61194.0880	35211.0380	2557.73	FD 14
2008	61939.4090	34681.4640	2622.63	SSPK
2009	61879.7170	33990.6920	2626.29	SSPK
2010	61194.6440	35211.5710	2558.05	TOP CHANNEL
2011	61201.4120	35207.7510	2558.57	TOP CHANNEL
2012	61219.9760	35198.6670	2559.09	TOP CHANNEL
2013	61235.8200	35186.2830	2559.92	TOP CHANNEL
2014	61256.4140	35169.1580	2560.96	TOP CHANNEL
2015	61792.2430	34991.9140	2604.90	TOP
2016	61791.9560	34973.6190	2606.98	TOP
2017	61807.8260	34968.4040	2608.24	TOP
2018	61834.1500	34968.5600	2610.48	TOP
2019	61842.5140	34976.4790	2609.98	TOP
2020	61858.7040	34978.7530	2611.46	TOP
2021	61876.6960	34981.1200	2612.98	TOP
2022	61877.9140	34994.1740	2612.16	TOP
2023	61875.9000	35008.8050	2609.28	TOP
2024	61851.8800	35008.6880	2608.22	TOP OF 25FT
2025	61837.2210	35009.2180	2607.00	TOP
2026	61834.0920	35014.2660	2606.49	TOP
2027	61816.4420	35014.9100	2605.41	TOP
2028	61802.3370	35009.3110	2604.17	TOP OF 75FT B-2
2029	61816.0220	35008.8100	2603.00	OF 62.5FT B-3
2030	61827.0940	35008.5060	2603.97	OF 50FT B-1
2031	61827.4470	35007.2950	2601.55	B-1
2032	61816.5980	35007.6500	2599.80	B-3
2033	61852.0130	35007.8780	2605.47	25FT
2034	61812.9870	34992.6920	2593.65	TOE
2035	61813.1500	34987.9930	2593.10	TOE
2036	61830.5830	34993.3180	2594.25	SPIKE OF
2037	61872.1240	34996.7850	2601.66	TOE
2038	61872.0220	34992.6610	2601.85	TOE
2039	61864.3810	34992.2190	2599.53	TOE
2040	61864.1850	34996.3370	2599.62	TOE
2041	61857.7920	34995.4280	2598.68	TOE ORANGE PAINT
2042	61857.4160	34991.3800	2598.99	TOE ORANGE PAINT
2043	61844.2920	34990.7270	2597.41	TOE
2044	61844.0310	34994.0150	2597.46	TOE
2045	61840.6130	34993.7610	2593.93	TOE
2046	61840.6690	34990.3430	2594.01	TOE
2047	61838.6280	34990.1970	2593.42	TOE ORANGE PAINT

SURVEY DATA BY TUTTLE ENGINEERING

<u>NO.</u>	<u>NORTHING</u>	<u>EASTING</u>	<u>ELEV.</u>	<u>RAW DESC</u>
2048	61834.3930	34993.4600	2592.87	TOE
2049	61834.7290	34990.0440	2592.98	TOE
2050	61926.7620	34700.1440	2618.43	TOP
2051	61902.0740	34699.1170	2614.98	TOP OF 25FT
2052	61899.5780	34702.3400	2614.64	TOP
2053	61884.6250	34703.4640	2613.76	TOP
2054	61877.1630	34702.6940	2612.31	TOP OF 50FT B-4
2055	61867.3470	34701.3740	2612.14	TOP OF 60FT B-6
2056	61862.4000	34700.5950	2611.33	TOP OF 65FT B-7
2057	61857.4050	34700.3920	2610.91	TOP OF 70FT B-5
2058	61847.4090	34698.3890	2610.34	TOP
2059	61834.8920	34682.8330	2608.60	TOP
2060	61828.6090	34673.2730	2607.78	TOP
2061	61832.4810	34651.9860	2608.28	TOP
2062	61843.7190	34647.1290	2609.65	TOP
2063	61852.7810	34635.3250	2612.97	TOP
2064	61870.5260	34635.2060	2615.67	TOP
2065	61889.6750	34642.9160	2616.89	TOP
2066	61905.8660	34647.4670	2617.67	TOP
2067	61930.3170	34655.7090	2620.66	TOP
2068	61928.3140	34681.3800	2618.97	TOP
2069	61899.3130	34693.0280	2607.26	OP
2070	61882.1130	34692.0030	2602.99	OP
2071	61858.2040	34671.4800	2597.97	OF
2072	61867.7320	34673.8390	2598.50	OF
2073	61877.3500	34676.8490	2598.91	OF
2074	61883.3730	34686.3510	2601.92	OP



GEOTECHNICAL CONSULTANTS

APPENDIX E

REFERENCES

APPENDIX E

REFERENCES

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**STEREOSCOPIC AERIAL PHOTOGRAPHS UTILIZED
FROM RIVERSIDE COUNTY FLOOD CONTROL DISTRICT**

Flight Date	Photograph Numbers
3-10-10	4-45, 4-46
8-2-05	4-45, 4-46
3-2-00	4-45, 4-46
1-28-95	4-45, 4-46
2-22-90	4-45, 4-46
2-7-84	1544, 1545
2-180	183, 184
5-24-74	181, 182
1-29-64	2-258, 2-259 (Flight 24244)
6-1-49	AXM-12F-148 (no stereo)

ATTACHMENT 9
Response to written comments from the public

Response to written comments received at the Planning Commission Meeting of

January 6, 2016, from Inge Shuler and Linda Pippenger

(Please refer to the letter for specific phrasing)

The first six paragraphs of the letter recite project information, history, and opinions regarding the preparers. There is mention that a header was listed in the Initial Study as "Habitat for Humanity (MA 1463)".

Response:

The cover page of the Initial Study clearly identifies the subject project as Tentative Tract Map 36939. Therefore, this item is considered as a typographical error and is deleted.

Project Description

A. Minimum lot size is projected at 7000 sf. City Ordinance requires 80' frontage.

Response:

The staff report states that lot sizes range from 7,000 square feet to 19,239 square feet. However, Table 17.08.030 of the Zoning Ordinance requires a minimum lot width for the Low Density Residential (LDR) zoning district of 70 feet. There is no minimum frontage requirement listed in Table 17.08.030.

Project proposes density of 2.8 dwelling units (d/u) per acre. Math?

Response:

The project acreage is 34.6 acres. The number of proposed units is 98 residential lots. 98 divided by 34.6 equals 2.832 carried to the third decimal place.

Store runoff and mitigate developed condition flows...

Response:

The engineering drawings that provide for the design of public facilities including basins that store water runoff are not prepared until before the final map is presented to City Council; and, that includes the preparation of construction estimates for bonding purposes. The construction documents are prepared by professionals licensed by State of California in accordance with State and Local development codes and design standards.

... the actual street width for internal neighborhood streets is 36'... How can emergency traffic be accommodated? That needs clarification.

Response:

The City of Banning Typical Undivided Street Section Standard No. ST-100 relates that the curb to curb dimension is 40 feet for a local residential street. This standard has been in use for many years and is accepted as the typical local street standard width without objection from the Police Department or Fire Services. The City Engineer approved Standard No. ST-100 on December 12, 2012.

D. Construction Schedule

...expected to commence sometime in 2015 Really?

Response:

Application for the subject project was made in 2015 with the anticipation that it may develop thereafter. The life of a tentative tract map may continue for several years in accordance with the Subdivision Map Act; therefore, a more accurate reflection of the construction schedule is that construction will commence after project approval, which may be 2016 or later.

E. Operational Characteristics

The MND specifically refers to "onsite recreational facilities and general management of common areas" ...

Response:

The description of a residential community's operational characteristics are stated in general terms. At this time no on-site recreational facilities are proposed other than what is typically provided on individual residential lots, so that portion of the description may not apply at this time. The staff report relates the following information regarding public parks:

"Lot 'A' of the proposed map is intended as a setback area for the earthquake fault located along the northerly boundary of the Project (this area is about five (5) acres, more or less). No structures are permitted to be constructed in this area; therefore, it may be considered open space that may be used by the community. Sylvan Park is located approximately 1,000 feet to the south of the project and may be accessed via Park Avenue from Wilson Street. The 7.8 acre site includes passive and active facilities, including a tee-ball field, a playground, a picnic shelter, picnic areas with barbeques, restrooms, two basketball courts, open space, and parking. Facilities may be rented for private and public functions. Table III-20 of the General Plan sets forth standards for Recreational Service Areas. The Radius of Area Served standards are stated as 0.5 miles (2,640 feet) for playgrounds and neighborhood parks, and three (3) miles for Community Parks. The location of Sylvan Park in relation to the proposed subdivision meets both standards as stated in the General Plan."

“Future Population”

Response:

As stated in the staff report the estimated increase in population for the project is 284 persons. The next sentence states that this increase is approximately 1% of the estimated population by the California Department of finance of 25,600 which is 284 persons (not 25,884).

3.1(a) building

Response:

Not certain what the above statement indicates or questions; therefore, please refer to the analysis provided in Section 3.1 of the Initial Study.

Reference to “citrus grove” and “metal shed”

Response:

The Initial Study check list Section 3.5(a) asks if there are impacts that would cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. The determination that there is no significant impact to historical resources is accurate.

Update the entire 3.6 section Geology and Soils

Response:

Request noted.

3.9 (a) ... reference to the City of Jurupa Valley...

Response:

This is a typographical error and is corrected to read the City of Banning.

3.9 (b) The impact analysis in this section is inaccurate

Response:

The complaint does not identify what data is inaccurate. The statement is noted.

3.14 There is not detailed response from the BPD included in the MND.

Response:

If the complaint refers to the Banning Police Department, a detailed response was not received.

3.17 (a) The impact analysis for the waste water issues needs documentation

Response:

Please refer to Initial Study analysis and the City's General Plan, Water and Wastewater Master Plans.

3.17 (f) ... references to the Waste from construction being transported to the El Sobrante landfill

Response:

The El Sobrante Landfill is an integral part of Riverside County's waste disposal system processing about 43% of the County's annual waste.

Inge Schuler

Linda Pippenger

Banning Planning Commission Meeting January 5, 2016

Comments on Agenda Item V. Tentative Tract Map 36939 No. 15-4501

The Mitigated Negative Declaration (MND) is unchanged from the document that was available to the public for the first time at the December 2, 2015 meeting. The exception is that the heading "Habitat for Humanity" was removed from all pages.

Architecture always has a social component. Mr Pitassi must have encountered that concept in his student days when he was introduced to e.g., *Bauhaus* in the Berlin of the 1920's, the row houses of the industrial Revolution in England, the public and private buildings designed by Neutra, Schindler, and Gehry, to name a few. That means that building can be beneficial or destructive to society.

Here the Group Diversified Pacific which Mr Pitassi represents proposes to build the above referenced TTM. The project is located on the NE corner of Sunset and Wilson in Banning.

The MND document, not even commenting on the multitude of grammatical and syntactical errors is a shoddy example of something cobbled together without attention to detail. Evidently, spelling and grammar checks were not employed. If Diversified Pacific paid for the document, the company should get the money back. The staff that prepared the document should be sent back to the course English 101.

Page numbers referred to subsequently are to the new document before you tonight. There also will be references to the clarifications in the Minutes of the December 2, 2015 meeting, using those page numbers.

P 85=7 Project Description

- A. Minimum lot size is projected at 7000 sf. City Ordinance requires 80' frontage. That represents a problem. In the Minutes, p.10, Mr Pitassi says that private yards will be fifteen to nineteen thousand feet in size.

Project proposes density of 2.8 dwelling units (d/u) per acre. Math?

Store runoff and mitigate developed condition flows. This issue is discussed without providing a detailed plan for the on p 8 in response to Commissioner Krick's question. It is not acceptable to postpone such detail until the project is approved. Specifics are needed NOW. Basins are to be deeded to the City of Banning. What is the projected cost?

On Site Street Improvements points out in the Minutes (p.13) that the actual street width for internal neighborhood streets is 36'. How can emergency traffic be accommodated ? That needs clarification.

D. Construction Schedule

... expected to commence sometime in 2015 Really?

E. Operational Characteristics

The MND specifically refers to "on site recreational facilities and general management of common areas" (p. 87). In the Minutes (p.10), Mr Pitassi adamantly maintained that the size of the development does not require him to build parks . Private yards should be sufficient as they will be large. There are public parks nearby. Never mind that the children will have to negotiate crossing busy Wilson Street to get there.

"Future Population"

This estimate (2003) presents an interesting math problem Projected Population increase of 1% or 25,884 residents. New math.

p. 95

3.1(a) building

p. 123

3.5(a) when was the citrus grove removed? Where is the corrugated metal shed in a dilapidated condition? Who makes this stuff up?

Update the entire 3.6 section **Geology and Soils**

p. 145

3.9 (a)

PPP 3.9-2 What is this mysterious reference to the City of Jurupa Valley? Since when are they responsible for the periodic inspection of the construction of this development?

3.9 (b) The impact analysis in this section is inaccurate

p.169

3.14 There is no detailed response from the BPD included in this MND.

p. 179

3.17 (a) The impact analysis for the waste water issues needs documentation

p. 184

3.17 (f) there is a repeated reference to the Waste from construction and the completed development being transported to the El Sobrante landfill. That is located in Corona. Needs clarification as it seems unlikely that the WM trucks would travel some 55 miles each way. How will that impact the Waste removal fees for the existing citizens of Banning?

Respectfully submitted,

Inge Schuler and Linda Pippenger

FIGURE 1
TTM 36939
Project Boundary

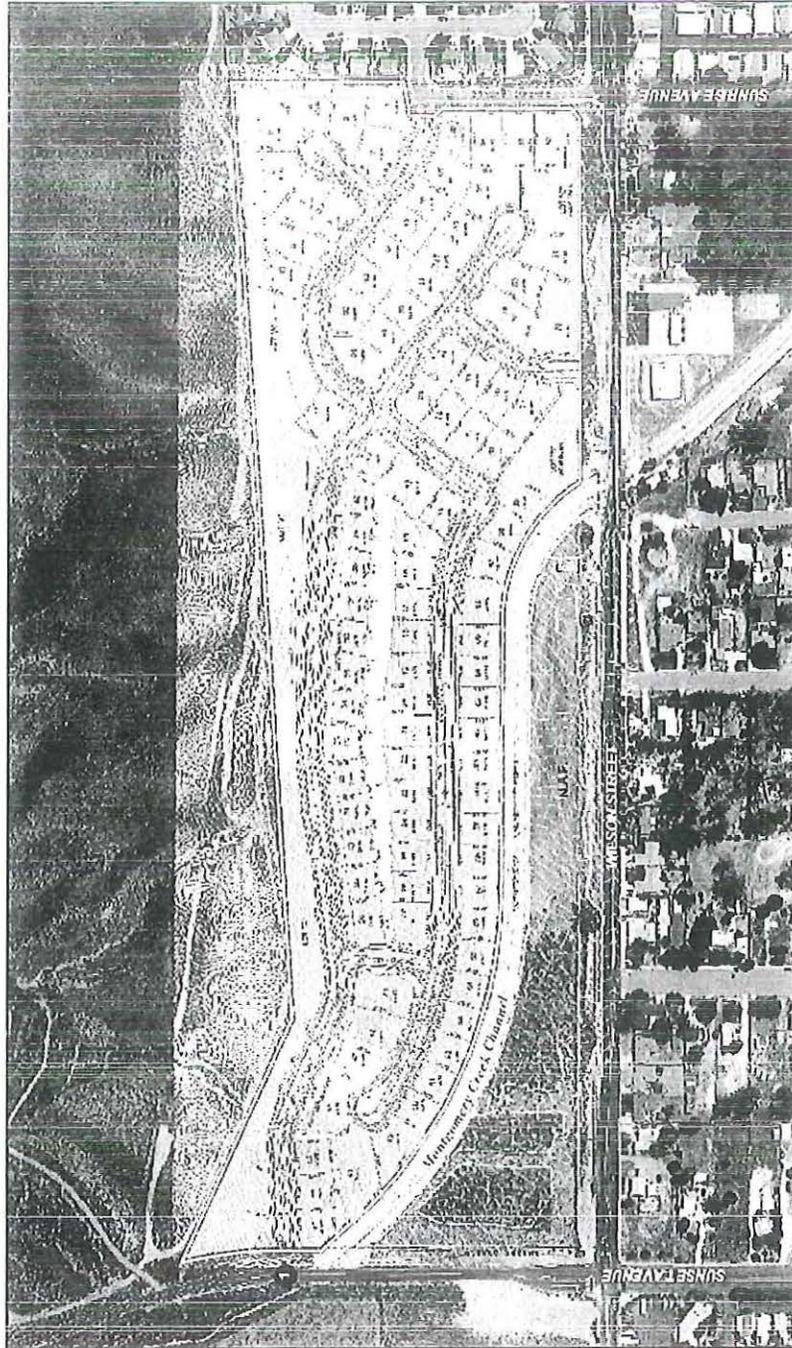
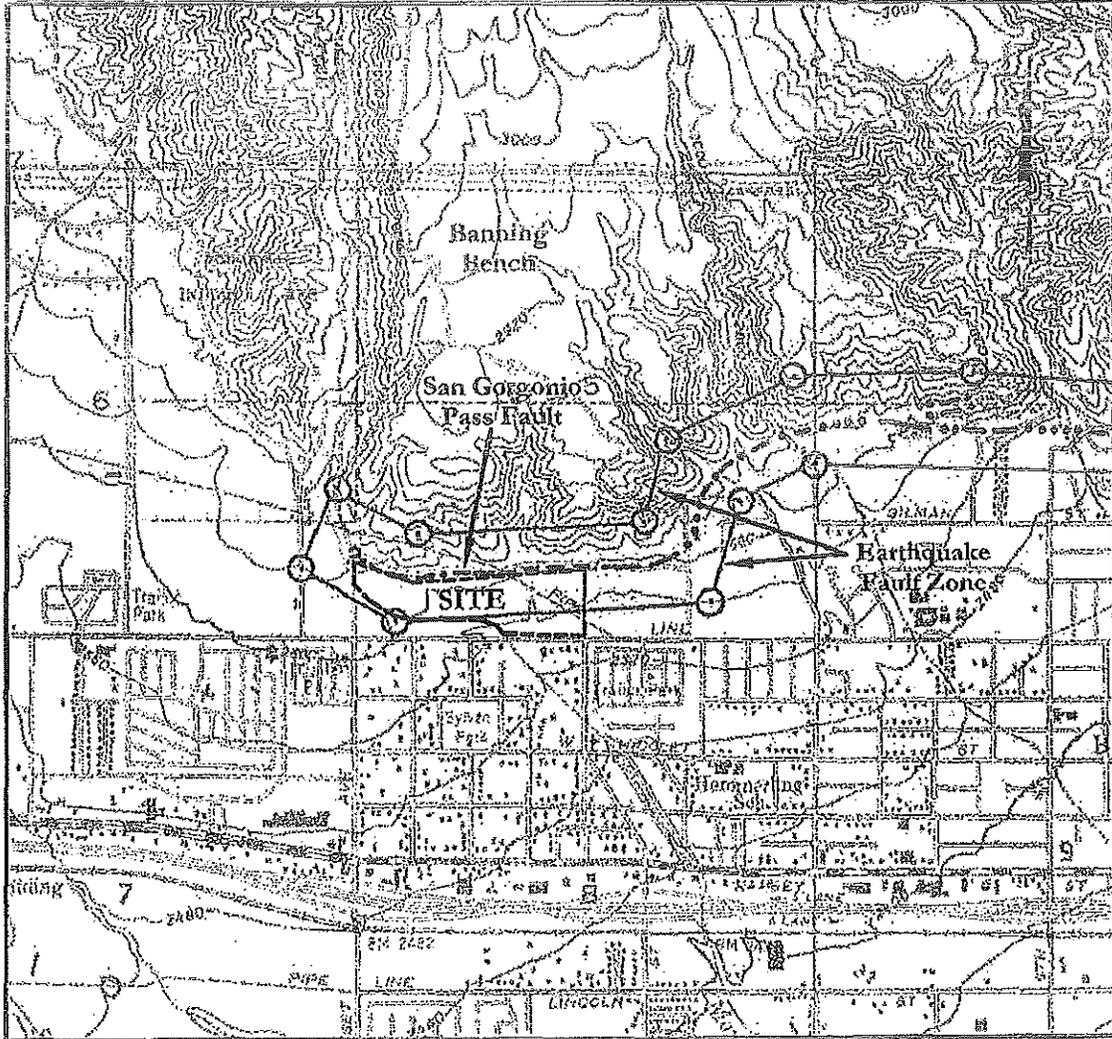


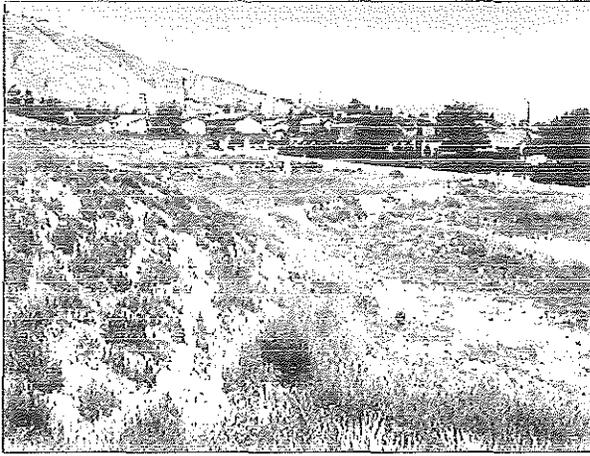
FIGURE 2
TTM 36939
Earthquake Fault Zone



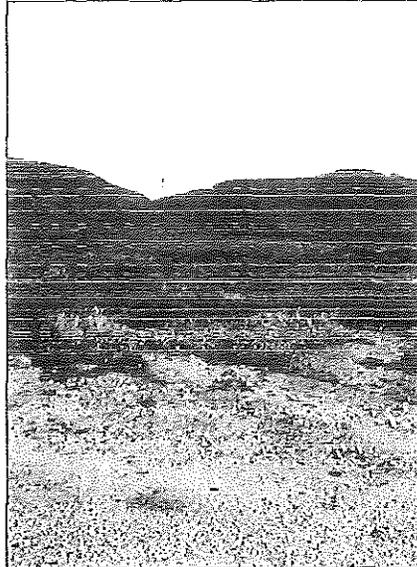
SITE LOCATION AND EARTHQUAKE FAULT ZONE MAP

Scale: 1" ~ 2,000'

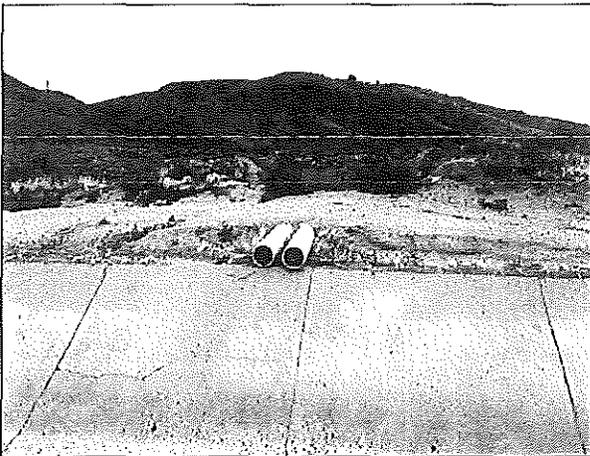
FIGURE 3
TMM 36939
Photos



PHOTOGRAPH 1: View facing northeast, along the eastern edge of the project site.



PHOTOGRAPH 2:
View facing north
where drainage feature
D-2 leaves the site.



PHOTOGRAPH 3: View facing northeast of two culvert pipes. Channelized Montgomery Creek is in the foreground.

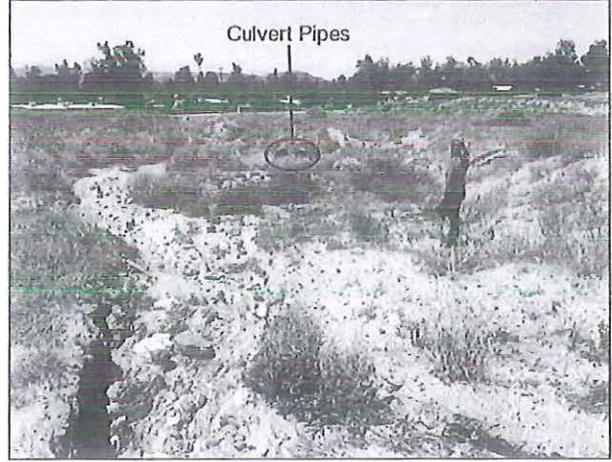


PHOTOGRAPH 4: View facing east along an access road.

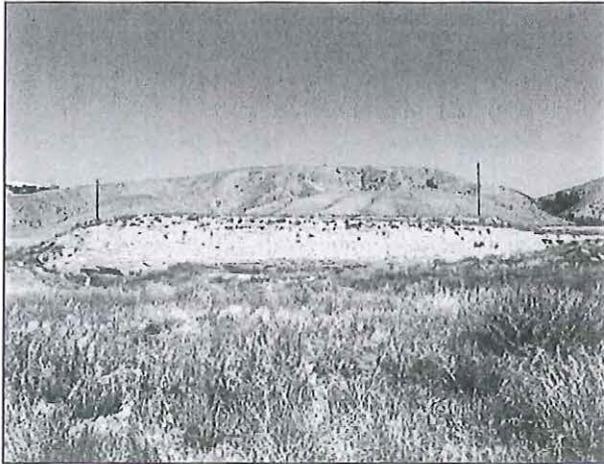
FIGURE 3
TTM 36939
Photos



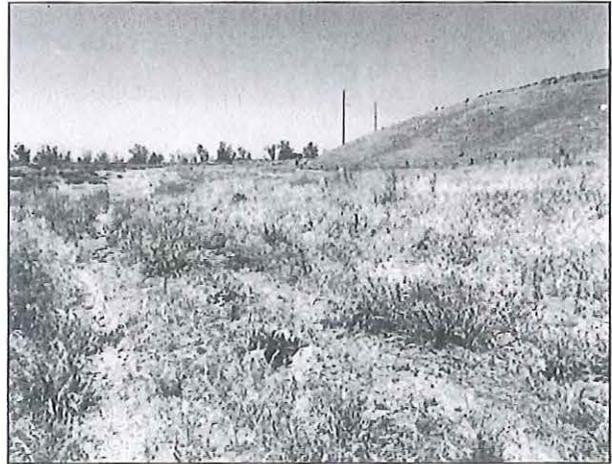
PHOTOGRAPH 5: View facing south where the access road crosses drainage feature D-1.



PHOTOGRAPH 6: View facing southwest of two corrugated plastic culvert pipes in drainage feature D-1.



PHOTOGRAPH 7: View facing northwest from the southeastern part of the project site.



PHOTOGRAPH 8: View facing west from the central part of the project site.

FIGURE 4
TM 30642

Snapshot from Geotechnical Report showing gas line.

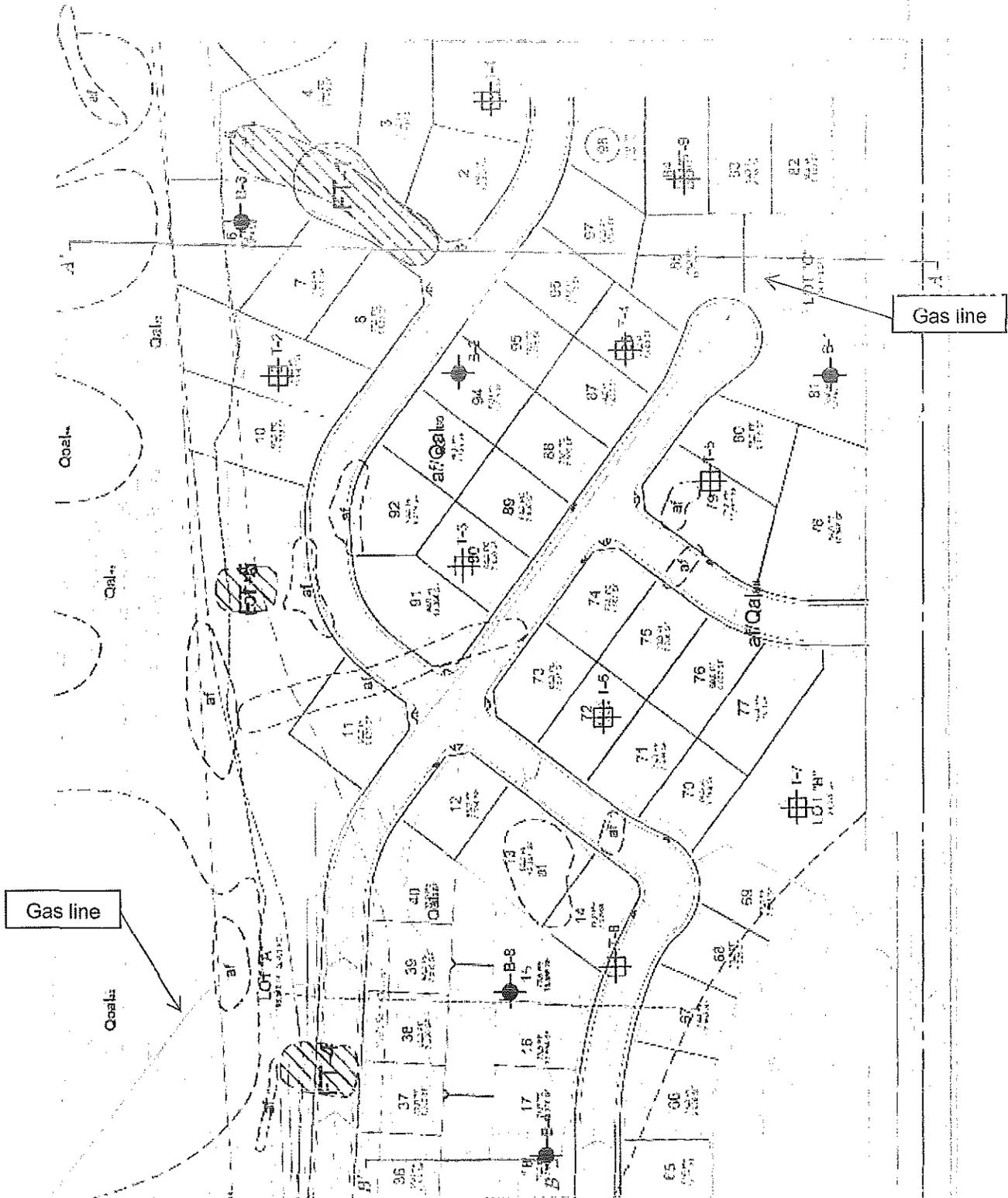
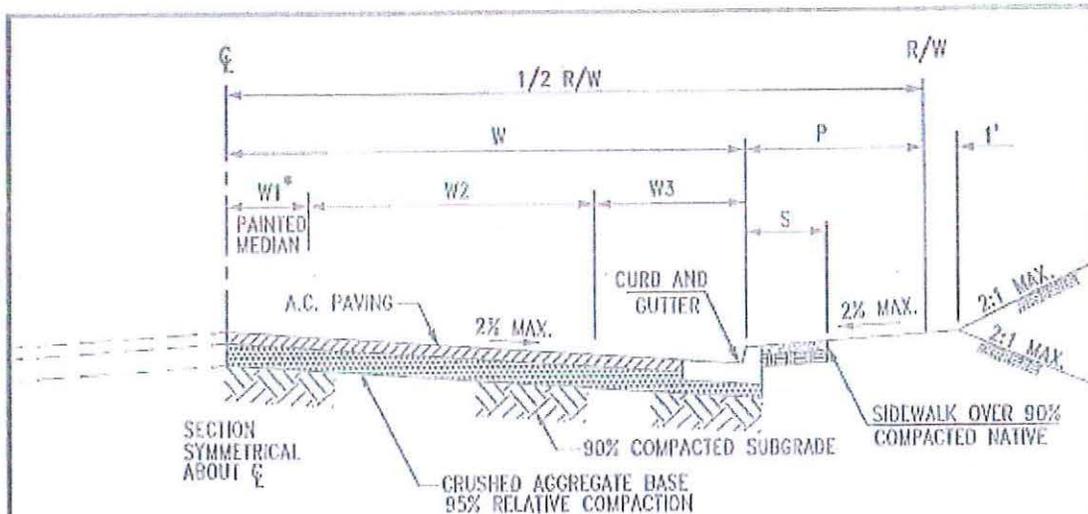


FIGURE 5



* IF THERE'S NO PAINTED MEDIAN
W2 MEASURES TO CENTERLINE

TYPICAL MID-BLOCK 1/2 WIDTH STREET SECTION

ROADWAY DESIGNATION	R/W	W	W1	W2	W3	PARKWAY P	SIDEWALK S
LOCAL	60'	20'	-	-	-	10'	5'
COLLECTOR	66'	22'	-	12'	10'	11'	5'
DIVIDED COLLECTOR	78'	28'	6'	12'	10'	11'	5'
SECONDARY HIGHWAY	88'	32'	12'	12'	8'	12'	8'

NOTES:

1. ACTUAL THICKNESS OF A.C. PAVEMENT AND/OR BASE COURSE MATERIAL FOR STRUCTURAL STREET SHALL BE RECOMMENDED BY A GEOTECHNICAL ENGINEER'S REPORT AND SUBMITTED TO THE CITY FOR APPROVAL UPON COMPLETION OF ROUGH GRADING.
2. A.C. FINISH COURSES, MIN. 0.10', C2-AR-4000, BASE COURSES MIN. 0.15' B-AR-4000.
3. CRUSHED AGGREGATE BASE SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK-LATEST EDITION) AND AS APPROVED BY THE CITY ENGINEER.
4. ADDITIONAL IMPROVEMENTS BEYOND JOIN LINE MAY BE REQUIRED BY THE CITY ENGINEER WHEN MATCHING EXISTING IMPROVEMENTS.
5. EXACT LOCATION/WIDTH OF SIDEWALK MAY VARY AND SHALL BE DETERMINED AT PLAN REVIEW AS APPROVED BY THE CITY ENGINEER.



2012 EDITION

	RECOMMENDED BY: <i>Arturo Vela</i> 12-12-12 ARTURO VELA, P.E., SENIOR ENGINEER DATE	CITY OF BANNING TYPICAL UNDIVIDED STREET SECTIONS	STANDARD NO.
	APPROVED BY: <i>Kahono Oei</i> 12-12-12 KAHONO OEI, P.E., CITY ENGINEER DATE		ST-100

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CITY OF BANNING
CITY COUNCIL/ BANNING UTILITY AUTHORITY REPORT

TO: BANNING UTILITY AUTHORITY

FROM: Michael Rock, City Manager

PREPARED BY: Art Vela, Acting Public Works Director
Holly Stuart, Management Analyst

MEETING DATE: February 9, 2016

SUBJECT: Resolution No. 2016-01 UA, "Awarding the Services Agreement to Prominent Systems, Inc. of Industry, CA for Project No. 2016-01 WW, 'Iron Sponge Media Replacement' in the amount of \$32,245.00 and establishing a total project budget of \$35,469.50"

RECOMMENDATION: The Banning Utility Authority adopt Resolution No. 2016-01 UA:

- I. Awarding a Construction Agreement for Project No. 2016-01 WW, "Iron Sponge Media Replacement" to Prominent Systems, Inc. of Industry, CA for an amount of \$32,245.00 and authorize an additional 10% contingency in the amount of \$3,224.50 to cover any unforeseen conditions.
- II. Authorizing the Administrative Services Director to make necessary budget adjustments, appropriations and transfers related to Project No. 2016-01 WW, "Iron Sponge Media Replacement".
- III. Authorizing the City Manager to execute the Services Agreement with Prominent Systems, Inc. in the amount of \$32,245.00.

JUSTIFICATION: Prominent Systems, Inc. is the lowest responsive and responsible bidder to perform the work for the City of Banning's Project No. 2016-01WW, "Iron Sponge Media Replacement". It is imperative that the scope of work for this project be completed in order to reduce hydrogen sulfide gases produced at the Wastewater Treatment Plant in order to meet South Coast Air Quality Management District (SCAQMD) requirements.

BACKGROUND: Suez Environmental Water Services, Inc., formerly known as United Water Services, the City's Wastewater Treatment Plant Operator, has informed staff that the current iron sponge media is nearing the end of its service life. The iron sponge media, last replaced in August of 2014, removes hydrogen sulfide from the pipes which is highly corrodible and generates an odorous gas into the atmosphere that is regulated by SCAQMD.

On December 29, 2015 and January 5, 2016 staff advertised the Request for Proposals in the Press Enterprise. Additionally, the project was advertised on the City's website, social media (Facebook and Twitter), as well as, on bidamerica.com, ebidboard.com, NAPC.com and isqft.com. In response to these efforts, the below bids were received on January 19, 2016:

<u>NAME OF FIRM</u>	<u>BID AMOUNT</u>
1) Prominent Systems, Inc.	\$32,245.00
2) Carbon Activated Corporation	\$33,502.00
3) Pure Effect, Inc.	\$52,500.00

As a result, staff respectfully requests that a Services Agreement be awarded to Prominent Systems, Inc. in the amount of \$32,245.00. Prominent Systems, Inc. is the lowest responsive and responsible bidder and is a reputable company that has successfully performed services for the City in the past. The scope of work for this project will include the removal and disposal of the existing iron sponge media, installation of new media and the replacement of neoprene gaskets.

OPTIONS: The Banning Utility Authority may choose to take no action and in doing so, the replacement of the iron sponge media will not occur. Without its replacement, the City may potentially violate air pollution requirements and emission limitations which, depending on the severity, could lead to fines or prosecution. Furthermore, the hydrogen sulfide that is currently present could lead to the corrosion of the existing pipes, jeopardizing its current functionality.

FISCAL IMPACT: The Services Agreement in the amount of \$32,245.00 with a 10% contingency of \$3,224.50 for a total budget amount "not to exceed" \$35,469.50 will be funded by the Wastewater Fund, Account No. 680-8000-454.30-04 (Repair/Maintenance – Plant). The account has a balance of \$46,302.42.

Prepared and Reviewed by:



Art Vela
Acting Public Works Director

Reviewed by:



Rochelle Clayton
Administrative Services Director/
Deputy City Manager

Approved by:



Michael Rock
City Manager

RESOLUTION NO. 2016-01 UA

A RESOLUTION OF THE BANNING UTILITY AUTHORITY OF THE CITY OF BANNING, CALIFORNIA, AWARDING THE SERVICES AGREEMENT TO PROMINENT SYSTEMS, INC. OF INDUSTRY, CA FOR PROJECT NO. 2016-01 WW, "IRON SPONGE MEDIA REPLACEMENT" IN THE AMOUNT OF \$32,245.00 AND ESTABLISHING A TOTAL PROJECT BUDGET OF \$35,469.50

WHEREAS, Suez Environmental Water Services, Inc., formerly known as United Water Services, the City's Wastewater Treatment Plant Operator, has informed staff that the current iron sponge media is nearing the end of its service life; and

WHEREAS, the iron sponge media, last replaced in August of 2014, removes hydrogen sulfide from the pipes which is highly corrodible and generates an odorous gas into the atmosphere that is regulated by South Coast Air Quality Management District; and

WHEREAS, on December 29, 2015 and January 5, 2016 staff advertised the Request for Proposals in the Press Enterprise, in addition to, advertising the project on the City's website, social media (Facebook and Twitter), as well as, on bidamerica.com, ebidboard.com, NAPC.com and isqft.com; and

WHEREAS, three bids were received and as a result staff recommends a Services Agreement be awarded to the lowest qualified bidder, Prominent Systems, Inc., in the amount of \$32,245.00; and

WHEREAS, the scope of work for this project will include the removal and disposal of the existing iron sponge media, installation of new media and the replacement of neoprene gaskets; and

WHEREAS, the Services Agreement in the amount of \$32,245.00 with a 10% contingency of \$3,224.50 for a total budget amount "not to exceed" \$35,469.50 will be funded by the Wastewater Fund, Account No. 680-8000-454.30-04 (Repair/Maintenance – Plant).

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Banning as follows:

SECTION 1. The Banning Utility Authority adopts Resolution No. 2016-01 UA Awarding the Services Agreement for Project No. 2016-01 WW, "Iron Sponge Media Replacement" to Prominent Systems, Inc. of Industry, CA in an amount of \$32,245.00 and authorize an additional 10% contingency in the amount of \$3,224.50 to cover any unforeseen conditions.

SECTION 2. The Administrative Services Director is authorized to make necessary budget adjustments and appropriations and transfers related to Project No. 2016-01 WW, "Iron Sponge Media Replacement" and approve change orders within the 10% contingency.

SECTION 3. The City Manager is authorized to execute the Services Agreement with Prominent Systems, Inc. in the amount of \$32,245.00.

PASSED, ADOPTED AND APPROVED this 9th day of February, 2016.

Arthur L. Welch, Chairman
Banning Utility Authority

ATTEST:

Marie A. Calderon, Secretary

APPROVED AS TO FORM AND
LEGAL CONTENT:

Anthony R. Taylor, City Attorney
Aleshire & Wynder, LLP

CERTIFICATION:

I, Marie Calderon, Secretary of the Utility Authority of the City of Banning, California, do hereby certify that the foregoing Resolution No. 2016-01 UA, was duly adopted by the Banning Utility Authority of the City of Banning, California, at its Joint Meeting thereof held on the 9th day of February, 2016, by the following vote, to wit:

AYES:

NOES:

ABSTAIN:

ABSENT:

Marie A. Calderon, Secretary
Banning Utility Authority